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The Valles Caldera: Recreationists' Perspectives on Access and Management

Matt Gagnon

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Approved by the Thesis Committee:

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**THE VALLES CALDERA: RECREATIONISTS'
PERSPECTIVES ON ACCESS AND MANAGEMENT**

BY

MATTHEW C. GAGNON

**B.S., GEOGRAPHY
TEXAS A&M UNIVERSITY, 2009**

THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of

**Masters of Science
Geography**

The University of New Mexico
Albuquerque, New Mexico

August, 2011

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ABSTRACT OF THESIS

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By

Matthew C. Gagnon

B.S., Geography, Texas A&M University, 2009
M.S., Geography, University of New Mexico, 2011

ABSTRACT

With the public acquisition of Valles Caldera National Preserve in 2000, Congress granted management to a Board of Trustees, a unique experiment in public land management. Ten years into the experiment, the trust model has been failing to meet certain management objectives and is under pressure by outdoor recreationists to provide greater public access to this treasured piece of land in New Mexico. Pressure has become so great that the United States Senators from New Mexico have introduced legislation, the Valles Caldera National Preserve Management Act, which would transfer management to the National Park Service. To address this blossoming issue, and to really understand what is happening on this highly treasured land, this research sets out explore the many attitudes and perceptions of the Valles Caldera's recreationists.

To gather the necessary data set, a survey questionnaire was developed and administered to recreationists of the Valles Caldera through a number of online mediums, posted flyers, and various on-site methods. At the time the surveys were closed to the public, 712 (36%) recreationists had responded to the survey. A detailed statistical analysis of the acquired data was then performed using Vaske's (2008) Potential for

Conflict Index, the chi-square test, and other descriptive methods in order to help bridge the gap between these recreational perceptions and attitudes, and future management decisions on the Valles Caldera. The intent and purpose of this research is to provide future managers of the Valles Caldera, whoever that might be, with valuable information that can lead to management actions that appropriately reflect the needs of those using the Caldera for recreation. Further, this research offers the opportunity for the public to have their voice heard where it may not have existed otherwise.

This research has identified recreationists' attitudes and perceptions towards public access, religious and cultural sites, environmental preference, crowding, livestock grazing. Preference for recreational activities and the amount of money recreationists are willing to spend to recreate are also discussed. More specifically, this thesis has revealed that all surveyed recreationists are dissatisfied with their current level of access to the Valles Caldera, and that there is a major split in respondent's preferences towards the protection of cultural and religious sites when it could limit access for recreationists. Results also identified that some groups favor or understand environmental values more than other groups, and that a majority of recreationists favor quality of experience over quantity. Research also found that livestock grazing does not diminish the recreational experience for most visitors. For numerous questions, recreationists were subdivided and analyzed by interest group and socio-demographic characteristics.

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CHAPTER ONE

Introduction

With the passage of the Valles Caldera Preservation Act (VCPA) in 2000, Congress made a treasured piece of land in north-central New Mexico available to the public for the first time in over a century. Over a decade since its acquisition, however, the management of the Valles Caldera has failed to meet a number of the goals defined in the legislation, and seemingly, the hopes and expectations of its outdoor recreationists.

By gathering information about recreationists' attitudes and perceptions toward potential problems and concerns on the Valles Caldera, this research sets out to understand whose hopes and expectations have not been met. To acquire such data, this research looks at multiple factors, including socio-demographic status and interest group affiliation (e.g. New Mexico Wildlife Federation and Caldera Action), that may influence recreationists' attitudes and perspectives toward current practices on the Valles Caldera. By identifying which groups are more or less satisfied, future management may better reflect the needs of its many recreationists.

1.1 Research Question

The goal of this research is to obtain information that future management of the Valles Caldera can use to better meet the needs of its recreationists. As such, this research seeks to answer the following question:

What are the attitudes and perceptions of those that use the Valles Caldera for recreational activities?

To answer this question, this research has been divided into five areas of interest. These areas of interest are: (1) public access, (2) religious and cultural sites, (3) environmental preference, (4) crowding, and (5) livestock grazing. By understanding recreationists' attitudes and perceptions towards these five specific areas, this research provides valuable information for both the academic literature and the future management of the Valles Caldera.

1.2 The Valles Caldera

The Jemez Mountains are a dormant volcanic complex covering over 1,000 square miles in north-central New Mexico. Most of this area is now in public ownership as part of the Santa Fe National Forest, Bandelier National Monument, or Valles Caldera National Preserve (VCNP) (see Figure 1). The Valles Caldera, a resurgent cauldron that saw its last major eruption approximately 1.25 million years ago, lies very near the center of the Jemez Range (Goff 2009). This final eruption, sending debris halfway across the country, caused this volcanic edifice to lose its structural support. The resulting landscape is circular geometrically, 15 miles across, and more than a half mile deep (American Geologic Institute 2000; Valles Caldera Trust [VCT] 2003). More recent resurgent domes during periods of isolated uplift have created the current dramatic landscape of rolling mountains amongst the valleys that we see today (Goff 2009). The result is a landscape so dramatic that it is often referred to as the “Yellowstone of the Southwest” (see Figure 2 and 3).

Valles Caldera National Preserve, New Mexico

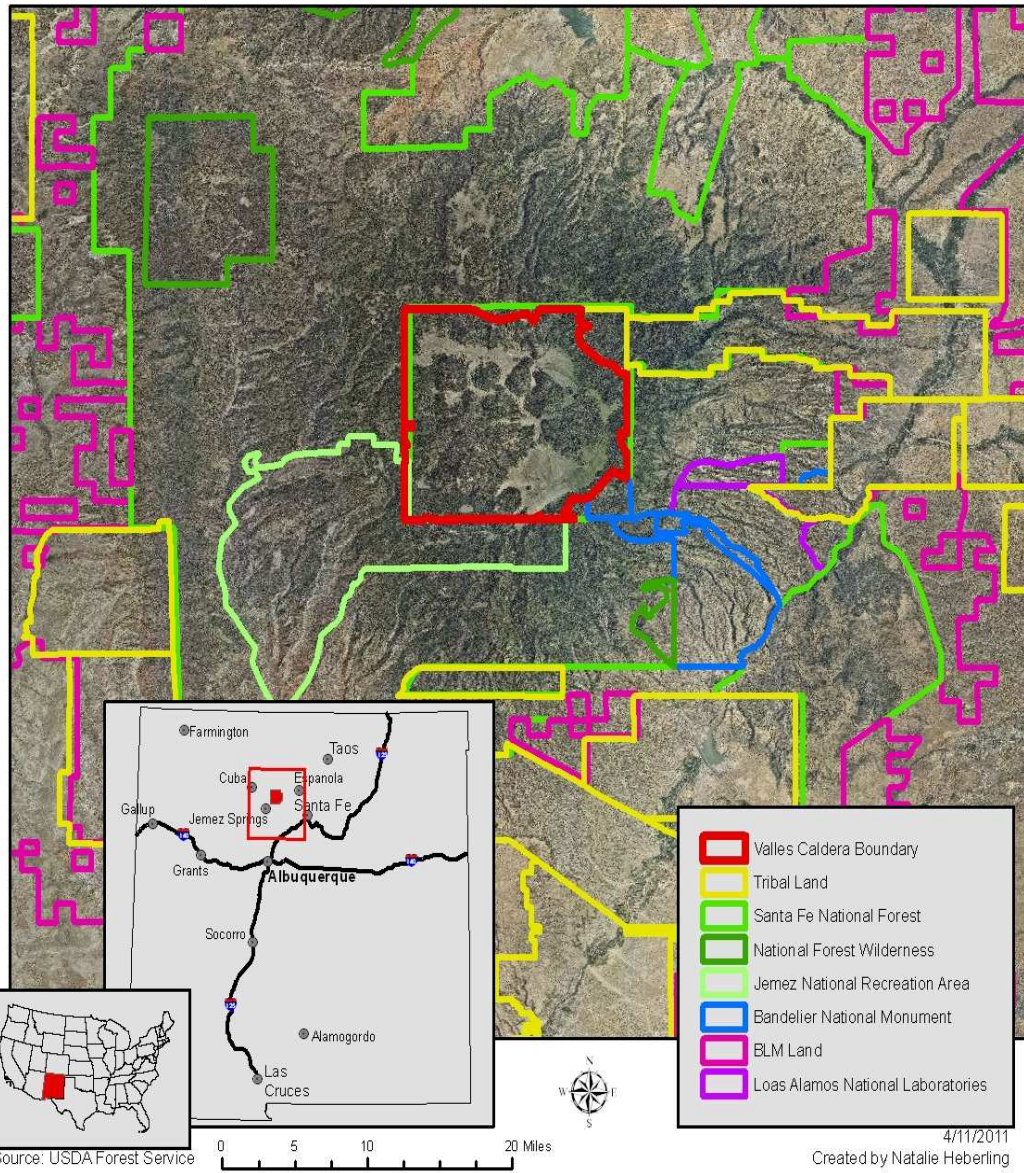


Figure 1 - Map of the Valles Caldera National Preserve and surrounding areas.



Figure 2 –East Fork Jemez River of the Valles Caldera.¹



Figure 3 – The Valles Caldera.²

¹ Photograph borrowed from The New Mexico Independent: *U.S. Park Service may take over Valles Caldera preserve*. Bryant Furlow 2010.

² Photograph borrowed from callescaldera.gov. Photograph by Don J. Usner. Content Copyright © 2005.

Like much of New Mexico, the Valles Caldera has a land use history that dates back thousands of years. Records show that this area has been inhabited by many Native American, Hispano, and Anglo-American cultures that have resulted in diverse ways in which people have both used and constructed relationships with this land. Archeological sites provide evidence that Native Americans have used the Valles Caldera for centuries to hunt, collect vegetable foodstuffs, gather medicinal plants, and collect valuable materials like obsidian (Anschuetz and Merlan 2007). Today, the Valles Caldera remains a place of cultural and religious significance for the neighboring Jemez and Santa Clara Pueblos. The Jemez Pueblo specifically, located just south of the Valles Caldera, cite the grasslands on the south-facing slope of Redondo Peak, the highest peak in the Jemez Mountains, as forming the shape of an eagle, both a powerful symbol and a major part of the Pueblo's identity (Anschuetz and Raish 2010).

These traditional activities went unobstructed until 1860 when the Baca family, recipients of lands near Las Vegas, New Mexico, chose the Valles Caldera as the first piece of their five-part land compensation for a dispute over the original land grant that was given to them during Mexican control. This location, following congressional approval, became known as the Baca Location No. 1. (Anschuetz and Merlan 2007; VCT 2003).

During the decades of private ownership, the Valles Caldera played host to a number of activities including sulfur mining, homesteading, a hot springs resort, survey disputes, timber harvest, and the extensive use of the grassland valleys for livestock grazing (deBuys and Usner 2006). In 1963, the Baca Location was sold to James Dunnigan, an up-and-coming oilman from Texas who established the Baca Land and

Cattle Company. This establishment phased out sheep grazing in preference of a working cattle ranch, still an important identity for the Valles Caldera today. Mr. Dunnigan, like many others before and after him, was soon captured by the significance of this place, turning down investors' various development plans for the Valles Caldera, including a ski resort, a racetrack, a resort community, and possibly a golf course. In 1971, Mr. Dunnigan negotiated the purchase of timber rights on the property, a move that ended the clear-cutting and road building (totally more than 1,500 miles), a scar that is still evident on the Valles Caldera today. Soon after, James Dunnigan recognized that the most appropriate future for the Valles Caldera lay in public ownership (Anschuetz and Merlan 2007; deBuys and Usner 2006).

Throughout the period of private ownership, the Valles Caldera could only be experienced by the public from behind the fences that bound this fascinating piece of land. Private ownership not only denied them access to the lands that much of the public considered their backyard, it also kept them from having a say in what happened in “one of the most important parts of [their] world” (deBuys and Usner 2006, p. 49). While the first serious expression of federal interest in acquiring the Valles Caldera in 1923 failed, interest would continue to grow with regularity over the proceeding decades (deBuys and Usner 2006).

The idea that the Baca Ranch should be under public ownership resurfaced in the 1970's and 1980's as environmental groups and the federal government sought to put the 100,000 acre property into public hands. After on and off sales discussions between the federal government and James Dunnigan's sons, the White House and New Mexico Senators Pete Domenici (R-NM) and Jeff Bingaman (D-NM) expressed a joint

commitment to draft and enact legislation authorizing federal acquisition of the Baca Ranch in the summer of 1998 (deBuys and Usner 2006). While the first major attempt to purchase the land fell apart, a new deal was struck a year later, based on a \$101 million appraisal. A bill was reintroduced in both Houses of Congress in November 1999 as Senate Bill 1892, or the Valles Caldera Preservation and Federal Land Transaction Facilitation Act (VCPA). Senate Bill 1892 passed both the House and the Senate, and following President Clinton's signature on July 25th 2000, the Baca Ranch was presented to the public as the 88,900-acre Valles Caldera National Preserve (VCNP) (see Public Law 106-248, Title I) (deBuys and Usner 2006). Of the original amount purchased, the adjacent Bandelier National Monument and the Santa Clara Pueblo were given 823 acres and 5,045 acres, respectively.

The VCPA states that Congress established the preserve in order “to protect and preserve the scientific, scenic, geologic, watershed, fish, wildlife, historic, cultural, and recreational values of the preserve, and to provide for multiple use and sustained yield of renewable resources within the preserve” (VCPA §105(b)). Deciding who would manage VCNP and administer the requirements of this Act would invoke a political compromise (deBuys, personal communication, 2010).

Not eager to put more of New Mexico's land into the federal system without important management reforms, then Senator Domenici suggested an innovative trust structure, much like the one that had been implemented at the Presidio in San Francisco (Fairfax et al. 2004; Little et al. 2005; deBuys and Usner 2006). Because it was determined that the unique nature of the Baca Ranch required a unique program for its appropriate preservation, operation and maintenance, the legislation favored the

establishment of a trust (deBuys and Usner 2006). As such, a compromise was reached to have the VCNP managed by an independent trust structure rather than a traditional federal agency. To the slight dismay of Senator Bingaman who originally proposed USFS management, Senator Domenici was one of many congressional representatives that were excited to see how this experiment in land management would play out (see S. HRG. 106-577).

1.3 The Valles Caldera Trust

The Valles Caldera Trust (VCT) is a wholly owned federal corporation, governed by a nine-member board of trustees, who have the authority to conduct business independent of other agencies (VCT 2003). Two of the trustees, the supervisor of the Santa Fe National Forest and the Superintendent of Bandelier National Monument, are ex officio. The seven other trustees, five of whom must be residents of New Mexico, are appointed by the president in consultation with the New Mexico congressional delegation. These seven trustees are selected for their specific, individual expertise: (1) domesticated livestock management; (2) management of fish, wildlife, and recreation; (3) sustainable management of forest lands; (4) nonprofit conservation activities; (5) financial management; (6) cultural and natural history of the region; and (7) state or local government activities in New Mexico, with expertise in local customs.

The VCPA instructs the appointed trustees to pursue six specific goals, with none carrying more weight than the next, and to develop a management program for the VCNP. By the end of 2001, a board member retreat at Bandelier National Monument revealed a common set of management values. These values are expressed in the 10

management principles that guide management decisions and unify the programs of the VCNP (see Appendix 1).

The governance framework of the VCPA is a modern form of cooperative federalism that has created a fiduciary organization requiring that resources be managed by a designated group (the VCT) on behalf of another (U.S. Government) (VCT 2003; Fairfax 2004; Little 2000; Weiser 2001). Accordingly, the VCT experiment, often referred to as a charter forest concept, could parallel the general shift from the governing norm, a ‘top-down’ model, to a more collaborative and multilevel approach that involves both government and non-governmental actors from the private sector and civil society (Eagles 2008; Hanna et al. 2008; Huffman 2004; Lockwood 2010). While many agree that the management framework of the VCT is one that could be the right approach in terms of public land management (Anderson and Fretwell 2001; Little 2005; Little et al. 2005; Fairfax 2004), problems still exist.

Like other organic legislation that guides our federal land agencies, the goals and principles of the Valles Caldera emphasize the multiple use concept. A major criticism of the legislation, however, have cited that it was created to emphasize revenue generation, financial self-sufficiency, and minimizing costs to federal taxpayers over the other five goals (Fairfax et al. 2004; deBuys and Usner 2006). Coincidentally, this “opportunity to marry commodity and amenity production [came] at a time when Congress [was] searching for new ways to finance and manage federal lands” (Terry and Fretwell 2001: 140). The Reagan Administration’s pressure on federal agencies to decrease federal land budgets and charge increased fees has subsided in recent years. Even so, the current backlogs and deferred maintenance issues on NPS lands, estimated

to be in the billions of dollars, have revived political and research interests in finding alternative ways to manage public lands (Ostergren et al. 2005). As Fairfax (2004) and Leal and Fretwell (2001) point out, the self-sufficiency mandate, if successful, might provide a paradigm shift in the way public lands are managed. Big Bend State Park, for example, is a self-sufficiency model that has seen some success. Many have come to believe, however, that this mandate is casting a shadow over the other legislative goals, such as public access and outdoor recreation (Cusick 2009; Huffman 2004).

The Act authorizes the VCT to continue to receive appropriations from Congress for 15 fiscal years following the 2000 acquisition. If the VCT has not achieved financial self-sufficiency by the end of 2014, the Preserve may request an extension of appropriations to cover the initial 20-year authorization. During the eighteenth year following acquisition, the VCT will send its recommendation to the Secretary of Agriculture to decide whether it believes the life of the VCT should be extended or not (VCPA 2000, 110(b); VCT 2003). Until Congress decides otherwise, financial self-sufficiency is a problem the VCT must make work.

As of 2009, the United States Government Accountability Office (GAO) (2009) found that the VCT had failed to meet the timeline that was set for meeting the VCPA's goals. With the exception of the grazing and science program, all other areas of program development, including recreation, are more than five years behind their anticipated schedule. Failure to meet these goals has been attributed to several factors: (1) the high turnover rate among board members, with at least three positions up for appointment every two years; (2) a time lag ranging from two to nine months between the beginning and end of old and new members; and (3) a directive to 'open-up' the resources of an

underprepared Preserve only two years after acquisition (GAO 2009). For these reasons, and a number of other legislative constraints, it seems unlikely that the VCT will be able to meet financial self-sufficiency by 2015, or even 2020.

With the VCNP struggling to balance financial self-sufficiency with public access, current New Mexico Senators Bingaman and Udall, under pressure from a number of interest groups, have proposed legislation that would place the Valles Caldera under the management of NPS (citing VallesCaldera.com 2010). A feasibility study (NPS 2009) performed in 2009 by the NPS confirmed the national significance and suitability for an inclusion of the VCNP into the park system.

It is clear that the public, specifically recreation enthusiasts, were ecstatic about the public acquisition of the Valles Caldera (deBuys and Usner 2006). Decades in the making, their dream of access to this treasured piece of land had finally come to fruition. Having to balance the protection of ecological integrity, monetary generation, and sustainability in conjunction with equitable public access, however, has made it seemingly impossible for the VCT to make this dream come true (Little 2005). Accordingly, the public has continued to grow increasingly concerned and outspoken about the lack of public access to the Preserve. As will be detailed below, the apparent access issues seem to stem from both the current prices for outdoor recreation activities and the lack of activities offered (Valles Caldera Listening Sessions 2010). This dissatisfaction has prompted many to support the transfer of the management of the VCNP to the NPS as a solution (Snodgrass 2010).

Accordingly, the Valles Caldera National Preserve Management Act (VCNPMA), S.3452, was introduced by Senator Jeff Bingaman and co-sponsored by Senator Tom

Udall (D-NM) in May of 2010. It failed to pass as part of an Omnibus Public Lands Package in the 2010 lame-duck session of Congress. However, in a continued push for NPS management, Senator Bingaman reintroduced the VCNPMA (S.564) in March of 2011. As of May 2011, the Board of Trustees publicly announced its support for the VCPMA and NPS management of the Valles Caldera (Loretto 2011).

1.4 Outdoor Recreation

Outdoor recreation, broadly defined here as any leisure time activity conducted outdoors, cannot be understated in terms of importance. Measured in user days, recreational activities are the single greatest demand on U.S. public lands (Coggins et al. 2009). An increase in economic prosperity, road infrastructure, and leisure time after the Second World War resulted in a significant increase in outdoor recreation (Manning 1999). The USFS alone hosted 214 million recreationists and generated roughly \$100 million in 2002, dwarfing the revenue-generating estimates for both timber and grazing programs. Outdoor recreation and American culture have become intimately related (Coggins et al. 2009).

The Valles Caldera is of considerable interest for outdoor recreationists. This was evidenced during the Valles Caldera National Preserve's open house in 2006; a one day event that allowed visitors to traverse the roads of the Valles Caldera. This event drew more than 1,400 vehicles and nearly 4,000 people (GAO 2009). Because the Valles Caldera is under federal ownership, however, numerous hurdles and liability requirements, including environmental reviews required by the National Environmental Policy Act, now stand in the way of every decision made by the VCT. As a result,

recreational activities were slow to get off the ground and often seemed neglected in the early years of operation. The Preserve was slow to open hiking trails, for instance, because each trail required archeological clearance, a time consuming effort (deBuys and Usner 2006).

With time, the number of outdoor recreation activities on the Valles Caldera has increased considerably. The VCNP offered the following recreation opportunities in 2010:

Hunting (elk & turkey)	Hiking	Tours
Fishing	Photo Adventure	Group Tours
Equestrian	Run the Caldera	Special Events
Facility Rentals	Skiing & Snowshoeing	Sleigh Rides

Many of these activities, however, require fees, reservations, or are determined by a lottery system. For example, the Photo Adventure, a three day adventure that allows the winners to pick where they would like to go, drive their own car, and take as many photos as they would like, is determined by lottery that requires a \$10 fee for each ticket purchased. Fishing on the Valles Caldera, while providing the angler with a personal stretch of a particular creek within the Caldera, costs the applicant \$35, must be done through reservation, and does not include the required New Mexico Game and Fish fishing license.

Additionally, the Valles Caldera has only two trails open available to hikers for free and without reservation. These trails, along with every other outdoor recreation activity, are open from dawn to sunset. Other trails require a reservation, up to a \$10 fee depending on age, and may only be available on certain days of the week. Further, hikers are not allowed to deviate to another trail and must use the designated shuttle buses to get

to and from the trail head. Without permission, the Valles Caldera does not currently allow any overnight camping, backpacking, off-highway vehicle (OHV) use, or personal vehicle travel along the interior roads of the Preserve.

These limitations and fees for recreational activities may seem stark (i.e. double taxation) and untraditional in terms of the public land management practices that many of us have become accustomed to over the years, such as those of the NPS, for example. Amongst other things, however, the goals, principles, and mandates of VCT were designed to stress quality over quantity, guaranteeing fair public access, multiple use, protection and preservation, and financial self-sufficiency. Effectively meeting this swath of often-conflicting mandates and goals is not an easy task. Mandates or not, these limitations and fees have seemingly become too burdensome for many outdoor recreation enthusiasts who are increasingly voicing their opinions (Valles Caldera Listening Sessions 2010).

This research set out to explore the attitudes and perceptions of different user groups, including whether there are significant differences between socio-demographic characteristics such as age, gender, education, income. This research also gathers information from a number of different outdoor interest groups, like the New Mexico Wildlife Federation and New Mexico Off-Highway Vehicle Alliance, to examine if and where differences in attitudes and perceptions may exist. With detailed information regarding different recreation groups' attitudes and perceptions towards recreation-related issues on the Valles Caldera, management can more appropriately adapt management plans to meet the needs of those that are not satisfied with their recreational experiences.

CHAPTER TWO

Literature Review

2.1 General Context

While most of the attention is focused on the recreation values and culture section of this chapter, the nature of this research has led to the examination of three separate, but related bodies of literature. The first section of this review discusses the role of geography in outdoor recreation research. At the heart of this research, the second section examines the values and culture of outdoor recreation. This section defines the meaning of values and attitudes and further examines them as they are associated with demographic, socio-economic, and different value-based groups such as off-highway vehicle users and promoters of wilderness characteristics. Specific attention was given to the literature on public access and cultural and religious sites. The final section discusses future trends that may influence outdoor recreation, such as the projected age of the population and new technological developments.

2.2 Recreation and Geography

Defined by Smith (1982) as the systematic study of recreation patterns and processes on the landscape, outdoor recreation as a subject of research and scholarship in geography dates back to the 1930s (see Carlson 1938; Brown 1935; McMurray 1930). A number of influences from early studies in recreation geography can be traced back to environmental determinism, possibilism, regionalism, and a number of other geographical trends that provided direction and development for the discipline (Johnston

1991; Hall and Page 1999). Defined by Pacione (1999) as the application of geographical knowledge and skills to the resolution of real-world social, economic and environmental problems, the rise of applied geography opened many doors for recreation geographers.

There should be little doubt, however, that leisure activities like outdoor recreation are of considerable interest to geographers. The Association of American Geographers (2011) broadly defines geography as the science of space and place. They go on to say that geographers ask where things are located, why they are located there, how they are different from place to place, and most important in regards to this research, how people interact with the environment. To take it one step further, geographers have the ability to take a uniquely holistic approach when studying the relationship between people and the environment, because, as their academic background has led them, they approach these issues on a variety of spatial scales. The concepts that lie at the heart of geography like spatiality, place, landscape and region are all important facets that geographers can offer to the research field of outdoor recreation (Hall and Page 1999).

Post World War II, geographers use their skills to consistently contribute to the field of outdoor recreation (Butler 2004). The major contributions by geographers were first summarized in Wolfe's (1964) "Perspective on Outdoor Recreation", published in the *Geographical Review*. Much of the high quality research post-Wolfe were developed by a number of geographers of the U.S. Forest Service (Butler 2004). In particular, Lucas (1964), Clarke and Stankey (1979) (Recreation Opportunity Spectrum), and Wagar (1964) all made major contributions to the theory and practical land management of the time.

Geographers have made substantial contributions to the understanding of outdoor recreation (see Wolfe 1964; Butler 2004). Many geographers have, however, often located themselves in departments of tourism and recreation, environmental studies, or business to display their geographic prowess (Hall and Page 1999). Hall and Page (1999) suggest that the relationship between the geography of recreation and the broader discipline suffers from two problems: (1) critics have seen it as lacking substance and rigor, and (2) geographical organizations and geography departments have failed to recognize recreation as a research area capable of strengthening and supporting the discipline.

These criticisms are not meant to reduce morale, but rather, to serve as a motivator for geographers to continue their research in the field of outdoor recreation, and recreation geography. Geographers have time and time again contributed to the recreation literature (Butler 2004), and as Smith (1982:19) states, “recreation geographers have a record of achievement and of breadth of vision that distinguishes us.” As we continue to populate our nation and the public devotes more of its leisure time to outdoor recreation, this sub-discipline of geography has the opportunity to step to the forefront, continuing to contribute to the private and public sector while playing a central role in the public policy that guides it (Cappock 1974).

2.3 Recreation Values, Cultures, and Users

First defining value and attitude, this portion of the literature review sets out to explore the various socio-demographic factors that influence outdoor recreation attitudes, preferences, patterns, and values. Demographic variables such as age, income, sex, and

education are examined, and, because it has been such a big issue at the Valles Caldera to date, user fee preferences. Those that value off-highway vehicle (OHV) use and wilderness characteristics are also reviewed, because their values, at least in terms of public land management, often lie on opposite ends of the spectrum. In addition, the literature on these two groups is significantly more available than any other group. With interest to this thesis, attitudes towards public access and cultural and religious sites are also addressed.

2.3.1 Values and Attitudes

Values are described by Rokeach (1973) as the appropriate modes of conduct or desirable end states of the human way of life. This perspective entails that values are the basic beliefs that are shaped by family, friends and significant others from early stages in life (e.g. freedom, honesty, fairness, etc.). As such, a recreationist with friends and family that value wilderness-characteristics is likely to also value them. Vaske (2008) goes on to say that these are the characteristics that give direction to one's attitudes. Thus, there are differences between these terms and it is important that this project, gathering the perspectives of many recreationists, defines and respects them. Attitudes can be thought of as opinions, preferences, or perceptions (i.e. favorable or unfavorable). With this definition, crowding, satisfaction, and experience would all be forms of recreational attitudes. These definitions provide a hierarchy presented in the literature; a person's values determine their attitudes, and these affect behavior (Vaske 2008).

As Manning (1999) has suggested, these values and attitudes of recreationists may differ substantially from how they are perceived by managers (see Clark et al. 1971 and

Merriam et al. for examples). In addition, resource values are not static, and they often alter over time with changes in the needs and attitudes of society (Hall and Page 1999). The understanding of these issues of recreation values can be divided up into manageable components for study. As such, this research studies the Valles Caldera as a manageable component of the larger management of public land for recreation. The data can be included with the mass of information needed to meet ever-changing land management practices, user perceptions and attitudes.

2.3.2 Public Access

The academic literature on outdoor recreation and public access is spotty and often limited. While numerous disgruntled groups, specifically those that favor hunting and off-highway vehicle (OHV) use, will voice their opinions on their websites, blogs, and monthly newsletters, little academic attention is given to understanding why these groups are so upset, and if any other recreational groups feel the same way. The limited literature cites fees (Buckley 2003; Manning 1999), distance (McConnell 1975), time and mobility, and recreation choice (Pigram and Jenkins 1999) as barriers. Marketing, while not directly evident in the literature, may also be a factor that limits recreational access to public lands.

Fees are found to have a negative influence or an obstruction to access for a number of reasons. First, the initiation of a fee where it has not existed historically is not usually supported by the public (Buckley 2003). The mentality is that it has always been free, and that it should stay that way. Additionally, local residents and visitors tend to be more resistant to new or increased fees than non-local visitors. This is probably because

local visitors are likely to visit the recreation area more often than non-local residents, and thus, will carry the heaviest burden of the total visitor costs (Manning 1999). Finally, many have cited that pricing discriminates against certain groups in society, specifically those with lower incomes (Bowker et al. 1999; Manning 1999; Reiling et al. 1992).

Distance is another potential impediment to access. Those that are located further from a place of recreation are less likely to visit it (McConnell 1975). The reasons can be physical, temporal, and monetary (Taylor and Knudson 1976). Additionally, if one does not have access to a vehicle, their recreation opportunities become more limited in terms of choice of site, journey, timing, and duration of trip (Jenkins and Pigram 1999). Costs of future vehicles and gas prices are also likely to play a role in potentially limiting access to more distant recreational settings. Other studies, alternatively, and citing that the journey itself is a part of the experience, have found that distance can actually serve as an attraction factor for recreationists (Baxter 1979).

No research was found discussing the implications that marketing could have recreational access. It seems likely that if potential recreationists lack knowledge about a particular venue, then they will be less inclined to choose it as their option for recreation. This lack of attention could be because public lands do an adequate job of informing the public currently, or that the public has come to understand what our traditional public lands offer in terms of recreational opportunities. More research is needed to address this issue.

Finally, and also relatively absent in the literature, is the barrier that one's recreational choice has on access. For instance, recreationists can hike on almost any public land, in any place on that land, and at any time. OHV users, on the other hand, are

much more dependent on trail infrastructure, and are more limited because of safety and/or environmental management constraints. These constraints, including numerous recreational groups, are actively voiced in numerous websites, blogs, and monthly newsletters of those that feel locked out of their own public lands (see Coalition for Common Sense Use 2011; New Mexico Wildlife Federation 2011; Paskus 2005).

2.3.3 Cultural and Religious Sites

Over four decades of research has focused on conflict in recreation (Vaske et al. 2007). Conflict, in terms of outdoor recreation, occurs when two or more groups compete for similar resources and at least one group finds that another group interferes with their pursuits (Eagles et al. 2002). These previous studies have focused on conflicts between recreationists and managers, between users of the same recreational activity, or in different activities, and between recreation and other non-recreation activities (Zeppel 2009). Little academic attention, however, has been given to conflicts between recreation activities and indigenous or ethnic groups on public lands (Zeppel 2009a).

Cultural discrepancies between indigenous groups and recreational users derive from differing social and cultural values for the use of public space (Zeppel 2009). Both indigenous and non-indigenous groups value the resources that public lands provide, but in very different ways. Non-indigenous groups are cited as identifying with values such as biodiversity, recreation and scenic amenity. These non-indigenous groups can have personal attachments to the land through concepts like wilderness or the sense of national pride that is often embodied into our relationship with public lands (Carpenter 2006).

Conversely, indigenous groups view these lands as cultural landscapes and homelands that embody both spiritual and community identity (Zeppel 2009). These values are often threatened by the values of the aforementioned non-indigenous values, including recreational activities permitted by federal land management agencies (Nie 2008). These values differences have created conflicts with indigenous groups and rock climbers (Harkin 2002), hikers and sightseers (Reeves 1994), ski resorts (Bauer 2007), mountain climbers, and visitor infrastructures (Zeppel 2009). These confrontations resulted in voluntary climbing bans where rituals were held, and direct interpersonal conflicts with recreational users that interrupted religious ceremonies.

While conflict between recreationists and indigenous groups continues to exist on public lands, little academic research has been undertaken to determine which recreationist's values and attitudes conflict the most with those indigenous to the land (Zeppel 2009). This research will look at specific user groups, demographics, and socioeconomic factors as potential determinates for conflict with indigenous values.

2.3.4 Gender

Differences in recreation between males and females was formally observed for the first time in the early Outdoor Recreation Resources Review Commission (ORRRC) studies on nationwide participation in outdoor recreation (1962). These initial studies were primarily descriptive and documentary in nature. Only recently have attempts been made to understand the implications of male and female recreation patterns in public land management (Manning 1999).

Manning (1999) promptly focuses our attention on the distinctly different meanings between sex and gender, two words that are often used interchangeably. Sex refers to the genetic and biological differences that distinguish males and females. Gender, on the other hand, refers to the social and cultural distinctions that are learned in society (Manning 1999). Thus, gender is the more likely factor in determining the values and attitudes that are developed by males and females over time.

Because males typically participate in more outdoor recreation activities than females, a number of studies have attempted to make sense of the why this is the case (Hartman and Cordell 1989; Johnson et al. 2001; Kelly 1980). These studies have seemed to draw similar conclusions, with the first being that the similarities between males and females are more prevalent than the differences (Christensen et al. 1987; Manning 1999). However, the major differences suggest that women are more likely to participate in fewer leisure and recreation activities than their male counterparts, because they are (1) more oriented toward culturally-based and family-centered activities, (2) that they are likely to give more consideration to others, not themselves, when it comes to leisure time and activities, and (3) that they are less likely to participate in activities that are traditionally masculine, such as hunting, fishing, and backcountry or wilderness-related activities. Others have cited economic impediments, and psychological constraints that women may often have, including fear of attack and harassment (see Henderson 1991; Johnson et al. 2001; Manning 1999).

This is not to say that females always participate in less recreational activities than men. For instance, while men account for a majority of wilderness users, hunters and backpackers, females participated in other activities such as developed camping and

day hiking as frequently as males (Manning 1999). Studies have shown that males, in general, are more likely to engage in winter, water-based, hunting, and dispersed land activities, while females are more likely to engage in horseback riding, picnicking, and non-consumptive wildlife activities (Johnson et al. 2001; Cordell et al. 2005). Studies have also found that participation rates have risen faster for females than for males in a large percentage of activities (Cordell et al. 2000). Research on the role of gender in recreation seems to suggest that there are as many similarities as differences in recreation participation and behavior.

2.3.6 Income, Education, and User Fees

When using income as a determinate for outdoor recreation participation, the results have often varied from study to study. Hall et al. (2009) noted that low-income people participate at a much lower rate than higher income people in outdoor recreation, and that the growing disparity between the poor and affluent may create inequities in opportunities for participation. Along the same lines, a population survey found that socioeconomic variables, including income and education, were positively correlated to national park visits (Bultena and Field 1978). Alternatively, Manning's (1999) review of the literature has somewhat downplayed the role of income, finding that while socioeconomic factors are often related to outdoor recreation participation, the relationships were weak to moderate.

In terms of actual recreation activities, Manning (1999) has cited that income affects only a few recreation activities that have relatively high cost thresholds. One might expect that Valles Caldera-related activities such as skiing, equestrian activities,

hunting, fishing, etc., would be those that inhibit lower income people from participating. The Fish and Wildlife Service's, "National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (2001)", found that both anglers and hunters typically had an average to high household income, or about \$40,000 to \$100,000. In terms of the Valles Caldera, because every activity currently has a price associated with it, it seems necessary to see how income influences recreational access and activities. In addition, adequate access to private transportation can inhibit mobility, limiting access to a range of recreational opportunities (Hall and Page 1999).

An extensive amount of literature has focused on user fees for recreation services on public lands (Bowker et al. 1999; Bowker et al. 2008; Driver 1984; Harris and Driver 1987; More 1998). Proponents for fees on public outdoor recreation often claim that fees: (1) recover costs, (2) allocate resources more efficiently, (3) stimulate recreation opportunities, and (4) promote equity by shifting the financial burden to those who actually use the resource (More 1998; Bowker et al. 1999). Alternatively, many contend that higher fees for recreation may force lower income users to decrease their recreational participation proportionally more than higher-income populations. Thus, low-income users may be forced to stop using facilities that have increased fees while higher-income populations will be less affected (Reiling et al. 1992). Others have suggested that the higher fees do not have a differential impact on campers with different income levels, citing that low income users decrease their use of facilities in the same proportion as high-income users (Cordell 1985).

Bowker et al. (2008) has suggested that minorities, women, and people with less education were less likely to favor user fees for certain recreation services on public land.

Other sources of opposition to user fees for recreation, which may be the case with those that have opposed fees on Valles Caldera, come from a type of user that McCarville et al. (1996; 61) has defined as a recreationist that “typically had not paid fees for public leisure services [in the past], and its members resent even the implication that they may be asked to do so. They [further] assert that fees are unfair and that they feel victimized through the introduction of fees. User resentment is exacerbated by participants’ familiarity with the recreational setting and those living closest to the sites are most likely to be indignant at the thought of paying a first-time fee.”

Further, studies conducted by Bowker et al. (1999) have shown that boat ramps, campgrounds, and special exhibits drew the most support for user fees. Users did favor funding from taxes or a combination of fees and taxes for visitor centers, trails, picnic areas, restrooms, parking and historic sites (Bowker et al. 1999). Understanding these preferences and trends can lead to the more effective allocation of user fees on the Valles Caldera.

While correlation between these demographic and socioeconomic factors has proven to have little to moderate variance in past on-site studies, likely because the sample is of limited diversity (Manning 1999), the wide array of those interested in recreation on the Valles Caldera warrants further analysis. The reason for this is that the three most adjacent counties to the Valles Caldera (Los Alamos County, Sandoval County and Santa Fe County) have a very high discrepancy in both education and income. This discrepancy could likely affect the outdoor activities that are preferred, rates of participation, and ability to pay user fees. Los Alamos County, immediately west of the Valles Caldera, is truly a demographic anomaly. With a population of

approximately 18,000, more than 60% of the people that reside within Los Alamos County have a bachelor's degree or higher. The median household income in the county is \$102,602 (U.S. Census Bureau 2011). Both of these numbers are likely a result of the nearby Los Alamos National Laboratory.

Encompassing the entirety of the Valles Caldera, Sandoval County is home to a population in which 24.8% had a bachelor's degree or higher, and the recorded median household income was \$56,479. These numbers for Santa Fe County were 36.9% and \$55,000. We can compare these numbers to the state of New Mexico (23.5% and \$43,719) or even the nation (24.4% and \$52,029), to see the differences that exist (U.S. Census Bureau 2011). These socio-economic differences should be accounted for when determining future levels of access, where fees should be apportioned, and what outdoor recreation activities should be offered in the future.

2.3.7 Age

As the age continuum in the United States shifts, it is important for public land managers to understand the recreational needs of an ageing population. Studies have found that age has generally had a high correlation with the likelihood of participating in recreation activities (Dwyer 1994; Cordell et al. 2005). This is important when we consider that the number of people 65 years of age and older, which now make up 12.4 percent of the U.S. population, is expected to increase by 147 percent between 2000 and 2050 (Hall et al. 2009). Additionally, the recreational activities that different age groups participate in are changing and evolving all the time (see Bowker et al. 1999).

Understanding this shift in age and subsequent change in recreation preference can help managers better meet the public's recreational needs.

Participation rates for almost all of the more active outdoor pursuits vary considerably by age (Cordell et al. 2005). Manning (1999) goes on to say that age is strongly and inversely related to recreation activities requiring physical strength and endurance. Cordell et al. (2004) found that, on the national level, older populations (40+ years) have tended to prefer activities such as driving for pleasure, picnicking, sightseeing, wildlife viewing, visiting nature centers and walking for pleasure. While younger populations (12-39) have preferred many of the same recreational activities, they have had a higher preference for bicycling, day hiking, and a significantly higher preference for primitive camping and off-road driving. Overall, it appears that older populations participate in more selective, less demanding and active pursuits when compared to younger populations. Interestingly, studies show that there was no positive correlation between the increased leisure time associated with retirement and participation in leisure activities (Hall and Page 1999).

The significance of age in recreation was stated by Murdock et al. (1991), who cited that age will have the most significant effect on change in future recreation participation for activities such as backpacking, bird watching, camping, day hiking, picnicking, and walking. This highlights the importance for public land managers to understand the implications of an aging population.

2.3.8 OHV

As evidenced by the Yellowstone snowmobile controversy that has seen little resolve over the last decade, access rights for off-highway vehicle (OHV) users has been

at the center of attention in many land management debates. This research uses the following as a definition of OHVs: (1) 4-wheel drive jeeps, automobiles, or sport utility vehicles; (2) motorcycles designed for off-highway use; (3) all-terrain vehicles (ATVs) and other specially designed off road motor vehicles (Cordell et al. 2005). While Cordell et al. (2005) does not include snowmobiles in their broad definition of OHVs, they will be included as part of this research because of their potential interests to winter recreation on the Valles Caldera. OHV use to the public is not currently allowed on the Valles Caldera.

As one might expect, the recreational experiences and values of backpackers, photographers, wildlife observers, and many others that favor natural environments, often conflict with OHV and other motorized recreation (Badaracco 1976; Cordell et al. 2005; Sheridan 1979). OHV alterations of the viewscape, soundscape, and landscape are likely the reasons for this incompatibility. Others have cited unmanaged OHV use as a major source of unauthorized creation of roads and trails, and the associated erosion, water-quality degradation, negative impacts on wildlife and local air quality, and habitat destruction (Bleich 1988; Leung and Marion 1996; Payne 1983; Petulla 1977; USFS 2011; Vancini 1989; Vieira 2000). For this reason, it is likely that a significant number of Valles Caldera recreationists will oppose an increase in OHV access.

In terms of trends, driving motor vehicles off-road has become one of the fastest growing outdoor activities in the country. This form of outdoor recreation grew from 27.3 million in 1994 to 36 million in 2000, a 32 percent increase. This number grew to 51 million by 2004, constituting approximately 19 percent of the American population 16 and older (Cordell et al. 2005). The western United States has been cited with an OHV

participation rate of 27.3 percent, the most of any other region. New Mexico, in particular, has 25.6 percent of its state population participating in OHV-related recreation (Cordell et al. 2005). With this 1 in 4 OHV use population expected to grow, it is likely that a number of them would like to access the Valles Caldera to meet their recreational needs.

Nearly every demographic stratum showed significant increases in OHV recreation. While the Hispanic population participation grew by the largest percentage, white Americans added more OHV participants than any other racial or ethnic group between 1999 and 2004. Persons holding a post-graduate degree and those with family incomes greater than \$150,000 have shown only modest gains in OHV participation in the same time period. The two family income categories with the largest growth rates were the \$75,000 to \$100,000 and \$25,000 to \$49,999, with the latter group adding the most users. People with less than a high school education contributed significantly, adding 4.8 million participants, a 79 percent increase since 1999. Those with ‘some college or technical school’ added 4.0 million over the same time period. People under the age 30 continue to participate more than the 30-50 year age group, but the latter added more participants as a percentage. The 30-50 year old group OHV participation rates increased from 15.5 million to 23.4 million, a 51-percent growth rate. The rate of growth as a percentage was higher for females than males, but males added more OHV users (Cordell et al. 2005).

As a heterogeneous population, much like any other outdoor recreation group, OHV users see their form of recreation as a means to an end – a way to get out, to explore, and to challenge (Kockelman 1983). Kockelman (1983) identifies three types of

OHV users: (1) those that use OHVs for their work, including land managers and patrollers; (2) those that use OHV solely for recreational purposes and for having a good time; usually law-abiding citizens who respect other users and the environment; and (3) the “bad apple” group, a group of users that do not care about the damage they cause. The second of these described groups are divided into casual and endurance riders, with the former using OHVs as a means to reach a destination or get into the backcountry. These users are typically hunters, fishermen, environmentalists, conservationists and scientists. Endurance riders want to be challenged, and they use their OHVs to conquer these challenges. The “bad apple” group has often been cited for deliberate or unintended damage to public and private property, including geologic, paleontological, and archeological resources (Kockelman 1983).

Understanding who is using OHVs, what their intentions are, and what the future trends predict will all be important information that needs to be incorporated into future management decisions on the Valles Caldera.

2.3.9 Wilderness

It is appropriate to discuss the recreationists that value wilderness characteristics, because their perceptive use of the land, or lack thereof, is often the antithesis of the previously-discussed OHV recreationists. All other outdoor recreation activities and personal values seem to fall somewhere in between these two outliers. And while the Valles Caldera is not designated as a wilderness area, and likely never will be, it is quite possible that many recreationists on the Valles Caldera support wilderness-like values. Thus, understanding the values of wilderness and its supporters is important as future

management decisions on the Valles Caldera are made to reflect the needs of its many users.

The Wilderness Act of 1964 defines wilderness as an area that is in contrast with areas where man and his own works dominate the landscape. It is an area untrammelled by man, where man himself does not remain. It is an area of land that retains its primeval character and influence. It is an area that man's work is substantially unnoticeable and offers outstanding opportunities for solitude or primitive and unconfined types of recreation (16 U.S. C. 1131-1136). Exclusively granting these types of values might be difficult in a place that promotes multiple-use and strives to grant fair public access to all (VCT 2003). However, if wilderness characteristics are highly valued by a large percentage of Valles Caldera recreationists, actions could be taken to limit other activities or minimize contact between conflicting groups.

In terms of wilderness values that the Valles Caldera's recreationists might desire, we look to the Hall et al. (2010) survey in which three-quarters of the wilderness visitors were seeking solitude, freedom, remoteness, and wilderness opportunities. Representative studies of these visitors suggest that as use levels increase (crowding), some negative effects on solitude and the overall experience quality can occur (Hall et al. 2010). Because the current infrastructure and appropriated funds of/for the Valles Caldera are minimal, crowding has yet to become a major issue or concern. Further, as evidenced by the New Mexico Wilderness Alliance, wilderness supporters also promote preservation of the land and natural environment, including protection of water and air resources, and wildlife. Freimund and Cole (2001) have also found that privacy, opportunities for contemplation, relative naturalness, and the associated lack of

development and modifications are also important values of wilderness-seeking outdoor recreationists.

Although some site-specific studies may vary, the typical outdoor recreationist that values wilderness characteristics is white, male, able bodied, and well educated, with an above average income (as cited by Bowker et al. 2006). The average age of wilderness visitors is increasing, but as a percent, participation in wilderness-associated recreation still decreases with age. Women have increased their participation in wilderness-related activities, but still are less likely to visit this type of area than their counterparts (Johnson et al. 2004). Bowker et al. (2006) have found that income, gender and environmental awareness have all been positively correlated with wildland recreation activities, and that education did not necessarily have a significant influence.

2.4 Future Trends Influencing Outdoor Recreation

As Pigram and Jenkins (1999) have discussed, the extent and nature of recreational participation are increasing and have been affected by a number of factors. These factors include, but are not limited to, an increasing population and life expectancy, more diversification and a larger minority population, shorter working weeks, and increased mobility. Understanding these changes and trends in demographics, on both a regional and national scale, can help recreation managers understand and meet the changing needs and expectations of their recreational users.

The U.S. Census Bureau projects the U.S. population, currently estimated at 307 million, to increase to 392 million by 2050, a more than 50 percent increase from the 1990 population (J.C. Day 2011). The New Mexico population was estimated at 2

million, a 10.5% increase since 2000 (U.S. Census Bureau 2009). As the United States becomes more crowded, it will be important for managers to find a way to adjust how their limited resources are used and how to accommodate an increasing population.

In line with an increasing population, longer life spans and age in populations is expected to influence current and future recreation values and attitudes. Life expectancy has been projected to increase from 76.0 years of age in 1993 to 82.6 years in 2050 (J.C. Day 2011). The median age in populations is projected to steadily increase from 34.0 years of age in 1994 to 35.5 in 2000, peak at 39.1 in 2035, then decrease slightly to 39.0 by 2050. Creating more leisure time, the age of 60 has now become an accepted norm for retirement (Pigram and Jenkins 1999). This increasing median age is attributed to the aging of the population born during the Baby Boom years. Understanding the needs of an ageing, recreating population will be crucial for future public land managers.

A final trend that will likely influence recreation on the Valles Caldera is an increase in mobility and the influence of technological developments in recreation equipment and infrastructure. Pigram and Jenkins (1999) cite that although the home has become more important in leisure activities, other developments in technology (e.g. air transport, off-road vehicles, trail bikes, hiking boots, etc.) have widened the scope of outdoor recreation activities or made it easier, more comfortable, and more accessible to those located at greater distances from recreation sites. Additionally, as more recreation sites become more apt to meeting the infrastructure needs of additional recreationists (e.g. bathrooms, potable water, trails, etc.), numbers of visitors should continue to increase.

If gas prices continue to increase, however, OHV use may be reduced. A 2008 study, for example, cites that a dip in OHV sales may be attributed to increasing gas

prices, but notes that the impact of increasing gas prices on OHVs ownership remains undocumented (Cordell et al. 2008a). Future research is needed to document the impacts that increases gas prices might have on OHV sales and use. Recreation managers should look into the future trends in the area of mobility and infrastructure in order to meet the needs of possible changes in recreationist behavior.

CHAPTER THREE

Research Design and Methodology

3.1 Research Design Overview

This study is contingent upon the survey responses of outdoor recreationists, a subset of those for whom public lands are created and managed. More specifically, this research sets out to gather the perspectives, attitudes, and values of those that have an interest in outdoor recreation on the Valles Caldera. To acquire such data, the research was conducted in three phases: (1) develop relevant survey questions from the literature and public land managers; (2) administer these survey questions to those interested in outdoor recreation on the Valles Caldera; and (3) conduct a thorough analysis of the collected data.

To develop a set of survey questions, the first phase of the research required both a study of the recreation literature and input from the public land managers most familiar with the Valles Caldera. In an attempt to assure that the opinions of recreationists with interests in the Valles Caldera were all appropriately accounted for, the second phase employed a number of survey methods and techniques discussed in detail below. The final stage of this research required a thorough, qualitative and quantitative analysis of the surveyed responses. These analyses include descriptive methods, the Potential for Conflict Index, and chi-square tests.

3.2 Methodology

3.2.1 Phase I – Developing Survey Questions

Ideas for survey question structure were gathered from the relevant literature on public lands and recreation (Vaske 2008). Throughout the process of developing these questions, it was deemed necessary to incorporate the knowledge of those that are most familiar with the Valles Caldera's management practices, and those with appropriate public land management experience. Prior to the distribution of the survey, a local pilot study was conducted to provide feedback and minimize errors.

The VCT management goals and principles set forth in the VCPA, along with the mandates in the proposed Valles Caldera National Preserve Management Act (VCNPMA), were used as a framework for which the survey questions were developed. This was done so results from this survey will have longevity and shelf life. Addressing the impacts that cattle grazing on the Valles Caldera might have on recreationist's values and attitudes is one example of how the mandates of the VCPA and VCNPMA are incorporated into the survey. For instance, current legislation directs the Valles Caldera to continue to operate as a working ranch. Depending on the types of responses from different recreationist groups, land managers could either adjust the amount of cattle that graze certain areas or limit grazing to certain times of the day to avoid those that view cattle as an impediment to their recreational experience.

In addition to the confines of the legislation, questions were guided by relevant recreation literature (Vaske 2008). The literature provided information that offered guidance to the types of questions that are typical of recreation surveys, different formats

and preferred length, including the amount of time to take the survey, tolerable lengths for the distributed survey (number of questions), and individual question length.

Once a draft of the questions was developed, it was reviewed by professionals with knowledge about the Valles Caldera and incorporated into the final version of the survey. Those selected consisted of academics that had done past research on management of the Valles Caldera, land managers from the surrounding Bandelier National Monument and the Santa Fe National Forest, and a selection of appropriate management-level staff from the Valles Caldera, retired or active. There was hope that this wide array of expertise in different land management settings would negate some of the bias that may be directed at, against, or towards the current management practices on the Valles Caldera. By contacting these professionals after the original questions were developed, a meaningful set of questions was prepared for distribution. Additionally, the researcher asked interviewees to state their concerns so that questions, if necessary, could be altered or refined prior to distribution.

This contact process was completed in-person and through email to a total of nine persons in positions like those mentioned above. Upon completion of the final distributed survey, two anonymous employees from the VCNP provided feedback that was incorporated into the questionnaire. The other sources did not respond or did not have any suggested comments about changes, additions, or revisions. The researcher determined that the feedback, or lack thereof, stemmed from either time constraints, lack of interest, or an acceptance with the draft survey that was presented to them. Further, because the time period for this project was limited, the researcher decided that the feedback received was sufficient to move forward with the next phase of the

methodology. It is important to reiterate that this process was used for feedback, potential additions, and revisions to the questions that the researcher had already developed.

After a draft of questions was developed, and before the survey was administered, a pilot study was conducted as part of the final editing and review process. The purpose of this pilot study was to get feedback from individuals to check the length of time it took them to take the survey, point out any questions that were confusing or too difficult to answer, address any response categories that were left out of close-ended questions, spelling and/or grammatical errors, and any aesthetic or design issues. Thirteen people from the University of New Mexico (UNM) Geography Department, consisting of faculty and graduate students (some familiar with the research and some not) were used for the pilot study. This particular group was considered acceptable by the researcher because of time constraints, the various backgrounds of each respondent, and the limited resources available during the summer months on a college campus. No outside sources, such as those that might take the survey once administered, were sought, because it may have jeopardized whether those that completed the pilot study would be willing to re-submit responses during the administration of the final survey.

In conclusion, the researcher considers this combination an appropriate methodology for the first phase of this research, because it incorporates many dimensions relevant to recreation on the Valles Caldera. However, because of the uniqueness of this environment and experiment in management, it should be noted that while the methods of this section were employed to assist in the development of the survey questionnaire, the researcher created these questions specifically for the Valles Caldera, and, therefore, can

not necessarily be directly transferred to another survey for other public lands. The survey utilizes the Likert scale, and questions that are close-ended, allowing for “additional thoughts” or “comments” (see Appendix 5). The researcher determined that this combination of methods will provide an opportunity for the research to stake a claim in the public land management literature, and be of use to future managers of the Valles Caldera.

3.2.2 Phase II - Survey Distribution

This research sought to quantify the various values and attitudes of the Valles Caldera’s recreationists through a survey questionnaire. A survey was chosen because (1) they are useful for describing characteristics of a larger population; (2) standardized questions will allow for a statistical comparison among the sampled groups; (3) a relatively short time period is needed for a large sample size; and, (4) if needed, a large number of questions can be asked in the survey without consuming major amounts of time. As Manning (1999) describes, surveys, along with the observation of visitor behavior, are the most effective tool for gathering recreational attitudes and preferences. Since there are such a large number of recreationists interested in the Valles Caldera, the survey method presents itself as the appropriate choice for assessing and representing their many values and attitudes toward access and management.

It is important to gather the perspectives from a wide range of the public that use or would like to use the Valles Caldera for recreational purposes. While outdoor recreation can be defined in many different ways, this research defined it in a way that was reflective of the recreational opportunities that are currently allowed on the Valles

Caldera and those that are typical on other public lands (i.e. backpacking, mountain bicycling, RV camping, etc). The “additional comments” sections of many questions allowed open-ended answers in cases where a recreationist’s specific activity was not listed in the survey.

The “Survey Monkey” online software was chosen as a means to distribute the survey questionnaire. This software allows the user to create custom links so that responses from multiple sources can be studied individually, compared, and/or aggregated. For example, two groups that likely have differences in attitudes and values, such as the New Mexico Wilderness Alliance (NMWA) and the New Mexico Off Highway Vehicle Alliance (NMOHVA), can be compared, by response, analyzed separately, and then compared against other groups. The researcher sent custom survey links through many different mediums, including online newsletters, email lists, and posted flyers. The final data can be studied as a whole (a combination of all the responses) or broken down by each individual group.

Online surveys were made available through resources that recreationists interested in the Valles Caldera would likely encounter. Sources were chosen in a way to both make certain that as many recreation groups as possible had some exposure to the survey, and to negate bias toward one specific recreational group. The main source of responses came from the email directory of the VCNP, a voluntary sign-up list for those that seek to have additional information about the Valles Caldera emailed to them. An email with an online link and specific information about the survey was sent to those that had voluntarily signed up with the Valles Caldera’s “hunting”, “fishing”, “special events”

and “recreation events” email lists. An initial email was distributed on 12 August 2010, followed by a ‘last chance’ email one month later (see Appendix 2).

This list is likely to represent a broad spectrum of the people that are most interested in recreation on the Valles Caldera (See 3.2.2.11). Other survey distribution locations included: two running groups that have events in the Valles Caldera, through email and a Facebook post; the New Mexico Wildlife Federation’s September newsletter; NMWA’s September Newsletter; Albuquerque Wildlife Federation’s email list; New Mexico 4-Wheeler and New Mexico Off-Highway Vehicle Alliance (NMOHVA) email lists; the Caldera-Action website email list; a posted link on the vallescaldera.com webpage; and a posted link on the home webpage of the Espanola Sun, a local newspaper. To prevent multiple responses from one respondent, it is important to note that the online survey could only be completed once at any one, individual computer.

A brief description was taken from each group’s website and paraphrased to provide some insight into the types of recreationists, and the associated values, attitudes, and perceptions that we might expect to see within each group, detailed immediately below. On-site methods and posted flyers follow.

3.2.2.1 Albuquerque Wildlife Federation

Albuquerque Wildlife Federation (ABQWF) is an all-volunteer organization focused on New Mexico's wildlife and habitat resources. Among ABQWF's dedicated and able volunteers are wildlife experts, agents of public land stewardship, sportsmen and hunters, and most especially, ordinary citizens committed to conservation of nature's

wealth for personal satisfaction and for future generations (Albuquerque Wildlife Federation 2011).

3.2.2.2 Caldera Action

Caldera Action supports the long-term protection of the Preserve. This watchdog group for the Valles Caldera espouses a broad range of low impact public activities, including restoration, recreation, education and research. As such, their mission is to foster active citizen participation in the restoration, protection, and appreciation of the Valles Caldera, for the long-term benefit of the place itself, the American public, and visitors from around the world (Caldera Action 2011).

3.2.2.3 Rio Grande Sun [Española Sun]

Espanola is located approximately 20 miles east-northeast of the Valles Caldera. Primarily serving Santa Fe County, the Rio Grande Sun (“Espanola Sun” from here forth) serves a paid circulation of 12,000 and is the largest paid weekly newspaper in New Mexico. Readership reaches north to the Colorado border and south into Pojoaque, ten miles south of Espanola. The newspaper puts a strong emphasis on local politics, crime, school news, county coverage, editorial content and sports. The Sun also provides a website for user access and convenience (Espanola Sun 2011).

3.2.2.4 Jemez Mountain Trail Runs

The Jemez Mountain Trail Runs (JMTR) is a group that organizes annual runs in and through the Jemez Mountains and Valles Caldera (Jemez Mountain Trail Runs 2011). The Facebook group, where the link to the online survey was posted, has 291 members.

3.2.2.5 New Mexico 4-Wheelers

Based in Albuquerque, the New Mexico 4-Wheelers are the oldest and largest four wheel drive club in the New Mexico. This non-profit club provides social, educational, and recreational activities for its membership. They promote and participate in safe and responsible four wheel drive activities and seek to protect and enjoy all local, state, and national resources (New Mexico 4-Wheelers 2011).

3.2.2.6 New Mexico Off-Highway Vehicle Alliance

The New Mexico Off-Highway Vehicle Alliance (NMOHVA) is a statewide alliance of motorized, off-highway vehicle (OHV) enthusiasts that promotes responsible OHV recreation through education, safety training, land conservation and access, in cooperation with public and private interests, to ensure a positive future for OHV recreation in New Mexico. As such, NMOHVA supports and works with local user groups and public land managers to promote responsible use and protect access to public lands. Further, they are committed to creating additional motorized recreation opportunities in the state of New Mexico (NMOHVA 2011).

3.2.2.7 New Mexico Wilderness Alliance

The New Mexico Wilderness Alliance (NMWA) is a nonprofit, grassroots organization dedicated to the protection, restoration, and continued enjoyment of New Mexico's wildlands and Wilderness Areas (New Mexico Wilderness Alliance 2011).

3.2.2.8 New Mexico Wildlife Federation

The New Mexico Wildlife Federation (NMWF) is a conservation advocate, dedicated to protecting New Mexico's wildlife, habitat and outdoor way of life. NMWF promotes top-quality wildlife habitat and rights for conservation-minded hunters and anglers in the face of threats such as irresponsible oil and gas development, OHV abuse, or irresponsible grazing practices. NMWF also seeks to protect the right of its members to responsibly access public lands (New Mexico Wildlife Federation 2011).

3.2.2.9 Santa Fe Striders

The Santa Fe Striders promote running for its members, through road races, trail runs, and workouts. The Striders have weekly running events, yearly social events, and organize and sponsor several races every year (Santa Fe Striders 2011).

3.2.2.10 VallesCaldera.com

This web site has no affiliation with the National Preserve, and is run by a local resident proximate the Valles Caldera. This website is intended to educate the public about how to appreciate, visit, and enjoy Valles Caldera. It also seeks to encourage the

public to take an active role in the advancement and preservation of the Valles Caldera (vallescaldera.com 2011).

3.2.2.11 Valles Caldera National Preserve

The VCNP allows for those interested in the Valles Caldera to voluntarily sign up for their mailing list. The VCNP sends out information regarding news and newsletters, volunteer opportunities, recreation events, special events, fishing, hunting, contracting with the Valles Caldera, project planning & decisions, cultural resources, and education. Those that volunteer have the ability to select which, and how many of these interests they wish to receive by the occasional email (Valles Caldera National Preserve 2011).

3.2.2.12 On-site

Because some potential respondents may not have access to the internet, on-site surveys were conducted to complement the online survey. Additionally, immersing oneself into the environment of the research is an indispensable aspect that is unattainable through the internet. On-site surveys were conducted at trail heads and recreation sites, both inside and around the outer bounds (rim) of the VCNP, at the Valles Caldera Visitor Center, and in the Jemez National Recreation Area.

3.2.2.13 Posted Flyers

Posted flyers were also a method of survey distribution. These flyers were placed in locations around Albuquerque (unless otherwise noted) where the recreation populace was expected. These locations included: Recreation Equipment Inc. (REI) stores in

Albuquerque and Santa Fe, Sportsman’s Warehouse, Flying Star Café, Satellite Coffee, Performance Bicycle, The Valles Caldera Visitor center on the VCNP, and locations around the UNM Campus. The flyers bolded and enhanced the words “recreation” and “Valles Caldera” to draw the attention of those that might be interested in either of those two things. Other information like project description, researcher contact, and the online survey link were also listed on the flyers (see Appendix 3).

3.2.2.14 Survey Response and Results

In distributing the surveys, it was important to decide on the number of responses the survey should receive to accurately represent the 15,581 recorded recreationists of the VCNP in 2009 (VCT 2009; 24). When the survey questionnaire was closed to the public on 8 November 2010, a total of 712 responses were collected, or 4.57% of the annual visitation rate. Specific to the VCNP email distribution list described above, the first email was received by 2014 people, 731 of which opened or viewed the email, and 267 (36.5%) responded. The ‘last chance’ email sent on 9 September 2010 was received by 2042 people, 600 of which opened or viewed the email, and 140 (23.3%) responded (see Table 1). Because these numbers were recorded by the VCNP prior to the official closure of the survey, 37 respondents from the VCNP email list are unaccounted for in these statistics. When the surveyed closed, the VCNP email list helped acquire 444 respondents, 21.7% of the total that received the email about the survey. This number increases to 33.4% if we consider only those who opened or viewed the email. There was a 100% completion rate for those that started the survey.

Table 1 - VCNP Email Responses

	Received Email	Viewed Email	Responded	%
First Email	2014	731	267	36.5
“Last Chance” Email	2042	600	140	23.3

Using the approximate visitors in 2009 (16,000) as the population size, the minimum recommended sample size is 376 (95 percent confidence level). In a similar study conducted on a national scale, the Outdoor Recreation Participation Report (ORPR) (2009) considered a panel of around one million members as representative of the U.S. population, approximately .0000004% of the estimated 279,568,000 aged six and above. Additionally, and unlike the ORPR that oversampled ethnic groups to boost responses from a typically under-responding group, this research did not seek or isolate any minority or ethnic group.

Steps were taken to mitigate or minimize the potential disadvantages with the survey methodology: accessibility and survey comprehension. Help from thesis committee members and those involved with the pilot study assisted in making sure that the survey questions were transparent on a wide range of levels. Another concern was making sure that as many people interested in recreation on the Valles Caldera had the opportunity to respond to the survey in some way. To address this issue, an extensive amount of time was put into researching many different recreation groups around New Mexico, and contacting them to explain the relevance and importance of the survey. Many of these groups promptly responded and were used as a means to distribute the online survey.

In conclusion, the above approach presented itself as the best way to assess the recreationist's thoughts on access and management of the Valles Caldera. Thorough procedures were taken to make sure that the survey was made available to as many Valles Caldera recreationists as possible.

3.2.3 Phase III – Analysis

3.2.3.1 Introduction

The goal of this research, involving recreationists and their perspectives on access and management, is to provide information that will help future decision making on the Valles Caldera. When communicating results to a broad range of audience members, from public land managers to your average audience, it is important that the findings are conveyed in both a practical and understandable manner. Accordingly, because the collected data are primarily non-parametric, descriptive and ordinal data, the Potential for Conflict Index (Vaske 2008), various descriptive statistics, and chi-square tests of independence were used. The open-ended responses were quantified and described where appropriate.

3.2.3.2 Descriptive Statistics

The survey compiled a large amount of data. Accordingly, specific focus will be given to selected questions (discussed later) that were chosen to answer the research question. Much of the remaining data was quantified through the use of descriptive statistics. The use of descriptive statistics gives the readers simple summaries about the sample and the measures from the less-discussed questions. Simple tables, which include

the actual counts (responses), the percent of the total responses, and the number of survey-takers that skipped a question, have been created for every question and sited in the necessary locations throughout final chapters. The aforementioned tables were created using Microsoft Excel. Data are exported from the 'SurveyMonkey' software in CSV format and loaded into Microsoft Excel to create such tables.

3.2.3.3 Potential for Conflict Index

While basic summary statistics such as central tendency (mean), dispersion (standard deviation), and shape (skewness) can effectively convey meaning, Vaske (2008) notes that all three should often be considered together so that a more accurate understanding of the variable's distributions can be communicated. For this reason, this research will employ a method that was specifically developed to facilitate a better understanding and interpretation of statistical data to managers and non-technical audiences: the Potential for Conflict Index (PCI). Due to the nature of this method, the PCI will only be used for the likert scale questions of this research (Questions 5, 6, 16, 17, 19, 20, 21, and 23).

The PCI was introduced as a means for communicating sociological and psychological concepts (e.g. values and attitudes) to non-technical audiences (Manfredo et al. 2003). Vaske et al. (2010) explain that PCI has been used to facilitate the understanding of issues such as value orientations and attitudes toward wildlife, hunter behavior, management of desert tortoises, forest management, evaluations of wildfire management strategies, and ecotourism development. As such, the PCI was chosen as a

method of displaying and communicating the conflict that may exist within, and between different user-groups that are interested in recreation on the Valles Caldera.

The PCI value is a ratio of responses on either side of the rating scale's center, the neutral point (e.g. 'neither agree or disagree'). Numerical ratings for the likert scale questions of this research designate the neutral point (e.g. 'neither agree or disagree') a value of zero (0). The other values are assigned to the alternate response choices: 'strongly agree' [2], 'agree' [1], 'disagree' [-1], and 'strongly disagree' [-2]. Thus, the questions that will be examined using the PCI method will be based on a 5-point likert scale: (1) 'strongly agree', (2) 'agree', (3) 'neutral', (4) 'disagree', and (5) 'strongly disagree'. One can then calculate the PCI value (ratio) using the equation provided in Figure 4.

$$PCI_1 = \left[1 - \left| \frac{\sum_{i=1}^{n_a} |X_a|}{X_t} - \frac{\sum_{i=1}^{n_u} |X_u|}{X_t} \right| \right] * \frac{X_t}{Z} \quad (1)$$

where

$\Sigma |X_a|$ = sum of positive values for responses for n_a respondents giving "acceptable" (or "favor" or "like") responses;

$\Sigma |X_u|$ = sum of negative responses for n_u respondents giving "unacceptable" (or "oppose" or "dislike") responses;

$X_t = \sum_{i=1}^{n_a} |X_a| + \sum_{i=1}^{n_u} |X_u|$

$n = n_a + n_u$ + number of neutral responses; and

Z = the maximum possible sum of all scores = $n * \text{extreme score on a scale}$ (e.g., $Z = 2n$ for scale going from -2 to +2).

Figure 4 - Equation for Calculating PCI Value³

³ The entirety of Figure 4 was borrowed from Vaske et al 2010

The greatest possibility for conflict ($PCI = 1$) occurs when there is a bimodal distribution between the two extreme values of the response scale (e.g., 50% strongly agree, 50% strongly disagree, and 0% are neutral). A distribution of 100% at any one point (e.g. all respondents that select 'strongly agree') would have a PCI of 0 and suggests no potential for conflict amongst for that response group. The PCI has boundary values of 1 and 0 (zero). With the final results displayed as a bubble graph, it is the PCI value that determines the size of the bubble. A PCI value of 1 represents the largest bubble size. The size of the other bubbles are comparative proportions, and decrease in size as the PCI value decreases. The center point of the bubble is determined by the mean acceptance of the responses, where 'strongly agree' = 2, 'agree' = 1, 'neither agree nor disagree' = 0, 'disagree' = -1, and 'strongly disagree' = -2. This value determines where the PCI-represented bubble is located along the y-axis. Figure 5 provides an example, graphically displaying the PCI and mean acceptance of each management response to controlling the bear population in Alaska.

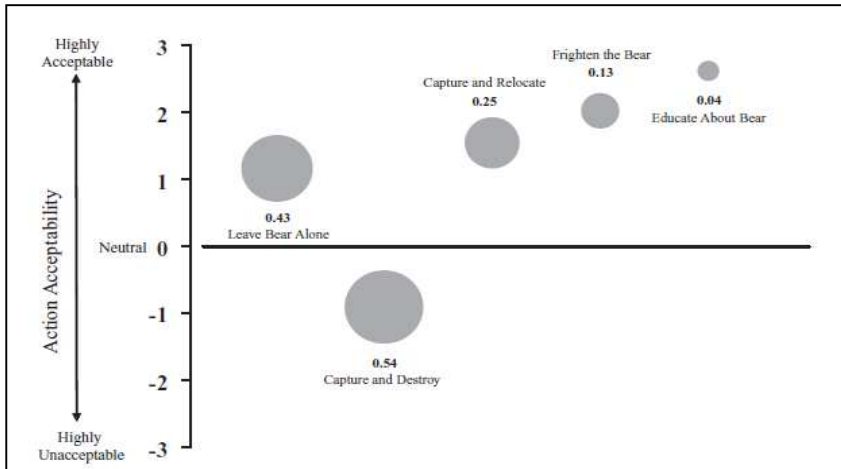


Figure 5 - PCI-based Bubble Graph Technique^{4 5}

Vaske et al. (2010) note two limitations of the PCI: (1) the PCI formula limits the statistic to bipolar scales with a neutral value, and (2) there is no formal test for differences among the PCI values. The former issue does not present a problem to this research because of the nature of our likert scale questions (bipolar in nature). The latter limitation creates a situation that will require a comparative analysis between group PCIs, because no formal valuation system for the PCI currently exists. For example, if one group has a PCI value of .65 and another has a value of .22, we have no formal method for testing whether differences between them are significant. However, and again thinking comparatively, there is a much higher potential for conflict within the first group (.65) than within the second (.22). To address these shortcomings, Vaske et al. (2010) have recently proposed a second generation PCI. This second generation PCI may warrant investigation for further analysis of the data collected, and the PCI method as a

⁴ The entirety of Figure 5 was borrowed from Vaske et al 2010

⁵ This PCI-based graph indicates the survey-consensus agreeing that to “capture and destroy” a bear was more or less unacceptable (~ -1) (y-axis). We also see that this management decision had the highest PCI value (0.54), indicating that the standard deviation of the responses was greater than the other alternatives. “Educate about the bear” was the most acceptable (~ 2.5) and had the lowest PCI value (0.04).

whole. These limitations, however, have not been determined to be a major concern or constraint to the representation of the data for this research.

3.2.3.4 Chi-square

The chi-square statistic (χ^2) will be used to evaluate statistically significant differences between groups. For this research, this could be a comparison of different recreation groups (e.g. NMWF and NMWA) or different demographic groups (e.g. males to females). The chi-square statistic, calculated using the formula shown in Figure 6, is the comparison between the observed (o) and expected (e) values.

$$\chi^2 = \sum \frac{(o - e)^2}{e}$$

Figure 6 - Chi-square equation

Small deviations between the observed and expected counts produce a small chi-square value. A smaller deviation suggests that the relationship between the tested groups can be attributed to chance. The greater the discrepancies between the observed and expected counts, the larger the chi-square, and the more likely the two groups will differ significantly. For simplicity reasons, and as a time-saving measure, the chi-square value was calculated using an online matrix (see Preacher 2001).

Once the chi-square value is computed, it is compared against the critical value. The critical value is a value of the theoretical distribution that is found in given tables. The comparison between these two values produces the likelihood (i.e., the p-value) that the calculated value of the two tested groups are significantly different. The p-value is

the probability of obtaining a value of chi-square as large as or larger than the one calculated between the two groups (Vaske 2008). If a difference is said to be statistically significant in this research, it is assumed to be at $p < 0.05$, or the 95% confidence level.

3.2.4 Phase IV – Areas of Focus

The survey questions were grouped into like categories to address the five areas of interest discussed in Chapter One: (1) public access, (2) religious and cultural sites, (3) environmental preference, (4) crowding, (5) and livestock grazing. Within each of these areas of interest, two to four questions were developed to answer the sub questions of this research, or, the attitudes and perceptions towards each of the five areas of interest. Of these two to four questions, particular attention was given to a set of focus questions; the questions that most accurately answer the research questions of the thesis. The remaining questions were used to supplement the data gathered from the focus questions.

To understand different group's attitudes and perceptions towards public access, Question 6 [*In your opinion, you are satisfied with the level of recreation access experienced on the Preserve.*] was used as the focus question. Question 21 [*In your opinion, the protection of important Indian and Puebloan cultural and religious sites inside the Preserve is more important than access for recreationists.*], was used as the focus question for understanding the attitudes and perceptions towards cultural and religious. Question 15 [*Do you believe increasing recreation would have negative environmental impacts on the Preserve?*], Question 10 [*Do you value the quality or quantity of your recreational experience? For instance, would you prefer to have one hiking trail or campsite to yourself for the day (quality), or have the option of many trails*

and campsites that are open to many recreationists (quantity)?], and Question 25 [*Do you think that grazing in the Preserve would diminish your recreational experience?*] were employed as focus questions for environmental preference, crowding, and livestock grazing, respectively. The chi-square test was only used for focus questions 6, 21, and 15. Future research should consider the chi square test for the remaining survey questions.

CHAPTER FOUR

Findings

This chapter describes of all data, providing numerous graphs, tables, and written descriptions of the general findings from the administered survey. The format of this chapter was created by combining questions into like categories to discuss the project's five areas of interest, and assigning them to appropriate sections. This Chapter begins with the type of recreation activities occurring on the Valles Caldera and other public lands. Findings of the survey respondents' attitudes towards management objectives, as well as demographic and socioeconomic information, are presented at the conclusion of this chapter.

4.1 Recreationists and Recreational Activities

At the completion of the survey period, responses from 712 persons interested in recreation on the Valles Caldera were recorded. In this section, Questions 1 [*What recreational activities do you engage in on the Preserve?*], Question 2 [*What recreational activities do you engage in on public lands outside of the Preserve?*], Question 3 [*What recreational activities would you like to see more widely or frequently allowed on the Preserve?*], and Question 4 [*Are there any recreational activities that you would not like to see on the Preserve in the future?*] were analyzed to understand the types of recreation that the Valles Caldera's recreationists are most interested in, what recreation activities those recreationists would like to see made more available, and what activities are disfavored. The results to Question 1 of the survey, asking the respondent

what types of recreational activities they participate in on the VCNP, are shown in Table 2.

Table 2- Question 1 [What recreational activities do you engage in on the Preserve?]

Activity	Actual Count*	% of Total
Hiking	312	45.5
Wildlife Viewing	298	43.5
Fishing	200	29.2
Winter Recreation	150	21.9
Hunting	145	21.2
Biking/Cycling	121	17.7
None	120	17.5
Lodging	25	3.60

Answered Question: 685; Skipped Question: 27

*multiple responses were allowed for this question

In the above Table 2, wildlife viewing (43.5%) and hiking (45.5%) represent the clear majority of the current activities for recreationists on the Valles Caldera. The Valles Caldera also sees its share of anglers (29.2%), winter recreationists (21.9%), and hunters (21.2%). Because only limited overnight activities currently exist on the Valles Caldera, the amount of recreationists participating in recreational lodging (3.6%) is quite low. Other activities that few Valles Caldera recreationists engage in, as recorded in the “others” or “specifics” open-ended option of Question 1 (see Appendix 5.1), include equestrian (7, actual count), volunteer or restoration-related activities (18), trail running or jogging (11), and photography (17).

While the next section of this chapter has been designated to the issues on public access, it is worth mentioning is that 120 respondents (17.5%) cited that they have never recreated on the Valles Caldera (see Table 2). This lack of participation is further expressed in the open-ended responses: “I refuse to pay the ‘fee’ for land bought with my

taxes. I had more access when the Texans owned it” and “[I] have never been able to draw a permit for hunting and cannot afford the fishing (see Appendix 5).” Conversely, only 10 respondents (1.4%) said that they did not participate in recreational activities on other public lands. This was the only count that was higher for Question 1 than Question 2.

When we consider the results from Table 2, and compare them to Table 3 below, we see many similarities in terms of recreational preference between the Valles Caldera and other public lands (i.e. hiking and wildlife viewing are the most popular). Actual participation rates are significantly different, however, with nearly twice as many respondents participating in like activities on other public lands. This disparity is most clearly evident in hiking (79.2%), wildlife viewing (65.1%), hunting (40.7%), fishing (55.2%), and winter recreation (46.2%) activities. Table 3 also reveals some interest for activities not currently offered on the Valles Caldera, including backpacking (43.2%), campsite camping (57.9%), RV camping (25.8%), and motorsports (16.8%). Because of the additional opportunities that exist, the percent of those participating in lodging activities (28.1%) on other public lands is much higher.

Table 3 - Question 2 [What recreational activities do you engage in on public lands outside of the Preserve?]

Activity	Actual Count*	% of Total
Hiking	561	79.2
Wildlife Viewing	461	65.1
Campsite Camping	410	57.9
Fishing	391	55.2
Winter Recreation	327	46.2
Backpacking	306	43.2
Hunting	288	40.7
Biking/Cycling	268	37.9

Lodging	199	28.1
RV Camping	183	25.8
Motorsports	119	16.8
None (all reduced)	10	1.40

Answered Question: 660; Skipped Question: 52

*multiple responses were allowed for this question

The information recorded in Questions 1 and 2, when supplemented with the responses received for Questions 3 (Table 4) and 4 (Table 5), may help managers more accurately understand what recreational activities its users value.

Table 4 - Question 3 [What recreational activities would you like to see more widely or frequently allowed on the Preserve?]

Activity	Actual Count*	% of Total
Hiking	374	56.7
Wildlife Viewing	290	43.9
Backpacking	271	41.1
Campsite Camping	262	39.7
Fishing	240	36.4
Hunting	212	32.1
Winter Recreation	210	31.8
Biking/Cycling	192	29.1
Lodging	115	17.4
RV Camping	99	15.0
Motorsports	66	10.0
None (all reduced)	33	5.00

Answered Question: 660; Skipped Question: 52

*multiple responses were allowed for this question

In regards to those that responded to Question 3 of the survey, it is evident that nearly all of those interested in recreation on the Valles Caldera prefer to see a large number of recreation activities more widely or frequently allowed. As demonstrated in Tables 2 and 3, wildlife viewing (43.9%) and hiking (56.7%) were the clear favorites, followed closely behind by campsite camping (39.7%) and backpacking (41.1%), two

activities not currently offered on the VCNP. While still represented by a comparatively large number of recreationists, the lowest four counts were for motorsports (10%), RV camping (15%), lodging (17.4%), and “none - reducing all recreational activities” (5%). Using the open-ended responses to this question (see Appendix 5.3), ten respondents said that they would like to see more photography-related activities allowed, nine respondents specified the type of OHV use they would like to see offered and their overall desire to have more opportunities made available, and eleven claimed that they were satisfied with the current level of recreation offered on the Valles Caldera.

Table 5 - Question 4 [Are there recreational activities that you would not like to see on the Preserve in the future?]

Activity	Actual Count*	% of Total
Motorsports	541	87.7
RV Camping	390	63.2
Lodging	178	28.8
Campsite Camping	121	19.6
Hunting	108	17.5
Biking/Cycling	64	10.4
Winter Recreation	28	4.50
Fishing	25	4.10
None (all reduced)	25	4.10
Backpacking	18	2.90
Hiking	10	1.60
Wildlife Viewing	8	1.30

Answered Question: 617; Skipped Question: 95

*multiple responses were allowed for this question

On the other end of the spectrum, Question 4 (Table 5), asks respondents to identify the recreational activities that they would prefer not to see on the Valles Caldera in the future. These results reveal that many would prefer to limit or prevent motorsports

“No ATV’s or off road vehicles should be allowed at all.”

(87.7%) and RV camping (63.2%) on the Valles Caldera. Many of these same recreationists further expressed their resentment towards motorsport-based recreation in the open-ended portion of this question, including: “ATVs and motorcycles trash the environment,” “no ATV's or off road vehicles should be allowed at all,” “Absolutely no motorized vehicles whatsoever! Guaranteed to ruin the preserve and the experience,” and “Keep OHV's out (see Appendix 5.4)!” The results also reveal some disfavor toward lodging (28.8%), campsite camping (19.6%), and hunting (17.5%). Table 6 provides the results from Questions 1-4 in one table.

Table 6 – Comparative Table – Results from Questions 1-4

Activity	% of Total			
	Question 1	Question 2	Question 3	Question 4
	Activities engaged in on the Preserve	Activities engaged in on other public lands	Activities more widely allowed on the Preserve	Activities <u>not</u> wanted on the Preserve
Hiking	45.5	79.2	56.7	1.60
Wildlife Viewing	43.5	65.1	43.9	1.30
Campsite Camping	n/a	57.9	39.7	19.6
Fishing	29.2	55.2	36.4	4.10
Winter Recreation	21.9	46.2	31.8	4.50
Backpacking	n/a	43.2	41.1	2.90
Hunting	21.2	40.7	32.1	17.5
Biking/Cycling	17.7	37.9	29.1	10.4
Lodging	3.60	28.1	17.4	28.8
RV Camping	n/a	25.8	15.0	63.2
Motorsports	n/a	16.8	10.0	87.7
None (all reduced)	17.5	1.40	5.00	4.10

n/a – activity is not currently allowed on the Valles Caldera as of 2011

4.2 Public Access

As evidenced by the Valles Caldera Listening Sessions (2010) and a continued push by many to have the Valles Caldera managed by the NPS, adequate access for

recreationists has become a major concern. In an attempt to understand why this might be the case, Questions 5 [*In your opinion, since the acquisition from private ownership in 2000, the Preserve has offered adequate recreation access to the public*] and Question 6 [*In your opinion, you are satisfied with the level of recreation access experienced on the Preserve*] were specifically designed to help discover how different interest groups feel towards the level of access that the Valles Caldera currently provides. The focus of this section has been given to Question 6, because it seeks to understand how personally satisfied (*In your opinion, you are satisfied...*) recreationists are with their current level of access on the Valles Caldera.

Vaske's (2008) Potential for Conflict Index (PCI) was employed for Questions 5 and 6 in order to understand, in terms of future management decisions, the potential for conflict that may arise from different interest and demographic groups. A chi-square test of independence was then performed for these same questions to help determine if any significant differences between surveyed response groups may exist. Responses to Questions 7 [*What circumstances have prevented you from participating in more, or any, recreational activities on the Preserve?*], Question 13 [*Should there be a limit to the recreational access on the Preserve?*], Question 16 [*Currently road infrastructure of the Preserve is minimal. In your opinion, management should develop more paved roads to increase access in and around the Preserve.*], and Question 17 [*In your opinion, the Preserve should favor the use of buses or shuttles over personal vehicles to move recreationists around the Preserve.*] were used to supplement the findings from Questions 5 and 6.

An immediate glance at Question 6 (see Table 7) reveals a high standard deviation amongst respondents. And while a majority of recreationists (52.2%) fall on the “disagree” to “strongly disagree” end of the likert scale, a significant portion has either not chosen a side (14.6%), or agreed (30%), meaning they are satisfied with their current and past recreational experience on the Valles Caldera.

Table 7 - Question 6 [In your opinion, you are satisfied with the level of recreation access experienced on the Preserve.]

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Never Recreated on the VCNP
Actual Count	161	206	103	142	69	23
% of Total	22.9	29.3	14.6	20.2	9.8	3.3

Answered Question: 617; Skipped Question: 95

Vaske’s (2008) PCI, requiring both a calculated mean and PCI value, was employed to help determine which response groups might be more satisfied with their recreational experience than others. Figure 7 shows that no response group, at least in terms of overall satisfaction, as defined by agreeing (positive mean value) with Question 6, is on the satisfied end of the likert scale.

When using the calculated mean, it appears that respondents from on-site (-0.07) locations, the .GOV email list (-0.08), and those that identified themselves with the Republican Party (-0.15), while still on the unsatisfied end of the likert scale, were more satisfied with their recreational experiences than the other 29 interest groups. Comparatively, OHV groups (-1.38), the vallescaldera.com (.COM) web posting (-1.36), and the *Caldera Action* email list (-1.36) were the least satisfied with their recreational

experiences on the Valles Caldera. The mean for the aggregate of all responses was - 0.36.

While the mean can be used to define the level of satisfaction for each group, the PCI can be used as a way to understand how much internal conflict and disagreement occurs within each of the analyzed groups, and how that amount of conflict differs across these groups. The greatest possibility for conflict (PCI=1) occurs when there is a bimodal distribution between the two extreme values within the group (e.g. 50% strongly agree, 50% strongly disagree, and 0% Neutral). To have no potential for conflict, or a PCI of 0 (zero), all responses (100%) require the same value on the response scale. To help create a more legible graph, calculated means of response groups that fell within +/- 0.05 of the aggregate are not shown on the PCI graph, but are listed in the associated tables (e.g. Figure 7 and Table 8). Subsequent PCI graphs and tables are similarly formatted.

The PCI value for the aggregate responses for Question 6 was 0.41, the smallest PCI value was 0 (zero) for both OHV groups and vallescaldera.com, and the largest PCI value was recorded by Republican Party affiliates and the .GOV email list respondents (both 0.54). Recall that these values are used for comparative purposes between respondents.

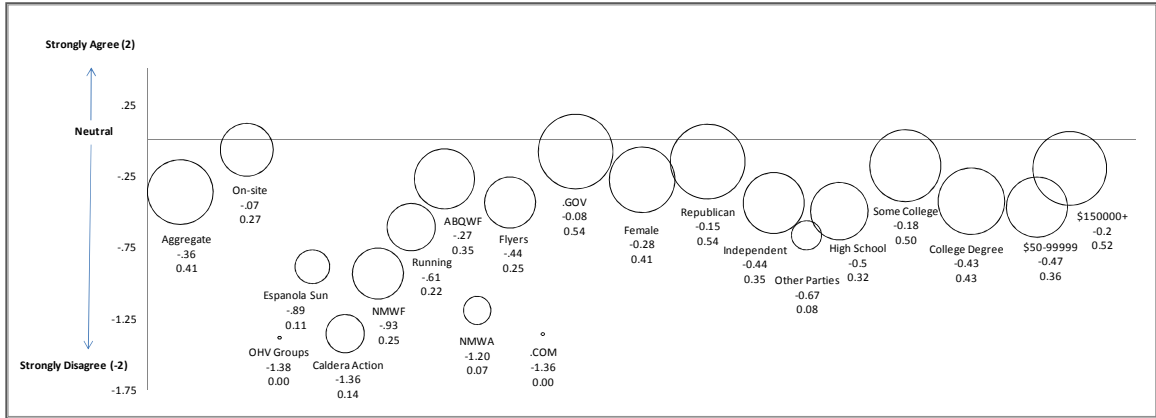


Figure 7 - PCI Graph [Question 6]

Table 8- PCI Table [Question 6]

Group	PCI	Mean	Group	PCI	Mean
Aggregate	0.41	-0.36	40-59	0.42	-0.38
On-site	0.27	-0.07	60+	0.41	-0.34
OHV groups	0.00	-1.38	Democrat	0.39	-0.41
Espanola Sun	0.11	-0.89	Republican	0.54	-0.15
Caldera Action	0.14	-1.36	Independent	0.35	-0.44
NMWF	0.25	-0.93	Other Parties	0.08	-0.67
Running	0.22	-0.61	High School	0.32	-0.50
ABQWF	0.35	-0.27	Some College	0.50	-0.18
NMWA	0.07	-1.20	College Degree	0.43	-0.43
Flyers	0.25	-0.44	Grad Degree	0.39	-0.36
.COM	0.00	-1.36	\$0-49999	0.33	-0.39
.GOV	0.54	-0.08	\$50-99999	0.36	-0.47
Male	0.41	-0.38	\$100-149,999	0.45	-0.36
Female	0.41	-0.28	\$150000+	0.52	-0.20
18-39	0.40	-0.33			

Table 8 and Figure 4 reveal that these different response groups have varying levels of satisfaction in regards to access on the Valles Caldera. To get a better understanding of what specific groups differ significantly from one another in regards to access, the chi-square test of independence was used. A test of independence assess whether there is a significant difference between two variables. Many groups, including onsite, OHV groups, Espanola Sun, Caldera Action, both running groups, those that have

a high school education, and data recorded from “other” party affiliation and the posted flyers, could often not be compared because of the sample size. For all chi-square tests in this project, different recreation user groups (i.e. NMWA, NMWF, the .GOV email list, etc) were tested against the aggregate responses and each other, but not any demographic groups. Alternatively, demographic and socioeconomic groups were tested amongst their like groups (e.g. Males v. Females, but not Males v. Democrats). If a difference is said to be statistically significant in this research, it is assumed to be at $p < 0.05$, or the 95% confidence level.

In testing the aggregate responses against all other groups, a significant difference was identified between three such groups. These significant differences occurred with NMWF ($p < 0.001$), NMWA ($p = 0.002$), and the .GOV email list ($p = 0.009$). No significant difference was found when the aggregate responses were compared against any demographic groups. Other statistically significant differences regarding access were also identified when the NMWF was tested against the .GOV email list ($p < 0.001$) and ABQWF ($p = 0.013$). NMWA also tested significantly different against ABQWF ($p = 0.011$) and the .GOV email list ($p < 0.001$) (see Table 9). The aggregate favored current levels of access more than NMWF and NMWA, and the .GOV email list favored access more than NMWF, NMWA, and the aggregate.

Table 9- Chi-square Test of Significance [Question 6]

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	161	206	103	142	69
NMWF	35	20	7	9	5
Total	196	226	110	151	74

$\chi^2 = 18.928$;
p-value = < 0.001

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	161	206	103	142	69
NMWA	20	12	6	3	0
Total	181	218	109	145	69

$\chi^2 = 17.446$
p-value = 0.002

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	16	206	103	142	69
.GOV	69	123	61	111	59
Total	230	329	164	253	128

$\chi^2 = 13.520$
p-value = 0.009

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWF	35	20	7	9	5
.GOV	69	123	61	111	59
Total	104	143	68	120	64

$\chi^2 = 37.08$
p-value = <0.001

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWF	35	20	7	9	5
ABQWF	6	11	9	9	2
Total	41	31	16	18	7

$\chi^2 = 12.715$
p-value = 0.013

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
ABQWF	6	11	9	9	2
NMWA	20	12	6	3	0
Total	26	33	15	12	2

$\chi^2 = 13.011$
p-value = 0.011

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWA	20	12	6	3	0
.GOV	69	123	61	111	59
Total	89	135	67	114	59

$\chi^2 = 31.711$
p-value = <0.001

The findings from Question 5 (see Table 10) [*In your opinion, since the acquisition from private ownership in 2000, the Preserve has offered adequate recreation access to the public*] closely parallel those from Question 6. This is not surprising because the questions are quite similar. The difference is that Question 5 asks the

respondent if the *Preserve has offered adequate recreation access to the public*, whereas Question 6 is more personal, asking the respondent if *[they] are satisfied with the level of recreation access*. Much like Question 6, this question had more than half (54.7%) of all respondents fall on the disagree end of the likert scale, 17.7% that did not agree or disagree, and 30.2% that agreed the public is allowed adequate access to the Preserve.

Table 10 - Question 5 [In your opinion, since the acquisition from private ownership in 2000, the Preserve has offered adequate recreation access to the public.]

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Actual Count	178	188	124	163	49
% of Total	25.4	26.8	17.7	23.2	7

Answered Question: 702; Skipped Question: 10

Employing Vaske’s (2008) Potential for Conflict Index (PCI) for Question 5, there were similar results to those in Question 6. In Figure 8, no group is on the satisfied end of the likert scale, and the aggregate mean of responses varied by only .04 between the two questions. Further, all three of the most unsatisfied groups are the same. In comparing PCI values between Questions 5 and 6 side by side for every response group, there were very similar results as well (see Tables 8 and 11). A chi-square test was employed for Question 5 and revealed significant differences between the same groups as Question 6 (see Table 12).

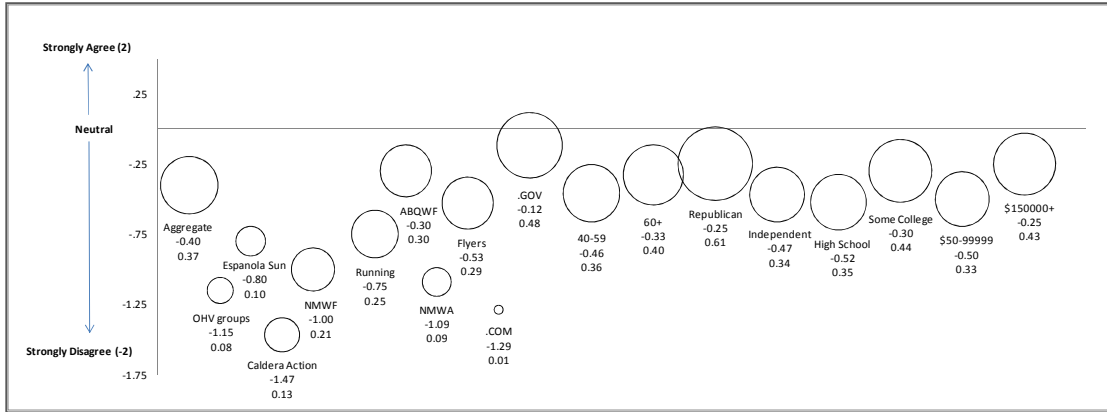


Figure 8- PCI Graph [Question 5]

Table 11 - PCI Table [Question 5]

Group	PCI	Mean	Group	PCI	Mean
Aggregate	0.37	-0.40	40-59	0.36	-0.46
On-site	0.27	-0.40	60+	0.40	-0.33
OHV groups	0.08	-1.15	Democrat	0.37	-0.42
Espanola Sun	0.10	-0.80	Republican	0.61	-0.25
Caldera Action	0.13	-1.47	Independent	0.34	-0.47
NMWF	0.21	-1.00	Other Parties	0.17	-0.42
Running	0.25	-0.75	High School	0.35	-0.52
ABQWF	0.30	-0.30	Some College	0.44	-0.30
NMWA	0.09	-1.09	College Degree	0.37	-0.43
Flyers	0.29	-0.53	Grad Degree	0.35	-0.40
.COM	0.01	-1.29	\$0-49999	0.31	-0.37
.GOV	0.48	-0.12	\$50-99999	0.33	-0.50
Male	0.39	-0.41	\$100-149,999	0.43	-0.25
Female	0.34	-0.36	\$150000+	0.42	-0.40
18-39	0.34	-0.36			

Table 12 - Chi-square Test of Significance [Question 5]

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	178	188	124	163	49
NMWF	39	13	11	8	4
Total	217	201	135	161	53
$\chi^2 = 25.003$ p-value = <0.001					
	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	178	188	124	163	49
NMWA	21	9	9	4	0
Total	199	197	133	167	49
$\chi^2 = 15.632$ p-value = 0.004					
	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	178	188	124	163	49
.GOV	77	111	82	127	42
Total	255	299	206	290	91
$\chi^2 = 13.500$ p-value = 0.009					
	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWF	39	13	11	8	4
.GOV	77	111	82	127	42
Total	116	124	93	135	46
$\chi^2 = 45.372$ p-value = 0					
	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWF	39	13	11	8	4
ABQWF	6	10	10	11	0
Total	45	23	22	19	4
$\chi^2 = 18.330$ p-value = 0.001					
	Str. Agree	Agree	Neither	Disagree	Str. Disagree
ABQWF	6	10	10	11	0
NMWA	21	9	9	4	0
Total	27	19	19	15	0
$\chi^2 = 11.319$ p-value = 0.010					
	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWA	21	9	9	4	0
.GOV	77	111	82	127	42
Total	98	120	91	131	42
$\chi^2 = 28.936$ p-value = <0.001					

To supplement the above findings, results from Question 7 [*What circumstances have prevented you from participating in more, or any, recreational activities on the Preserve*] reveal that limited access has prevented the largest number of respondents (456) from participating in more recreational activities (see Table 13) on the Valles

Caldera. A significant number of respondents also cited limited activities (240), finances (156), and lack of information about the Preserve (122) as obstacles to more participation in recreation. Evidenced in the open-end responses, many respondents also cited “time” (40) and “distance” (24) as major constraints to participation on the Valles Caldera (See Appendix 5.5).

Table 13 - Question 7 [What circumstances have prevented you from participating in more, or any, recreational activities on the Preserve?]

Obstacles	Actual Count*	% of Total
Limited Access	456	77.6
Limited Activities	240	40.8
Finances	156	26.5
Lack of Information	122	20.7
Health	22	3.70
Lack of Interest	13	2.20

Answered Question: 588; Skipped Question: 124

*multiple responses were allowed for this question

These results do not necessarily indicate that the public would like to see unlimited access on the Valles Caldera. In fact, Question 13 [*Should there be a limit to*

the recreational access on the Preserve?] confirms that a large percentage (80%) of the

survey respondents agreed that there should be a limit to the amount of recreational access that is allowed on the Valles Caldera (see Table 14). Open-ended responses to this question provoked some of the following thoughts: “at least a portion should be designated as a wilderness... allow access to the current headquarters area location and restrict access to the rest,” “there must be balance between people and place,” “if you sacrifice quality for quantity you will lose the allure,” and “yes, it should be limited to the

extent that the quality of the area does not degrade to much of the surrounding area in close proximity to populated areas...specifically, congestion and the disgusting filth [and] garbage that is prevalent in many areas of [New Mexico]” (See Appendix 5.6).

Table 14- Question 13 [Should there be a limit to the recreational access on the Preserve?]

Response	Actual Count	% of Total
Yes	553	80.0
No	138	20.0

Answered Question: 691; Skipped Question: 21

Question 16 was designed to see if, in regards to public access, recreationists would like to see the development of more paved roads within the Valles Caldera. Table 15 clearly shows that a majority of respondents disagree. Some relatively high PCI values were found within some user groups, including Caldera Action (0.40) and “other party (political)” affiliates (0.38), however, revealing that there was some internal disagreement between the users that identified within these groups (Figure 9 and Table 16).

Question 17, [*In your opinion, the Preserve should favor the use of buses or shuttles over personal vehicles to move recreationists around the Preserve.*], was asked to determine the recreationist’s preferences for mode of access: personal vehicle or Valles Caldera-provided shuttle or bus. While the largest percentage (24.7%) of respondents agreed that the Valles Caldera should favor the use of buses or shuttles over personal vehicles, the overall results (Table 17) reveal that more total respondents fell on the

disagree end of the likert scale (42.5%), implying that most would still prefer to use their own vehicles to access the Valles Caldera. The PCI for Question 17, shown in Table 18 and Figure 10, show that on-site groups were the most in favor of shuttles or buses. OHV groups, however, were the most opposed.

Table 15 - Question 16 [Currently road infrastructure of the Preserve is minimal. In your opinion, management should develop more paved roads to increase access in and around the Preserve?]

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Actual Count	318	218	73	75	26
% of Total	44.8	30.7	10.3	10.6	3.7

Answered Question: 710; Skipped Question: 2

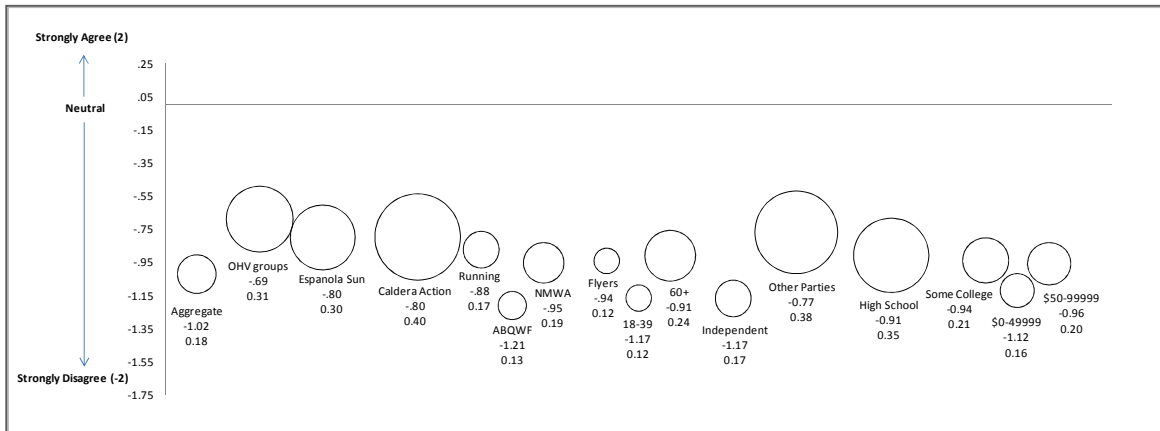


Figure 9 - PCI Graph [Question 16]

Table 16 - PCI Table [Question 16]

Group	PCI	Mean	Group	PCI	Mean
Aggregate	0.18	-1.02	40-59	0.16	-1.04
On-site	0.13	-1.07	60+	0.24	-0.91
OHV groups	0.31	-0.69	Democrat	0.18	-1.04
Espanola Sun	0.30	-0.80	Republican	0.18	-1.04
Caldera Action	0.40	-0.80	Independent	0.17	-1.17
NMWF	0.19	-1.03	Other Parties	0.38	-0.77
Running	0.17	-0.88	High School	0.35	-0.91
ABQWF	0.13	-1.21	Some College	0.21	-0.94
NMWA	0.19	-0.95	College Degree	0.15	-1.05
Flyers	0.12	-0.94	Grad Degree	0.17	-1.04
.COM	0.00	-1.03	\$0-49999	0.16	-1.12
.GOV	0.18	-0.99	\$50-99999	0.20	-0.96
Male	0.19	-1.03	\$150000+	0.18	-1.06
Female	0.16	-0.99		0.18	-1.01
18-39	0.12	-1.17			

Table 17- Question 17 [In your opinion, the Preserve should favor the use of buses or shuttles over personal vehicles to move recreationists around the Preserve.]

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Actual Count	152	147	156	174	76
% of Total	21.6	20.9	22.1	24.7	10.8

Answered Question: 705; Skipped Question: 7

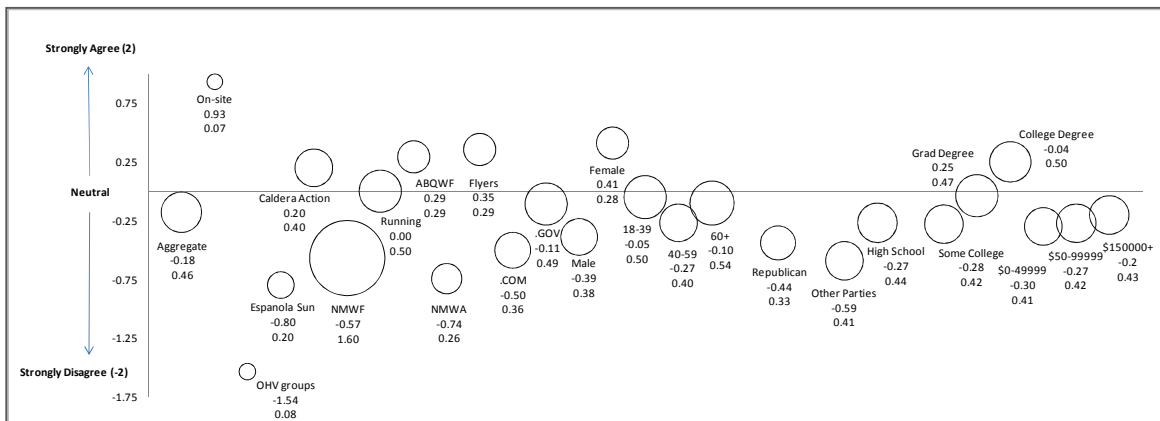


Figure 10- PCI Graph [Question 17]

Table 18 - PCI Table [Question 17]

Group	PCI	Mean	Group	PCI	Mean
Aggregate	0.46	-0.18	40-59	0.40	-0.27
On-site	0.07	0.93	60+	0.54	-0.10
OHV groups	0.08	-1.54	Democrat	0.47	0.17
Espanola Sun	0.20	-0.80	Republican	0.33	-0.44
Caldera Action	0.40	0.20	Independent	0.47	-0.18
NMWF	1.60	-0.57	Other Parties	0.38	0.31
Running	0.50	0.00	High School	0.41	-0.59
ABQWF	0.29	0.29	Some College	0.44	-0.27
NMWA	0.26	-.74	College Degree	0.42	-0.28
Flyers	0.29	.35	Grad Degree	0.50	-0.04
.COM	0.36	-0.5	\$0-49999	0.47	0.25
.GOV	0.49	-0.11	\$50-99999	0.41	-0.3
Male	0.38	-0.39	\$150000+	0.42	-0.27
Female	0.28	0.41	\$100-149,999	0.43	-0.2
18-39	0.50	-0.05			

4.3 Religious and Cultural Sites

Question 21 [*In your opinion, the protection of important Indian and Puebloan cultural and religious sites inside the Preserve is more important than access for recreationists.*], Question 22 [*Do you believe that management can increase recreation while protecting the important Indian and Puebloan cultural and religious sites inside the Preserve?*], and Question 23 [*Currently access is minimal to places like Redondo Peak because of their important cultural and religious significance. In your opinion, places of cultural significance inside the Preserve should be open to recreational visitors.*] were analyzed to help understand recreationist’s attitudes toward religious and cultural sites on the Valles Caldera. Specific focus, including PCI computation and chi-square tests, was given to Questions 21 and 23 (See Tables 19 and 23).

Table 19 - Question 21 [In your opinion, the protection of important Indian and Puebloan cultural and religious sites inside the Preserve is more important than access for recreationists.]

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Actual Count	93	175	172	167	97
% of Total	13.2	24.9	24.4	23.7	13.8

Answered Question: 704; Skipped Question: 8

Using Table 19 and Figure 11 as a visual reference, the standard deviation of the responses from Question 21 is quite high. In fact, the responses were nearly split down the middle of the likert scale, with 38.1% disagreeing and 37.5% agreeing (see Table 19). Not surprisingly, the aggregate of responses had a calculated mean of zero, revealing that respondents were evenly split on the topic of religious site protection and recreational access (See Table 22). The PCI value of 0.51 reveals that there is some inherent potential for conflict between user and demographic groups, however. The PCI values of all groups ranged from 0.61 (high school education) to 0.08 (OHV groups). The calculated mean values ranged from -0.69 (OHV groups) to 0.60 (Española Sun).

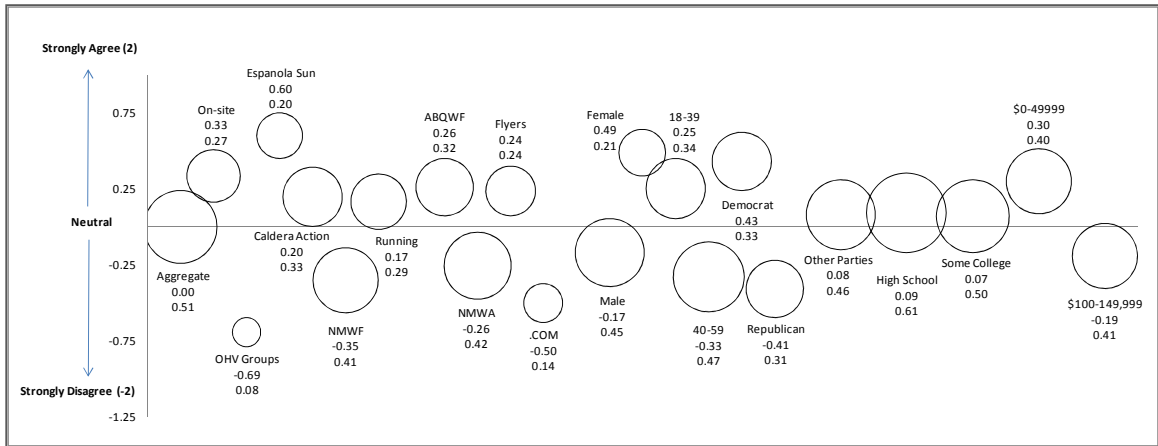


Figure 11 - PCI Graph [Question 21]

Table 20 - PCI Table [Question 21]

Group	PCI	Mean	Group	PCI	Mean
Aggregate	0.51	0.00	40-59	0.47	-0.33
On-site	0.27	0.33	60+	0.53	0.00
OHV groups	0.08	-0.69	Democrat	0.33	0.43
Espanola Sun	0.20	0.60	Republican	0.31	-0.41
Caldera Action	0.33	0.20	Independent	0.48	-0.01
NMWF	0.41	-0.35	Other Parties	0.46	0.08
Running	0.29	0.17	High School	0.61	0.09
ABQWF	0.32	0.26	Some College	0.50	0.07
NMWA	0.42	-0.26	College Degree	0.50	0.00
Flyers	0.24	0.24	Grad Degree	0.49	-0.04
.COM	0.14	-0.50	\$0-49999	0.40	0.30
.GOV	0.50	0.05	\$50-99999	0.48	-0.05
Male	0.45	-0.17	\$150000+	0.41	-0.19
Female	0.21	0.49	\$100-149,999	0.54	-0.01
18-39	0.34	0.25			

When testing the aggregate responses from Question 21 against all other user and demographic groups, a significant difference was identified between five response sub-groups. These significant differences occurred with NMWF ($p = 0.03$), females ($p < 0.001$), Democratic affiliates ($p < 0.001$), Republican affiliates ($p = 0.005$), and those with some college education ($p = 0.022$) (see Table 21). Democratic affiliates, females,

and those with some college education favored the protection of cultural and religious sites over the aggregate of all responses. In contrast, Republican affiliates and NMWF were less in favor of such protection.

Other statistically significant differences were also identified between the NMWF and the running groups ($p = 0.035$), ABQWF ($p = 0.02$), and the .GOV email list ($p = 0.02$). This shows that NMWF favored protection of cultural and religious sites much less than the running groups, ABQWF, and the .GOV email list. Males and females tested significantly to the 99.9% confidence level, as did Democrats when they were compared to Republican affiliates. This reveals that women respondents favor the protection of cultural and religious sites over males, and that Democratic respondents favor such protection more than Republican respondents. Those with some college education had a statistical difference when tested against those that had a college degree ($p < 0.001$) or a post-graduate education ($p = 0.017$). Respondents with a household income of less than \$50,000 also tested significantly against higher incomes. These latter findings show that respondents of the lowest income group and those with some college education favor the protection of cultural and religious sites over the higher incomes and those with a college or graduate degree, respectively. Other significant differences between groups can be found in Table 21. See Appendix 4 for a complete table of all tested groups, their computed chi-square value and associated p-values.

Table 21 - Chi-square Tests of Significance [Question 21]

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	93	175	172	167	97
NMWF	19	22	14	11	10
Total	112	197	186	178	107

$\chi^2 = 10.724$
p-value = 0.030

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	93	175	172	167	97
Female	5	27	61	45	40
Total	98	202	233	212	137

$\chi^2 = 31.92$
p-value = < 0.001

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	93	175	172	167	97
Democrat	15	45	45	70	51
Total	108	220	212	237	148

$\chi^2 = 21.465$
p-value = < 0.001

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	93	175	172	167	97
Republican	36	49	43	30	11
Total	129	224	215	197	118

$\chi^2 = 14.978$
p-value = 0.005

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	93	175	172	167	97
Some College	9	37	23	17	23
Total	102	212	195	184	120

$\chi^2 = 11.453$
p-value = 0.022

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWF	19	22	14	11	10
Running	2	3	11	5	3
Total	21	25	25	16	13

$\chi^2 = 10.336$
p-value = 0.035

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWF	19	22	14	11	10
ABQWF	1	10	10	12	5
Total	20	32	24	23	15

$\chi^2 = 11.711$
p-value = 0.020

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWF	19	22	14	11	10
.GOV	55	109	95	117	63
Total	74	131	109	128	73
$\chi^2 = 11.692$					
p-value = 0.020					

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Male	88	147	108	121	56
Female	5	27	61	45	40
Total	93	175	169	166	96
$\chi^2 = 52.369$					
p-value = < 0.001					

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
18-39 (age)	11	17	36	32	18
40-59 (age)	51	103	86	80	47
Total	62	120	122	112	65
$\chi^2 = 11.567$					
p-value = 0.021					

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Democrat	15	45	45	70	51
Republican	36	49	43	30	11
Total	51	94	88	100	62
$\chi^2 = 43.346$					
p-value = < 0.001					

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Democrat	15	45	45	70	51
Independent	22	44	51	38	24
Total	37	89	96	108	75
$\chi^2 = 15.669$					
p-value = 0.004					

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Some College	9	37	23	17	23
College Degree	36	53	65	71	27
Total	45	90	88	88	50
$\chi^2 = 18.860$					
p-value = < 0.001					

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Some College	9	37	23	17	23
Post-Graduate	44	74	77	73	39
Total	53	111	100	90	62
$\chi^2 = 12.075$					
p-value = 0.017					

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
\$0 - 49,999	12	20	26	25	26
\$50 - 99,999	28	60	49	55	25
Total	40	80	75	80	51
$\chi^2 = 10.046$					
p-value = 0.040					

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
\$0 - 49,999	12	20	26	25	26
\$150,000+	16	38	29	22	13
Total	28	58	55	47	39
$\chi^2 = 10.506$					
p-value = 0.033					

When Question 22 asked respondents if they believed that management could increase recreation while protecting important religious and cultural sites on the Valles Caldera, a clear majority believed that it could be done (Table 22). Open-ended responses varied, and included some of the following: “limiting access to certain areas would be an acceptable strategy,” “just what Indian and Puebloan sites are you referring to? The state already gave the Indians 11,000 acres of this preserve. How much more do we need to do? Enough is enough!” “teach,” and “cultural resources should be protected from damage and degradation by any kinds of recreation” (see Appendix 5.7).

“Cultural resources should be protected from damage and degradation by any kinds or recreation.”

Table 22 - Question 22 [Do you believe that management can increase recreation while protecting the important Indian and Puebloan cultural and religious sites inside the Preserve?]

Response	Actual Count	% of Total
Yes	574	81.5
Don't know	83	11.8
No	47	6.7

Answered Question: 704; Skipped Question: 8

Question 23 seems to reveal another area in which user groups are at odds with one another (see Tables 23 and 24 and Figure 12). The majority of respondents seemed to agree that Redondo Peak should be open to recreational visitors (34.8%), while 20.8% of respondents disagreed and 10.5% strongly disagreed. Calculated means for Question 23 ranged from lows of -0.40 (Espanola Sun) and -0.36 (On-site) to highs of 1.42 (OHV groups) and 0.86 (.COM). The PCI value for the aggregate responses was 0.42 and ranged from zero (OHV groups) to 0.50 (Democrats and 60+ years of age).

Open-ended responses to this question gave some further insight into the

“Close ‘em down - keep people out - we have no business at those sites any way - leave them for the archeologists.”

respondent’s views and attitudes toward

religious and cultural sites on the Valles

Caldera: “I agree, but make more of an

effort to educate visitors regarding the cultural and religious significance,” “Not all

recreationists are destructive. I can see limiting access during ceremonials,” “The Valles

Caldera Preserve is a federal preserve owned by all citizens,” “My Church of the

Morning Sunrise should have equal access to the top of Redondo Peak since I am part of

the group that purchased this property,” and “close ‘em down - keep people out - we have

no business at those sites any way - leave them for the archeologists” (see Appendix 5.8).

Table 23 -Question 23 [Currently access is minimal to places like Redondo Peak because of their important cultural and religious significance. In your opinion, places of cultural significance inside the Preserve should be open to recreational visitors.]

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Actual Count	74	146	131	244	107
% of Total	10.5	20.8	18.7	34.8	15.2

Answered Question: 702; Skipped Question: 10

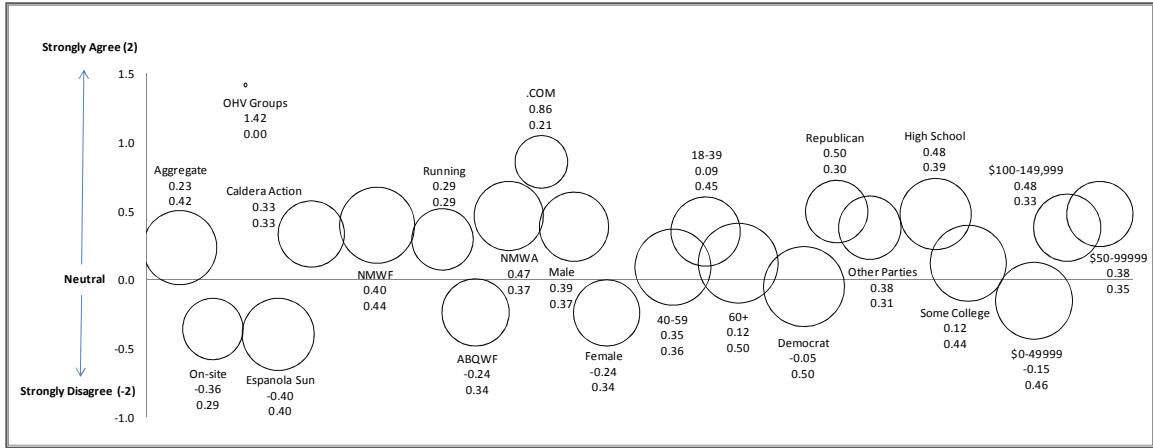


Figure 12- PCI Graph [Question 23]

Table 24 - PCI Table [Question 23]

Group	PCI	Mean	Group	PCI	Mean
Aggregate	0.42	0.23	40-59	0.36	0.35
On-site	0.29	-0.36	60+	0.50	0.12
OHV groups	0.00	1.42	Democrat	0.50	-0.05
Espanola Sun	0.40	-0.40	Republican	0.30	0.50
Caldera Action	0.33	0.33	Independent	0.42	0.21
NMWF	0.44	0.40	Other Parties	0.31	0.38
Running	0.29	0.29	High School	0.39	0.48
ABQWF	0.34	-0.24	Some College	0.44	0.12
NMWA	0.37	0.47	College Degree	0.42	0.27
Flyers	0.41	0.18	Grad Degree	0.40	0.24
.COM	0.21	0.86	\$0-49999	0.46	-0.15
.GOV	0.42	0.20	\$50-99999	0.35	0.38
Male	0.37	0.39	\$150000+	0.33	0.48
Female	0.34	-0.24	\$100-149,999	0.40	0.21
18-39	0.45	0.09			

When testing the aggregate responses from Question 23 against all other user and demographic groups, a significant difference was identified between three other response groups. These significant differences occurred with females ($p < 0.001$), Democratic affiliates ($p = 0.034$), and those with a household income of less than \$50,000 ($p = 0.026$) (see Table 25). This shows that these three groups, when compared to the aggregate, do

not believe that places of cultural and religious significance should be open to recreational visitors.

Table 25 - Chi-square Tests of Significance [Question 23]

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	74	146	131	244	107
Females	28	46	52	44	8
Total	102	192	183	288	115

$\chi^2 = 29.483$
p-value = < 0.001

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	74	146	131	244	107
Democrat	30	64	45	62	25
Total	104	210	176	306	132

$\chi^2 = 10.435$
p-value = 0.034

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Aggregate	74	146	131	244	107
\$0 - 49,999	21	23	24	29	10
Total	95	169	155	273	117

$\chi^2 = 11.080$
p-value = 0.026

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWF	12	10	9	29	18
ABQWF	6	10	10	11	1
Total	18	20	19	40	19

$\chi^2 = 13.131$
p-value = 0.011

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
NMWF	12	10	9	29	18
.GOV	42	99	85	152	59
Total	54	109	94	181	77

$\chi^2 = 11.566$
p-value = 0.021

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
ABQWF	6	10	10	11	1
NMWA	4	8	7	12	12
Total	10	18	17	23	13

$\chi^2 = 10.233$
p-value = 0.037

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Male	46	99	77	198	98
Female	28	46	52	44	8
Total	74	145	129	242	106

$\chi^2 = 48.491$
p-value = < 0.001

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
Democrat	30	64	45	62	25
Republican	13	24	32	62	36
Total	43	88	77	124	61

$\chi^2 = 20.69$
p-value = < 0.001

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
\$0 – 49,999	21	23	24	29	10
\$50 – 99,999	16	43	37	81	38
Total	37	66	61	110	48

$\chi^2 = 15.998$
p-value = 0.003

	Str. Agree	Agree	Neither	Disagree	Str. Disagree
\$0 – 49,999	21	23	24	29	10
\$150,000+	8	23	16	45	25
Total	29	46	40	74	35

$\chi^2 = 16.903$
p-value = 0.002

Other statistically significant differences regarding access were also identified between NMWF and both ABQWF ($p = 0.011$) and the .GOV email list ($p = 0.021$). As was the case with Question 21, males and females tested significantly to the 99.9% confidence level as did Democratic affiliates when they were compared to Republican counterpart. When ABQWF was compared against NMWA, it tested to the $p < 0.05$. Respondents with a household income of less than \$50,000 also tested significantly against two of the higher income groups (Table 25). These results illustrate that females, Democratic affiliates, and those with a household income of less than \$50,000 are less in favor of opening places of cultural and religious significance to recreational visitors than a number of their counterparts. See Appendix 4 for a complete table of all tested groups, their computed chi-square value and associated p-values.

4.4 Environmental Preference

To gauge environmental preference for the recreationists of the Valles Caldera, a analysis of Questions 15 [*Do you believe increasing recreation would have negative*

environmental impacts on the Preserve?] and Question 20 [*In your opinion, increasing access to the Preserve is more important than the possible negative environmental problems associated with it.*] were performed. These questions are further supplemented by Question 18 [*If the use of buses and/or shuttles would decrease the need for an additional infrastructure, like paved roads and parking lots, would you support their use?*], and Question 19 [*In your opinion, new roads in the Preserve would result in negative environmental impacts.*]. Vaske’s (2008) Potential for Conflict Index (PCI) was employed for all likert-scale questions. The chi-square test of independence was performed on Questions 15 and 20 even though environmental preference will not be as heavily weighted as the prior two topics in the Discussion and Conclusion chapter.

The results from Question 15 were mixed (see Table 26). A plurality of respondents (42.5%) thought that an increase in recreation on the Valles Caldera would result in negative environmental impacts, while 37.3% thought that it would not. A relatively significant percentage of respondents (20.3%) did not know what the environmental implications would be.

Table 26 - Question 15 [Do you believe increasing recreation would have negative environmental impacts on the Preserve?]

Response	Actual Count	% of Total
Yes	300	42.5
No	263	37.3
Don’t know	143	20.3

Answered Question: 706; Skipped Question: 6

As was done in the previous sections, the performed chi-square test compared the aggregate of all responses to all other groups, all interest groups against one another, and

like demographic groups against each other. When comparing the aggregate responses to all other demographic and interest groups, a significant difference only occurred with females ($p = 0.017$), NMWA ($p = 0.049$), and on-site respondents ($p = 0.015$). These tests reveal that both female and on-site respondents more strongly believe, at least when compared to the aggregate, that increasing recreation would have negative environmental impacts on the Valles Caldera. The NMWA, however, are the opposite, believing that increasing recreation would not have adverse environmental impacts.

For all the groups that on-site responses could be tested against (a limited on-site response rate restricted which other groups they could be compared to), there was a significant difference between NMWF (0.04), the running groups (0.023), and NMWA (< 0.001). This identifies that the on-site respondents believe that increasing recreation will have more adverse impacts to the environment than is believed by NMWF, the running groups, or NMWA. Other significant differences were found between the running groups and ABQWF ($p = 0.025$), between ABQWF and NMWA ($p = 0.007$), and between NMWA and the .GOV email list ($p = 0.021$), revealing that ABQWF and the .GOV email list believe that increasing recreation will result in negative environmental impacts. In the demographic comparisons, a significant difference of $p < 0.05$ was found between males and females ($p = <0.001$), Democratic and Independent party affiliates ($p = 0.005$), and Democratic and “Other Party” affiliates ($p = 0.041$) (See Appendix 4). Democrats and females were more apt to believe that increased recreation will have adverse environmental impacts than their counterparts.

Alternatively, Question 20 seeks to directly address the importance of increasing recreational access in regards to the potential environmental problems that might be

associated with it. Table 27 reveals that more than half (52.8%) of respondents (703) fell on the disagree half of the likert scale. Conversely, 28.7% agreed to some extent. The PCI was employed to help understand how different interest groups view this issue (see Figure 13).

Table 27 - Question 20 [In your opinion, increasing access to the Preserve is more important than the possible negative environmental problems associated with it.]

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Actual Count	179	192	130	162	40
% of Total	25.5	27.3	18.5	23.0	5.70

Answered Question: 703; Skipped Question: 9

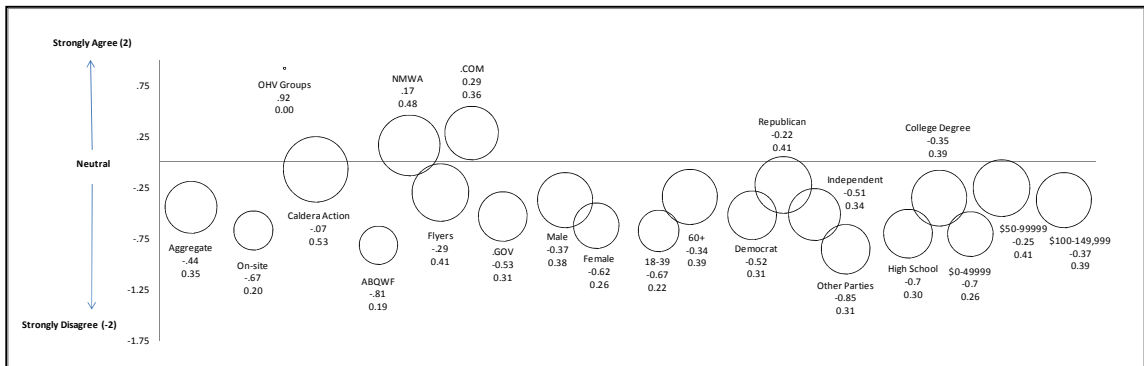


Figure 13 - PCI Graph [Question 20]

Using the calculated mean, we see that respondents from the OHV groups (0.92), the NMWA (0.17), and the vallescaldera.com (.COM) website (0.29) were the only groups that fell on the agree-end (indicated by a positive calculated mean) of the likert scale. Those respondents that said they were affiliated with “other parties” (not Democrat, Republican, or Independent) (-0.85) and ABQWF (-0.81) had the strongest

levels of disagreeance (lowest calculated mean). The largest PCI values were documented from Caldera Action (0.53) and NMWA (0.48), while the smallest values were recorded by the OHV groups (0) and ABQWF (0.19) (Figure 13 and Table 28).

Table 28 - PCI Table [Question 20]

Group	PCI	Mean	Group	PCI	Mean
Aggregate	0.35	-0.44	40-59	0.39	-0.42
On-site	0.20	-0.67	60+	0.39	-0.34
OHV groups	0.00	0.92	Democrat	0.31	-0.52
Espanola Sun	0.40	-0.40	Republican	0.41	-0.22
Caldera Action	0.53	-0.07	Independent	0.34	-0.51
NMWF	0.32	-0.48	Other Parties	0.31	-0.85
Running	0.25	-0.42	High School	0.30	-0.70
ABQWF	0.19	-0.81	Some College	0.31	-0.49
NMWA	0.48	0.17	College Degree	0.39	-0.35
Flyers	0.41	-0.29	Grad Degree	0.32	-0.48
.COM	0.36	0.29	\$0-49999	0.26	-0.70
.GOV	0.31	-0.53	\$50-99999	0.41	-0.25
Male	0.38	-0.37	\$150000+	0.33	-0.46
Female	0.26	-0.62	\$100-149,999	0.39	-0.37
18-39	0.22	-0.67			

When respondents were asked if they would support buses or shuttles if it would decrease the need for additional infrastructure (Question 18), the majority (57.8%) said that they would (Table 29). Still, a large number (206) of respondents said that they would not support their use, stating that

“I don’t want to be with a bunch of people. I want to have my own place to be with my thoughts and family.”

“...personal vehicles provide freedom and options for spontaneity,” “handicap access is essential for me and difficult to provide with buses/shuttle,” and “I don’t want to be with a bunch of people. I want to have my own place to be with my thoughts and family” (see Appendix 5.9). Most respondents (64.9%) agree or strongly agree that new roads would

have an environmental impact on the Valles Caldera (Table 30). Exceptions to this consensus were the OHV groups and NMWA, both of which had a computed mean of -0.83 and -0.21, respectively. The PCI value was quite high for NMWA, however (see Figure 14 and Table 31).

Table 29 - Question 18 [If the use of buses and/or shuttles would decrease the need for an additional infrastructure, like paved roads and parking lots, would you support their use?]

Response	Actual Count	% of Total
Yes	402	57.8
No	206	29.6
Don't know	87	12.5

Answered Question: 695; Skipped Question: 17

Table 30 - Question 19 [In your opinion, new roads in the Preserve would result in negative environmental impacts.]

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Actual Count	46	95	106	247	210
% of Total	6.5	13.5	15.1	35.1	29.8

Answered Question: 704; Skipped Question: 8

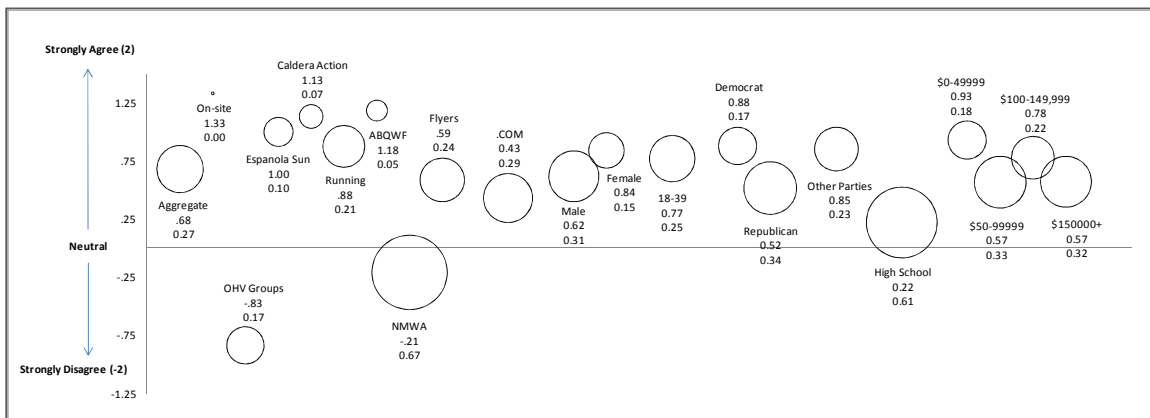


Figure 14 - PCI Graph [Question 19]

Table 31 - PCI Table [Question 19]

Group	PCI	Mean	Group	PCI	Mean
Aggregate	0.27	0.68	40-59	0.27	0.67
On-site	0.01	1.33	60+	0.27	0.64
OHV groups	0.17	-0.83	Democrat	0.17	0.88
Espanola Sun	0.10	1.00	Republican	0.34	0.52
Caldera Action	0.07	1.13	Independent	0.31	0.63
NMWF	0.30	0.73	Other Parties	0.23	0.85
Running	0.21	0.88	High School	0.61	0.22
ABQWF	0.05	1.18	Some College	0.26	0.65
NMWA	0.67	-0.21	College Degree	0.26	0.69
Flyers	0.24	0.59	Grad Degree	0.25	0.72
.COM	0.29	0.43	\$0-49999	0.18	0.93
.GOV	0.23	0.72	\$50-99999	0.33	0.57
Male	0.31	0.62	\$150000+	0.22	0.78
Female	0.15	0.84	\$100-149,999	0.32	0.57
18-39	0.25	0.77			

4.5 Crowding - Quantity or Quality Preference

This research also looked to gather recreationist’s perspectives on crowding, and to see how they might weigh the quantity of activities (more accessible) to the quality of experience (more private or solitude experience). Questions 10 [*Do you value the quality or quantity of your recreational experience? For instance, would you prefer to have one hiking trail or campsite to yourself for the day (quality), or have the option of many trails and campsites that are open to many recreationists (quantity)?*], Question 11 [*Would you be willing to pay an increased fee for a higher quality recreation experience on the Preserve?*], Question 12 [*If you answered yes to the previous question 11, how much additional money would you be willing to spend on quality?*], and Question 14 [*The Preserve (89,000 acres) currently sees less than 16,000 recreational visitors every year. By contrast, the adjacent Bandelier National Monument (32,000 acres) receives more than 300,000 people each year. Based on these numbers and experiences you have had on other public lands, how many visitors would you think the Preserve can reasonably*

accommodate while still providing an acceptable experience for most visitors?] were created to assess values and opinions related to crowding.

When respondents were asked if they preferred quality or quantity (Question 10), a significant percentage (66%) said that they value quality over quantity (Table 32). The

open-ended responses revealed some interesting perspectives, including “quality can be costly, but for this special place certain protective measures are warranted,” “I think it's selfish to have trails to one's self or group,” “limited quality....i.e. a max limit (10?) of current use of any one trail,” “quantity, but with balance,” and “a quantity of quality is preferred” (see Appendix 5.10 for all responses).

“A quantity of quality is preferred.”

Table 32 - Question 10 [Do you value the quality or quantity of your recreational experience? For instance, would you prefer to have one hiking trail or campsite to yourself for the day (quality), or have the option of many trails and campsites that are open to many recreationists (quantity)?]

Response	Actual Count	% of Total
Prefer Quality	441	66.0
Prefer Quantity	227	34.0

Answered Question: 668; Skipped Question: 44

Knowing that the Valles Caldera Trust (VCT) currently needs to become self-sufficient by 2018 to continue managing the Valles Caldera, it seemed necessary to gauge the public’s attitudes toward recreation fees. While this has been a major issue expressed by the public (see Valles Caldera Listening Sessions 2010), more than two-thirds (67.6%) of respondents said that they would pay a fee for a quality experience (Table 33). From those that stated they would pay an increased fee for quantity of experience, most

respondents (33.8%) said they would be willing to pay an additional \$5-10 per visit. All other categories, even the amounts over \$20, had a relatively significant percent of respondents (Table 34). The open-ended responses for this question revealed specific amounts, the need for specific amounts for different recreational activities, and ideas such as an annual or yearly pass (see Appendix 5.11 Responses).

Table 33 - Question 11 [Would you be willing to pay an increased fee for a higher quality recreation experience on the Preserve?]

Response	Actual Count	% of Total
Yes	467	67.6
No	224	32.4

Answered Question: 691; Skipped Question: 21

Table 34 - Question 12[If you answered yes to the previous question 11, how much additional money would you be willing to spend on quality?]

Response	Actual Count	% of Total
\$ 5-10/ visit	155	33.8
\$ 10-15/ visit	103	22.4
\$ 15-20/visit	89	19.4
\$ 20-30/visit	50	10.9
\$ 30+/ visit	62	13.5

Answered Question: 459; Skipped Question: 253

Question 14 [*The Preserve (89,000 acres) currently sees less than 16,000 recreational visitors every year. By contrast, the adjacent Bandelier National Monument (32,000 acres) receives more than 300,000 people each year. Based on these numbers and experiences you have had on other public lands, how many visitors would you think the Preserve can reasonably accommodate while still providing an acceptable experience*

for most visitors?], sought to address any potential crowding issue that recreationists perceive. Respondents were asked to answer this question by comparing personal experiences to the current visitation rates. Visitation rates at Bandelier, a National Monument adjacent to the Valles Caldera, were also cited for comparative purposes and to help with respondent conceptualization (see Table 35).

Table 35 - Question 14 [The Preserve (89,000 acres) currently sees less than 16,000 recreational visitors every year. By contrast, the adjacent Bandelier National Monument (32,000 acres) receives more than 300,000 people each year. Based on these numbers and experiences you have had on other public lands, how many visitors would you think the Preserve can reasonably accommodate while still providing an acceptable experience for most visitors?]

Response	Actual Count	% of Total
16,000*	103	16.2
20,000-50,000	243	38.1
50,000-100,000	178	27.9
100,000-200,000	60	9.40
200,000+	63	9.90

Answered Question: 637; Skipped Question: 75

*The estimated visitor count in 2009 (VCT 2003)

Respondents to the open-ended portion to Question 14 stated some specific amounts of visitors that they believed the Valles Caldera could reasonably accommodate. Others found this question confusing, and refused to compare or quantify these numbers (see Appendix 5.12 Responses).

“This depends on the type of visit. Camping visits must be fewer than drive-by visits. Drive through visits must be fewer than bicycle tours.”

4.6 Livestock Grazing

Question 24 [*Cattle and sheep grazing have occurred on this land for more than a century. The legislation allows grazing to continue on the Preserve to further scientific research and protect a piece of the Valles Caldera history. Would you like to see livestock grazing continue on the Preserve?*] and Question 25 [*Do you think that grazing in the Preserve would diminish your recreational experience?*] were analyzed to help understand recreationist's attitudes toward livestock grazing on the Valles Caldera.

According to the results, the majority of respondents (55.4%) would like to see livestock grazing continue on the Valles Caldera (see Table 36). A similar percentage of respondents (58.4%) did not think that livestock

grazing would diminish their recreational experience on the Valles Caldera (Table 37). A total of 168 open-ended responses to this

“Rotational and controlled grazing is a good use of the Preserve and can add to the recreational experience”

question revealed some interesting perspectives, including: “grazing causes more environmental damage than most forms of recreation. There's nothing historically significant about ‘more than a century’ of grazing...,” “a lot depends on the number and location of the animals. I prefer NO livestock unless very limited,” “if managed properly I don't think grazing would diminish the experience. But, cattle should be managed based on scientific principles and operators should pay a fair market price for access to the land, not the current rates,” “rotational and controlled grazing is a good use of the Preserve and can add to the rec. experience,” and “livestock grazing is essential to managing the preserve and to provide resource enhancement (see Appendix 5.14).”

Table 36 - Question 24 [Cattle and sheep grazing have occurred on this land for more than a century. The legislation allows grazing to continue on the Preserve to further scientific research and protect a piece of the Valles Caldera history. Would you like to see livestock grazing continue on the Preserve?]

Response	Actual Count	% of Total
Yes	392	55.4
No	226	32.0
Don't know	89	12.6

Answered Question: 707; Skipped Question: 5

Table 37 - Question 25 [Do you think that grazing in the Preserve would diminish your recreational experience?]

Response	Actual Count	% of Total
No	411	58.4
Yes	244	34.7
Don't know	49	7.00

Answered Question: 704; Skipped Question: 8

4.7 Value of Management Objectives

Questions 8 [*Do you believe a balanced use of the Preserve is possible, including livestock grazing, protection of cultural and religious sites, recreation, firewood collection, etc.?*] and Question 9 [*What management objective do you think should have the highest priority on the Preserve?*] were analyzed in order to understand what respondent's attitudes toward management objectives.

Question 8 reveals that survey respondents are optimistic, and believe that a balanced use of the Valles Caldera is possible (Table 38). Similarly, Question 9 shows us that the highest percentage of respondents (33.1%) agree that all management objectives should be weighted equally. Ecological restoration and resource protection (31.4%) came in a close second, followed by recreation (26.1%). Revenue generation and cultural

and religious resource protection combined for 15 total responses (Table 39). A number of users specified “hunting,” “fishing,” “education,” and “please no grazing” related comments in the open-end portion of the question (see Appendix 5.9 Responses).

Table 38 - Question 8 [Do you believe a balanced use of the Preserve is possible, including livestock grazing, protection of cultural and religious sites, recreation, firewood collection, etc.?)

Response	Actual Count	% of Total
Yes	509	71.7
No	128	18.0
Don't know	73	10.3

Answered Question: 710; Skipped Question: 2

Table 39 - Question 9 [What management objective do you think should have the highest priority on the Preserve?]

Response	Actual Count	% of Total
All Objectives weighted equally	225	33.1
Ecological Restoration and Resource Protection	213	31.4
Recreation	177	26.1
Grazing	29	4.30
Science and Research	20	2.90
Cultural and Religious Protection	10	1.50
Revenue-generation	5	0.70

Answered Question: 679; Skipped Question: 33

4.8 Demographics and Socioeconomics

In regards to gender, the clear majority of respondents were male (74.4%) (Table 40). Interestingly, the age group of most respondents was quite high, with 83% of all respondents being over the age of 40 (Table 41). These two previous demographic factors may justify the high levels of education recorded by respondents (Table 42).

More than 36% of respondents held a college degree, and 44.5% held a post-graduate degree.

Table 40 - Question 27 [What is your gender?]

Response	Actual Count	% of Total
Male	525	74.4
Female	181	25.6

Answered Question: 706; Skipped Question: 6

Table 41 - Question 28 [What is your age?]

Response	Actual Count	% of Total
50-59	240	33.9
60-69	159	22.5
40-49	131	18.5
30-39	87	12.3
70-79	57	8.10
18-29	28	4.00
80+	6	0.80

Answered Question: 708; Skipped Question: 4

Table 42 - Question 30 [How many years of schooling have you completed?]

Response	Actual Count	% of Total
Graduate Degree	311	44.5
College Degree	256	36.6
Some College	109	15.6
High School	23	3.30

Answered Question: 699; Skipped Question: 13

Party affiliation was distributed more evenly, but was skipped by a significant number of survey-takers (133) (See Table 43). A number of respondents selected “other” and submitted a party affiliation that wasn’t Democrat, Republican, or Independent (See

Appendix 5.15). These answers were combined into “other parties” in this research and included Libertarian, Green Party, Tea Party, etc. Respondent household income was relatively high when compared to the New Mexico average (\$43,719), with the two highest percentages of this survey falling between \$50,000 and \$74,999, and \$75,000 and \$99,999 (see Table 44). The overwhelming majority of respondents were White, non-Hispanic (Table 45). Not surprisingly, the vast majority of respondents were from New Mexico (597), but Texas (28), Colorado (11), and California (18) also contributed a much higher percentage than any of the other states (Table 46).

Table 43 - Question 29 [Party Affiliation?]

Response	Actual Count	% of Total
Democratic	226	39.0
Independent	181	31.3
Republican	172	29.7

Answered Question: 579; Skipped Question: 133

Table 44 - Question 31[What is your approximate 2009 annual household income before taxes?]

Response	Actual Count	% of Total
\$75,000 – 99,9999	117	19.1
\$50,000 – 74,999	102	16.6
\$100,000 – 124,999	101	16.4
\$25,000 – 49,999	80	13.0
\$125,000 – 149,000	66	10.7
\$150,000 – 200,000	65	10.6
> \$ 200,000	54	8.80
\$0 - 24,000	29	4.70

Answered Question: 614; Skipped Question: 98

Table 45 - Question 32 [What is your race?]

Response	Actual Count	% of Total
White	29	87.2
Hispanic	102	10.6
American Indian	117	1.00
Asian	101	0.80
Black	80	0.50

Answered Question: 616; Skipped Question: 96

Table 46 - Question 26 [What state are you a current resident of?]

State	Actual Count	State	Actual Count	State	Actual Count	State	Actual Count
AL	1	ID	4	NE	2	SC	1
AZ	5	IL	2	NH	1	TN	1
CA	18	IN	4	NJ	3	TX	28
CO	11	KS	1	NM	597	UT	3
CT	1	LA	1	NY	3	VA	1
FL	2	MI	2	OK	1	WA	2
HI	1	MN	2	OR	2	WI	3
IA	1	NC	1	PA	3	WV	1

CHAPTER FIVE

Discussion and Conclusions

5.1 Discussion

This thesis offers insight into the attitudes and perspectives of those that use the Valles Caldera for outdoor recreation. Particular areas of focus, discussed in detail below, offer information that can either supplement or inform the current recreation literature, and provide valuable information that is not currently available to the Valles Caldera management. In terms of future management decisions, this research can serve as an informative guide for future recreation managers of the Valles Caldera, and provide a valuable methodology that other public land managers can use to understand recreationists' attitudes and perspectives.

5.1.1 Public Access

Through public display at the Valles Caldera listening sessions (2010), and presented through local media, it seems clear that a number of recreationists are unsatisfied with their current level of access to the VCNP. The results from this research confirm this dissatisfaction, with more than half (52.2%) of all respondents either disagreeing or strongly disagreeing when asked if the Preserve had offered adequate recreation access to the public (see Question 5). Question 6 [*In your opinion, you are satisfied with the level of recreation access experienced on the Preserve.*], a very similar question, found like results.

Results from this research also revealed that different socio-demographic and interest groups have different levels of dissatisfaction (See Question 5 and 6). While

every surveyed group was dissatisfied with their current level of recreational access overall, Caldera Action, the .COM website posting, and the OHV groups were the least satisfied. Unfortunately, limited responses from these three groups inhibited a chi-square analysis. If the acquired data from this thesis could be used as an indicator, however, it is clear that a statistical difference between these three groups and most other interest groups would exist. Statistical differences were identified when NMWF and NMWA were compared to the aggregate of all responses and the .GOV email, signifying that the former two groups were considerably more dissatisfied than the latter. The .GOV group tested significantly against the aggregate of all responses, and Question 5 showed that they were more satisfied with current levels of access than any other group.

It seems likely that the .GOV group, because they are more attuned to the processes of the Valles Caldera and are more informed about recreational events and activities (sent through email), would be more satisfied with their level of access than other groups. On the other hand, because no OHV activities are currently allowed on the Valles Caldera, it is no surprise that OHV groups are very dissatisfied with their current level of access. Interestingly, it was Caldera Action and the .COM respondents that were the most dissatisfied (see Question 5).

Caldera Action may be very dissatisfied with their level of access, because, as some investigative research has revealed, many of the group members have lived very near the Valles Caldera for many years, and have a very strong relationship with the landscape. If this unique piece of land is essentially their backyard, then they are unlikely to be satisfied with making reservations and paying fees for access. The .COM website is run by a resident that lives very near the Valles Caldera, whose life is deeply

entrenched with the activities that occur in the area as well. In terms of access, further research is needed to determine why each of these groups differs so greatly in their level of satisfaction.

When recreationists were asked if they would like to see more paved roads on the Valles Caldera, 75.5% disagreed. Both interest groups and socio-demographic groups were similar in their levels of disagreement. Because the question asks specifically about “paved” roads, further investigation is needed to determine if recreationists would like to see more roads that are not “paved”, decommissioned, or left in its present condition.

Results from this research found that most groups would not favor the use of buses or shuttles over personal vehicles to access the Valles Caldera (see Question 17), those that were surveyed on-site said that they would prefer the use of buses or shuttles more than any other surveyed group. This may stem from a personal and positive experience with the current shuttle system. Because OHVs are their mode of transportation, there is no surprise that OHV groups were the most opposed to buses or shuttles.

5.1.2 Religious and Cultural Sites

As is evidenced throughout this research, outdoor recreation and access on Valles Caldera is of considerable interest to the public. The Caldera is also of great cultural and religious interest to many Native American (indigenous) groups (Anschuetz and Merlan 2007; Anschuetz and Raish 2010). So much so, that Redondo Peak, the highest in the Jemez Mountains, is currently off limits to outdoor recreationists. The potential for conflicting interests between the values of native groups and recreationists’ attitudes

signify the need for a more in depth analysis than what the academic literature currently provides.

Question 21 [*In your opinion, the protection of important Indian and Puebloan cultural and religious sites inside the Preserve is more important than access for recreationists.*] revealed that many groups, based on both socio-demographic characteristics and individual interest groups, have very different attitudes and perceptions towards cultural and religious sites when it restricts their personal recreational interests. The aggregate of all responses, for example, revealed a split (via the likert scale) in regards to whether recreational access or the protection of cultural and religious sites should have precedence over the other.

Results from this research show that different recreational interest groups varied considerably when asked about cultural and religious sites, and recreational access. Seven of the surveyed interest groups, for example, agreed that the protection of cultural and religious sites is more important than access for recreationists. On the other hand, four interest groups disagreed (see Table 20). Espanola Sun recorded the highest mean (0.60), signifying the highest preference for the protection of cultural and religious sites, while the OHV groups (-0.69) recorded the lowest. Significant statistical differences were found to occur between NMWF and running groups ($p = 0.035$), ABQWF ($p = 0.02$), and the .GOV email list ($p = 0.02$), showing that NMWF favored protection of cultural and religious sites much less than the running groups, ABQWF, and the .GOV email list.

When considering socio-demographic attitudes toward cultural and religious sites, a similar split, as seen above, was found to occur. Seven groups (females, 18-39 age group, democratic other party affiliates, high school and some college education, and the

\$0-49,999 income group) agreed that protection of cultural and religious sites should take precedence over recreational access, while eight groups did not (see Table 20). Further, this research found statistically significant differences between males and females ($p < 0.001$), the 18-39 and 40-59 age groups ($p < 0.05$), between Democratic and both Republican ($p < 0.001$) and Independent ($p < 0.005$) respondents, and between those with some college education and those with a college degree ($p < 0.001$) and a post-graduate degree ($p < 0.05$). Democratic affiliates, females, and those with some college education favored the protection of cultural and religious sites over the aggregate of all responses. In contrast, Republican affiliates and NMWF were less in favor of such protection. Women respondents were also found to favor the protection of cultural and religious sites over males, Democratic respondents were found to favor such protection more than Republican respondents, and the lowest income group (less than \$50,000) favors the protection of cultural and religious sites over their higher income counterparts.

Question 23 [*Currently access is minimal to places like Redondo Peak because of their important cultural and religious significance. In your opinion, places of important cultural significance inside the Preserve should be open to recreational visitors.*] revealed similar results that were identified to Question 21. Question 22 [*Do you believe that management can increase recreation while protecting the important Indian and Puebloan cultural and religious sites inside the Preserve?*] acknowledged that a majority of the respondents (81.5%) believe that management can continue to protect these important sites while allowing for more recreation.

Based on the above findings, it appears that conflicting attitudes and perceptions in regards to the protection of cultural and religious sites when it may inhibit recreational opportunities will be difficult management task for the Valles Caldera to address.

5.1.3 Environmental Preference

Understanding recreationists' attitudes toward environmental preference can reveal their associated underlying environmental values, providing the Valles Caldera management with information they can use to more appropriately develop recreational programs that reciprocate such preferences. For instance, if a majority of respondents seem to prefer more primitive experiences, managers may want to tailor future programs to meet those needs.

Results from this research found that the majority of respondents value the preservation or protection of environmental quality over their personal desire to recreate. Overall, it appears that respondents recognize that a decrease in environmental quality will cause the Valles Caldera to lose some of its recreational allure. By means of Question 15 [*Do you believe that increasing recreation would have negative environmental impacts on the Preserve?*], this research found that a plurality of all respondents (42.5%) believe that increasing recreation will have negative effects on the environment. Further research is needed to identify why a very comparable 37.3% believed otherwise. Question 19 [*In your opinion, new roads in the Preserve would result in negative environmental impacts*] identified that OHV groups and NMWA are the only two groups, including all socio-demographic and interest groups, that believe that new roads on the Valles Caldera will not have adverse environmental effects on the

Caldera. But again, additional research is needed to determine why these two groups, with very conflicting agendas in terms of recreational activities, have answered in such a way.

A majority (57.8%) of respondents said they would support the use of buses or shuttles if it would decrease the need for additional paved roads and parking lots (Question 18). It appears that minimizing impacts to the Valles Caldera is supported by most of the recreationists, even if that requires giving up accustomed luxuries, such as using one's own vehicle to traverse the Caldera or navigate to a trailhead.

Using the results from Question 20 [*In your opinion, increasing access to the Preserve is more important than the possible negative environmental problems associated with it.*], this thesis found that, out of every interest or socio-demographic group, only the .COM, NMWA, and OHV groups seem to believe that increasing access to the Valles Caldera should take precedence over the environmental consequences associated with it. As management does not currently allow OHV vehicles, it may not be a surprise that this group favors access for recreation over the potential environmental problems associated with it. As was seen previously, further research is needed to identify why the NMWA is giving preference to recreational access over the potential environmental issues associated with it. Because wilderness advocates typically recreate to preserve environmental qualities at very high levels, they may believe that if others act in a similar fashion, that an increase in access will not necessarily adversely affect the environment.

5.1.4 Crowding, and a Quantity or Quality Preference

The tenth management principle that currently guides Valles Caldera management is directed at the quality of experience. This principle states that in providing opportunities to the public, management will emphasize the quality of experience over the quantity of experiences. This research has found that a strong majority (66%) of all respondents agree with this principle, confirming that they do prefer quality over quantity. A slightly larger majority (67.6%) went on to say that they would be willing to pay an increased fee for a higher quality recreation experience. Most of these respondents said they would be willing to pay \$5-10 per visit (33.8%) or \$10-15 per visit (22.4%). Further research, with the data from this thesis, is needed to determine what specific socio-demographic or special interest groups are more sensitive to fees.

The VCNP hosted 16,000 total visitors in 2009 (VCT 2003). This research has identified that the plurality of survey respondents (38.1%), in terms of crowding, believe that the Valles Caldera can reasonably accommodate 20,000-50,000 visitors while still providing an acceptable recreational experience. As the Valles Caldera continues to open its doors to more recreationists and recreational opportunities, future research will be needed to determine if the attitudes and perceptions toward crowding change over time. This newly gathered information could be compared with the data collected in this thesis to help determine a crowding threshold, the point at which visitors perceive crowding as unfavorable, and having a negative effect on their recreational experience.

5.1.5 Livestock Grazing

In an attempt to continue what has been the dominant use of the Valles Caldera for the previous century, goal 1 of the VCPA instructs the VCT to operate the preserve as

a working ranch. This first goal is to be consistent with goal 2: the protection and preservation of the scientific, scenic... and recreational values of the preserve; and goal 4: public use and access to the preserve for recreation. As such, understanding the perceptions and attitudes of the Valles Caldera's recreationists towards livestock grazing is important information that management can use to more effectively meet the aforementioned goals.

Based on Question 24 [*Cattle and sheep grazing have occurred on this land for more than a century. The legislation allows grazing to continue on the Preserve to further scientific research and protect a piece of the Valles Caldera history. Would you like to see livestock grazing continue on the Preserve?*] and Question 25 [*Do you think that grazing in the Preserve would diminish your recreational experience?*], this research finds that the aggregate majority of recreationists do not believe that cattle or sheep grazing would diminish their recreational experience. In fact, most respondents (55.4%) would like to see grazing continue in the future.

Still, a moderate percentage (34.7%) of respondents believe that livestock grazing would diminish their experience on the Valles Caldera (see Question 25). This warrants further research to determine what specific socio-demographic or interest groups' experiences are adversely affected by livestock grazing. Gaining access to this information, managers could coordinate group-specific events that would avoid locations that are used for livestock grazing, for example. These more detailed data were not collected for this thesis because of time constraints.

5.2 General Research Limitations

There are a few of limitations that should be considered when assessing the results of this analysis. First, it is possible that a sampling error occurred during this research. A sampling error is the extent to which a sample is limited in its ability to describe a population, because only some, and not all, elements in a population are sampled (Vaske 2008). Other than the opportunities provided during on-site surveys, for example, this research required that the respondents have access to the internet. It is likely that this limitation inhibited those that may not have a computer or access to the internet, specifically older populations, minority groups, and lower income groups, from being able to respond, or even knowing that the survey existed. Providing more opportunities on-site, through the traditional mail system, and at the Valles Caldera-related public hearings or meetings would be a good supplement to this thesis. The internet was chosen as a means of distribution, because it the most efficient and lowest cost option.

In addition, it is likely that not every recreational interest group was identified or accounted for in the survey. This could have resulted from a limited number of responses from a particular group (e.g. the Espanola Sun had 10 respondents), or that a specific group did not exist, was not available, or was not identified by the researcher (e.g. spelunking, rockhound, or rock climbing groups), and thus, did not contribute to the survey. As a result of this and the aforementioned internet constraint, these data are not meant to reflect the attitudes and perceptions of the Valles Caldera's entire recreating population. Alternative studies and methods are needed in order to acquire a greater representation of the Valles Caldera's many outdoor recreation enthusiasts.

Additionally, information from this thesis is site-specific to the Valles Caldera and should not be used to directly reflect the attitudes and perceptions of outdoor recreationists on other public lands. Results from this research should, however, encourage other academics and recreation managers to ask similar questions about recreationists' attitudes and perceptions on other public lands, and employ similar methods to answer such questions.

5.3 Future Research

This research has identified the PCI to be an informative, simple, effective, and investigative method of identifying and presenting the attitudes and perceptions of the numerous interest and socio-demographic groups, simultaneously. This approach is an alternative to the conventional research approach to outdoor recreation, which has often been holistic (aggregated), focused specifically on socio-demographic characteristics, or a comparison of only two conflicting groups (i.e. snowboarders and skiers, canoeists and motorboatists, hikers and mountain bikers, etc.). The PCI's graphical technique allows for a comparison between numerous groups, allowing researchers and land managers to more easily identify what specific interest groups' attitudes or perceptions are deviating from the consensus. With this identification, land managers can specifically adapt outdoor recreation programs to meet the needs of such groups. Accordingly, the PCI method is a valuable tool that should be considered by other land managers or academics when collecting data for numerous recreational groups.

Furthermore, additional research is needed to distinguish how different interest groups' attitudes and perceptions might differ for all areas of focus, not just, as was done

in this thesis, public access and cultural and religious sites. This research has acquired the necessary dataset to do so, but time constraints inhibited such analysis. Additional research is also needed to understand why these interest and socio-demographic groups' attitudes and perceptions vary from each other.

Additionally, it would be valuable to repeat this study in the future to determine how these attitudes and perceptions may change over time. Similarly, comparing the results from this research to similar questions asked on other public lands might allow for some interesting and intriguing comparisons.

5.4 Summary of Conclusions

This research has revealed the attitudes and perceptions, for five specific areas of interest, of those that use the Valles Caldera for outdoor recreation. First, results from this research confirm a dissatisfaction with the current level of recreational access provided on the Valles Caldera. Second, many groups, based on both socio-demographic characteristics and individual interest groups, have very different attitudes and perceptions towards cultural and religious sites when it restricts their personal recreational interests. Third, results from this research found that a majority of recreationists value the preservation or protection of environmental quality over their personal desire to recreate. Fourth, a strong majority of all respondents prefer the quality of their experience over the quantity, and stated that they would be willing to pay a fee to have said quality. Finally, this research found that a majority of recreationists do not believe that cattle or sheep grazing would diminish their recreational experience, and in fact, would like to see grazing continue in the future.

The Valles Caldera is an interesting and unprecedented experiment in public land management. The challenges associated with implementing the trust model for land management, gaining financial self-sufficiency, as well as meeting the expectations of the public regarding recreational access have created many challenges. The results from this research reveal some conflicting views on recreational values that may inform future management of the Valles Caldera, regardless of whether the experiment continues. There is a significant discrepancy among various users regarding how much protection should be provided for cultural and religious sites. Future management must grapple with the competing values and concerns of various recreationists in this respect. In terms of public access more generally, a tension also exists between the need for future management to provide a significant quantity of recreationist's activities while also maintaining a high quality. Future management of the Valles Caldera will need to address the delicate balance of quality and quantity in meeting recreational demands. As managers work to address these issues and address competing concerns, the insights provided by this research into the values, attitudes and potential for conflict among various users, and the Potential for Conflict Index in particular, may provide valuable information to guide decision-making.

Appendices

Appendix 1 – Valles Caldera Trust Management Principles (VCT 2003)

Valles Caldera Trust

Management Principles

Adopted: December 13, 2001

1. We will administer the Preserve with the long term in mind, directing our efforts toward the benefit of future generations.
2. Recognizing that the Preserve possesses a rich sense of place and qualities not to be found anywhere else, we commit ourselves to the protection of its ecological, cultural, and aesthetic integrity.
3. We will strive to achieve a high level of integrity in our stewardship of the lands, programs and other assets in our care. This includes adopting an ethic of financial thrift and discipline and exercising good business sense.
4. We will exercise restraint in the implementation of all programs, basing them on sound science and adjusting them consistent with the principles of adaptive management.
5. Recognizing the unique heritage of northern New Mexico's traditional cultures, we will be a good neighbor to surrounding communities, striving to avoid negative impacts from Preserve activities and to generate positive impacts.
6. Recognizing the religious significance of the Preserve to Native Americans, the Trust bears a special responsibility to accommodate the religious practices of nearby tribes and pueblos, and to protect sites of special significance.
7. Recognizing the importance of clear and open communication, we commit ourselves to maintaining a productive dialogue with those who would advance the purposes of the Preserve and, where appropriate, to developing partnerships with them.
8. Recognizing that the Preserve is part of a larger ecological whole, we will cooperate with adjacent landowners and managers to achieve a healthy regional ecosystem.
9. Recognizing the great potential of the Preserve for learning and inspiration, we will strive to integrate opportunities for research, reflection and education in the programs of the Preserve.
10. In providing opportunities to the public, we will emphasize quality of experience over quantity of experiences. In doing so, while we reserve the right to limit participation or to maximize revenue in certain instances, we commit ourselves to providing fair and affordable access for all permitted activities.

Appendix 2 – Last Chance Email

Valles Caldera Trust	
UNM Graduate Student Conducting a Poll Regarding Recreation on the Valles Caldera National Preserve - <u>Still time to respond!</u>	
<p>Students contribute invaluable knowledge by completing research projects on the Preserve. Please support their efforts!</p> <p>Hello! A while back the Trust shared a letter from Matt Gagnon, a student at the University of New Mexico. Matt is conducting a survey on the management of the Preserve for his Master's Thesis titled "<i>Management of the Valles Caldera National Preserve: the Recreationist Perspective</i></p> <p>As part of his research, he invited you to participate in a brief online survey (http://www.surveymonkey.com/s/vallesrecreation1) about your recreation experiences or thoughts on, or about, the Preserve.</p> <p>Thank you to those that have already taken the survey; Matt truly appreciates your time. He has received 414 responses so far and would love to have 500. If you would like to participate there is still time!</p> <p>The survey should take about 10 to 15 minutes to complete. Your involvement in the study is voluntary, and you may choose not to participate. Further, you can refuse to answer any of the questions at any time. There are no names or other identifying information like phone numbers, street addresses, or social security numbers associated with this survey. The survey will include questions such as "What recreational activities do you engage in on the Preserve?" and "What management objectives do you think should carry the most weight?" All responses will be kept confidential and aggregated for a statistical analysis and write-up. All survey responses will be kept for one year in a locked filing cabinet and/or on a password-protected computer in the researcher's University of New Mexico office, and then destroyed.</p> <p>Your feedback is essential to this research. Findings from this research can provide information that may be used to assist the future management of the Preserve meet and understand the needs of its many recreationists. It should be stressed that this study is being conducted independent of the Valles Caldera Trust, the National Parks Service, the USDA Forest Service, or any other participatory group involved with the Preserve. If published, results will be</p>	<p>Quick Links Special Events Other Activities Web Calendar More About Us</p>

presented in summary form only.

Please click here to begin the survey:

<http://www.surveymonkey.com/s/vallesrecreation1>

If you have any questions about this research project, please feel free to email the researcher at mgagnon@unm.edu or Dr. Benson, the responsible faculty member, at mhbenson@unm.edu. If you have questions regarding your legal rights as a research subject, you may contact the UNM Human Research Protections Office at (505) 272-1129 or IRB@unm.edu.

By completing this survey, you will be agreeing to participate in the above described research study.

Thank you for your time and consideration.

Sincerely,
xxxxxxxxxx

On behalf of: Matt Gagnon
Graduate Student
Department of Geography
Protocol #: 10-356 Date: 08/02/2010

Contact Information

Valles Caldera Trust
1 866-382-5537
www.vallescaldera.gov

Appendix 3 – Survey Cover Letter and Questionnaire



The University of New Mexico

University of New Mexico
Informed Consent Cover Letter for Anonymous Surveys

STUDY TITLE

Management of the Valles Caldera National Preserve: the Recreationist Perspective

Dear Valles Caldera Recreationist,

You, as a past, current, or future recreationist of the Valles Caldera National Preserve are aware of the special opportunity that this highly treasured public land has to offer. As you may be aware, the Preserve offers a beautiful landscape and a great opportunity for recreation. For this reason, I, Matt Gagnon of the Department of Geography at the University of New Mexico, am contacting you because I am conducting graduate research on the values and perceptions of the Preserve's outdoor recreationists. You are being asked to participate in this study because of your potential interests in outdoor recreation on the Preserve.

As part of my research, I am requesting that you complete a **brief survey** about your recreation experiences or thoughts on, or about, the Preserve. The survey should take about **10 to 15 minutes** to complete. Your involvement in the study is voluntary and you may choose not to participate. Further, you can refuse to answer any of the questions at any time. There are no names or other identifying information like phone numbers, street addresses, or social security numbers associated with this survey. The survey will include questions such as "*What recreational activities do you engage in on the Preserve?*" and "*What management objectives do you think should carry the most weight?*" All responses will be kept confidential and aggregated for a statistical analysis and final write-up. All survey responses will be kept for one year in a locked filing cabinet and/or on a password-protected computer in the researcher's University of New Mexico office, and then destroyed.

Your feedback is essential to this project. Findings from this research can provide information that may be used to assist the future management of the Preserve meet and understand the needs of its many recreationists. It should be stressed that this study is being conducted independent of the Valles Caldera Trust, the National Parks Service, the USDA Forest Service, or any other participatory group involved with the Preserve. If published, results will be presented in summary form only.

If you have any questions about this research project, please feel free to email the researcher at mgagnon@unm.edu or Dr. Benson, the responsible faculty member, at mhbenson@unm.edu. If you have questions regarding your legal rights as a research subject, you may contact the UNM Human Research Protections Office at (505) 272-1129 or IRB@unm.edu.

By completing this survey, you will be agreeing to participate in the above described research study.

Thank you for your time and consideration.

Sincerely,

Matt Gagnon
Graduate Student
Department of Geography

Protocol #: 10-356
Date: 08/02/2010

Should you need it, a reference map of the current bounds of the Valles Caldera National Preserve can be provided by the researcher.

(1) What recreational activities do you engage in on the Preserve?

Check all that apply:

- Hunting
- Fishing
- Hiking
- Lodging
- Others or Specifics (please specify) _____
- Winter Recreation
- Biking/ Cycling
- Wildlife viewing
- None

(2) What recreational activities do you engage in on public lands outside of the Preserve?

Check all that apply:

- Hunting
- Fishing
- Hiking
- Lodging
- Backpacking
- RV camping
- Others or Specifics (please specify) _____
- Campground camping
- Winter recreation
- Biking/ Cycling
- Wildlife viewing
- Motorsports
- None

(3) What recreational activities would you like to see more widely or frequently allowed on the Preserve?

Check all that apply:

- Hunting
- Fishing
- Hiking
- Lodging
- Backpacking
- RV camping
- Others or Specifics (please specify) _____
- Campsite Camping
- Winter Recreation
- Biking/ Cycling
- Wildlife viewing
- Motorsports
- None (I would like all recreational activities reduced)

(4) Are there any recreational activities that you would not like to see on the Preserve in the future?

Check all that apply:

- Hunting
- Fishing
- Hiking
- Lodging
- Backpacking
- RV camping
- Campsite Camping
- Winter Recreation
- Biking/ Cycling
- Wildlife viewing
- Motorsports
- None (I would like all recreational activities reduced)
- Others or Specifics (please specify) _____

(5) In your opinion, since the acquisition from private ownership in 2000, the Preserve has offered adequate recreation access to the public.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Please check one:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(6) In your opinion, you are satisfied with the level of recreation access experienced on the Preserve.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Never Recreated on the Preserve
Please check one:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(7) What circumstances have prevented you from participating in more, or any, recreational activities on the Preserve?

- Limited access
- Limited activities
- Finances
- Health
- Lack of interest
- Lack of information about the Preserve
- Other (please specify) _____

(8) Do you believe a balanced use of the Preserve is possible, including livestock grazing, protection of cultural and religious sites, recreation, firewood collection, etc.?

- Yes
- No
- Don't know

(9) What management objective do you think should have the highest priority on the Preserve?

Please check one:

- Grazing
- Revenue-generation
- Science and research
- Ecological restoration and/or resource protection
- Recreation
- All objectives should be equally weighted
- Cultural and religious protection
- Other (please specify) _____

(10) Do you value the quality or quantity of your recreational experience? For instance, would you prefer to have one hiking trail or campsite to yourself for the day (quality), or have the option of many trails and campsites that are open to many recreationists (quantity)?

- I prefer quality
- I prefer quantity

Additional thoughts or comments _____

(11) Would you be willing to pay an increased fee for a higher quality recreation experience on the Preserve?

- Yes
- No

(12) If you answered yes to question 11, how much additional money would you be willing to spend on quality?

- \$ 5-10 / visit
- \$ 10-15 / visit
- \$ 15-20 / visit
- \$ 20-30 / visit
- \$ 30 + / visit
- Other amounts (please specify) _____

Management of the Valles Caldera National Preserve: the Recreationist Perspective

(13) Should there be a limit to recreational access on the Preserve?

- Yes
- No

Additional thoughts or comments _____

(14) The Preserve (89,000 acres) sees less than 16,000 recreational visitors every year. By contrast, the adjacent Bandelier National Monument (37,000 acres) receives more than 300,000 people each year. Based on these numbers and experiences you have had on other public lands, how many visitors do you think the Preserve can reasonably accommodate while still providing an acceptable experience for most visitors?

- The current visitor numbers should be the maximum (16,000 visitors / year)
- 20,000 – 50,000 visitors / year
- 50,000 – 100,000 visitors / year
- 100,000 – 200,000 visitors / year
- 200,000 + visitors / year
- Specific amounts _____

(15) Do you believe increasing recreation would have negative environmental impacts on the Preserve?

- Yes
- No
- Don't know

(16) Currently, the road infrastructure of the Preserve is minimal. In your opinion, management should develop more paved roads to increase access in and around the Preserve.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Please check one:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(17) In your opinion, the Preserve should favor the use of buses or shuttles over personal vehicles to move recreationists around the Preserve.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Please check one:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(18) If the use of buses and/or shuttles would decrease the need for additional infrastructure, like paved roads and parking lots, would you support their use?

- Yes
- No
- Don't know

Additional thoughts or comments

(19) In your opinion, new roads in the Preserve would result in negative environmental impacts.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Please check one:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(20) In your opinion, increasing access to the Preserve is more important than the possible negative environmental problems associated with it

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Please check one:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(21) In your opinion, the protection of important Indian and Puebloan cultural and religious sites inside the Preserve is more important than access for recreationists.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Please check one:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(22) Do you believe that management can increase recreation while protecting the important Indian and Puebloan cultural and religious sites inside the Preserve?

- Yes
- No
- Don't know

Additional thoughts or comments

- (23) Currently, access is minimal to places like Redondo Peak because of their important cultural and religious significance. In your opinion, places of cultural significance inside the Preserve should be open to recreational visitors.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
Please check one:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional comments or thoughts _____

- (24) Cattle and sheep grazing have occurred on this land for more than a century. The legislation allows grazing to continue on the Preserve to further scientific research and protect a piece of the Valles Caldera's history. Would you like to see livestock grazing continue on the Preserve?

- Yes
- No
- Don't Know

- (25) Do you think that grazing in the Preserve would diminish your recreational experience?

- Yes
- No
- Don't Know

Additional comments or thoughts _____

- (26) What state are you a current resident of?

- New Mexico
- Other (please specify) _____

- (27) What is your gender?

- Male
- Female

(28) What is your age?

- 18 – 29 years
- 30 – 39 years
- 40 – 49 years
- 50 – 59 years
- 60 – 69 years
- 70 – 79 years
- 80 + years

(29) Party Affiliation?

- Democratic
- Republican
- Independent
- Other (please specify) _____

(30) How many years of schooling have you completed?

- Grade/ Elementary school
- Jr./ Middle school
- High school diploma
- Some college
- College degree
- Graduate degree

(31) What is your approximate 2009 annual household income before taxes?

- \$0 – 24,999
- \$25,000 – 49,999
- \$50,000 – 74,999
- \$75,000 – 99,999
- \$100,000 – 124,999
- \$125,000 – 149,999
- \$150,000 – 200,000
- > \$200,000

(32) What is your race?

- White
- Black
- Hispanic
- American Indian
- Asian
- Other (please specify)

- (33) Please provide any additional comments or final thoughts about recreation on the Valles Caldera National Preserve:

- (34) Your feedback is vital to this research project and I thank you for spending the time to complete this survey. If you would like a copy of the results when the project is complete, please provide your e-mail address below.

E-mail: _____

Appendix 4 – UNM Internal Review Board Paperwork



THE UNIVERSITY of
NEW MEXICO

Main Campus Institutional Review Board
Human Research Protections Office
MSC08 4560

1 University of New Mexico~Albuquerque, NM 87131-0001
<http://hsc.unm.edu/som/research/HRRC/>

10-Aug-2010

Responsible Faculty: Melinda Benson
Investigator: Matthew Gagnon
Dept/College: Geography

SUBJECT: IRB Determination of Exempt Status

Protocol #: 10-356

Project Title: Management of the Valles Caldera National Preserve: The Recreationist Perspective

Approval Date: 09-Aug-2010

The Main Campus Institutional Review Board has reviewed the above-mentioned research protocol and determined that the research is *exempt* from the requirements of Department of Health and Human Services (DHHS) regulations for the protection of human subjects as defined in 45CFR46.101(b) under category 2, based on the following:

1. HRPO Application received 080310
2. UNM consent form v080210
3. Study questionnaire received 062810

Because it has been granted exemption, this research project is not subject to continuing review.

Changes to the Research: It is the responsibility of the Principal Investigator to inform the IRB of any changes to this research. A change in the research may disqualify this project from exempt status. Reference the protocol number and title in all documents related to this protocol.

Sincerely,

J. Scott Tonigan, PhD
Chair
Main Campus IRB

University of New Mexico
Informed Consent Cover Letter for Anonymous Surveys

STUDY TITLE
Management of the Valles Caldera National Preserve: the Recreationist Perspective

Dear Valles Caldera Recreationist,

You, as a past, current, or future recreationist of the Valles Caldera National Preserve are aware of the special opportunity that this highly treasured public land has to offer. As you may be aware, the Preserve offers a beautiful landscape and a great opportunity for recreation. For this reason, I, Matt Gagnon of the Department of Geography at the University of New Mexico, am contacting you because I am conducting a graduate thesis regarding the values and perceptions of outdoor recreationists of the Preserve. You are being asked to participate in this study because of your potential interests in outdoor recreation on the Preserve.

As part of my research, I am requesting that you participate in a **brief online survey** ([test - online survey link](#)) about your recreation experiences or thoughts on, or about, the Preserve. The survey should take about **10 to 15 minutes** to complete. Your involvement in the study is voluntary, and you may choose not to participate. Further, you can refuse to answer any of the questions at any time. There are no names or other identifying information like phone numbers, street addresses, or social security numbers associated with this survey. The survey will include questions such as *"What recreational activities do you engage in on the Preserve?"* and *"That management objectives do you think should carry the most weight?"* All responses will be kept confidential and aggregated for a statistical analysis and write-up. All survey responses will be kept for one year in a locked filing cabinet and/or on a password-protected computer in the researcher's University of New Mexico office, and then destroyed.

Your feedback is essential to this research. Findings from this research can provide information that may be used to assist the future management of the Preserve meet and understand the needs of its many recreationists. It should be stressed that this study is being conducted independent of the Valles Caldera Trust, the National Parks Service, the USDA Forest Service, or any other participatory group involved with the Preserve. If published, results will be presented in summary form only.

Please click here to begin the survey: [test - online survey link - test](#)

If you have any questions about this research project, please feel free to email the researcher at mgagnon@unm.edu or Dr. Benson, the responsible faculty member, at mhbenson@unm.edu. If you have questions regarding your legal rights as a research subject, you may contact the UNM Human Research Protections Office at (505) 272-1129 or IRB@unm.edu.

By completing this survey, you will be agreeing to participate in the above described research study.

Thank you for your time and consideration.

Sincerely,

Matt Gagnon

HRPO #: 10-356

Page 1 of 1

Version: 08/02/10

APPROVED: 08/09/10

OFFICIAL USE ONLY



The University of New Mexico Institutional Review Board (HRRC/MCIRB)

Appendix 5 – Posted Flyer

RECREATION *and* *The Valles Caldera National Preserve*



Are you interested in Valles Caldera National Preserve?
Are you interested in recreation?

If so, I invite you to participate in a **brief online survey** about your recreation experiences or thoughts on, or about, this treasured land in north-central New Mexico. The survey should take about **10 to 15 minutes** to complete and will include questions such as *“What recreational activities do you engage in on the Preserve?”* and *“What management objectives do you think should carry the most weight?”*

Your feedback is essential to this project. Findings from this research can provide information that may be used to assist the future management of the Preserve meet and understand the needs of its many recreationists. This study is being conducted independent of the Valles Caldera Trust, the National Parks Service, the USDA Forest Service, or any other participatory group involved with the Preserve.

Matt Gagnon

Graduate Student
University of New Mexico
Department of Geography
mgagnon@unm.edu

For questions or more information regarding this research project, please feel free to email the researcher at mgagnon@unm.edu or Dr. Benson, the responsible faculty member, at mhbenson@unm.edu. If you have questions regarding your legal rights as a research subject, you may contact the UNM Human Research Protections Office at (505) 272-1129 or IRB@unm.edu.

Recreation and the Valles Caldera National Preserve
Researcher contact: mgagnon@unm.edu
<http://www.surveymonkey.com/v/vallesrecreation4>

Recreation and the Valles Caldera National Preserve
Researcher contact: mgagnon@unm.edu
<http://www.surveymonkey.com/v/vallesrecreation4>

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Recreation and the Valles Caldera National Preserve
Researcher contact: mgagnon@unm.edu
<http://www.surveymonkey.com/v/vallesrecreation4>

Appendix 6 – Complete Chi-square Tables

Appendix 6.1 – Question 5 [In your Opinion, since the acquisition from private ownership in 2000, the Preserve has offered adequate recreation access to the public.]

Aggregate Response Comparisons		Tested Values		
Group	Compared Group	χ^2	p-value	df
Aggregate	On-site	X	X	X
Aggregate	OHV groups	X	X	X
Aggregate	Espanola Sun	X	X	X
Aggregate	Caldera Action	X	X	X
Aggregate	NMWF	25.003	< 0.001	4
Aggregate	Running	2.069	0.723	4
Aggregate	ABQWF	6.095	0.192	4
Aggregate	NMWA	15.632	0.004	4
Aggregate	Flyers	X	X	X
Aggregate	.COM	X	X	X
Aggregate	.GOV	13.50	0.009	4
Aggregate	Male	1.325	0.857	4
Aggregate	Female	5.178	0.270	4
Aggregate	18-39	7.329	0.119	4
Aggregate	40-59	0.866	0.929	4
Aggregate	60+	3.278	0.512	4
Aggregate	Democrat	0.879	0.928	4
Aggregate	Republican	2.901	0.575	4
Aggregate	Independent	0.708	0.950	4
Aggregate	Other	X	X	X
Aggregate	High School	1.816	0.770	4
Aggregate	Some College	3.132	0.536	4
Aggregate	College Degree	2.031	0.730	4
Aggregate	Post-Graduate	1.253	0.869	4
Aggregate	\$0 – 49,999	4.495	0.343	4
Aggregate	\$50 – 99,999	2.004	0.735	4
Aggregate	\$100 – 149,999	3.145	0.534	4
Aggregate	\$150,000+	3.076	0.545	4

Interest Groups		Tested Values		
Group	Compared Group	χ^2	p-value	df
On-site*	X	X	X	X
OHV groups*	X	X	X	X
Espanola Sun*	X	X	X	X
Caldera Action*	X	X	X	X
NMWF	Running	X	X	X
NMWF	ABQWF	18.330	0.001	4
NMWF	NMWA	X	X	X
NMWF	Flyers	X	X	X

NMWF	.COM	X	X	X
NMWF	.GOV	45.372	0	4
Running*	X	X	X	X
ABQWF	NMWA	11.319	0.010	4
ABQWF	Flyers	X	X	X
ABQWF	.COM	X	X	X
ABQWF	.GOV	4.853	0.303	4
NMWA	Flyers	X	X	X
NMWA	.COM	X	X	X
NMWA	.GOV	28.936	<0.001	4
Flyers*	X	X	X	X
.COM*	X	X	X	X

Demographic Groups	Tested Values			
Group	Compared Group	χ^2	p-value	df
Age				
18-39	40-59	8.277	0.082	4
18-39	60+	10.567	0.032	4
40-59	60+	3.971	0.410	4
Gender				
Male	Female	8.738	0.068	4
Party Affiliation				
Democrat	Republican	3.317	0.506	4
Democrat	Independent	1.097	0.895	4
Democrat	Other	X	X	X
Republican	Independent	3.489	0.480	4
Republican	Other	X	X	X
Independent	Other	X	X	X
Education				
High School*	X	X	X	X
Some College	College Degree	5.389	0.250	4
Some College	Post-Graduate	2.860	0.582	4
College Degree	Post-Graduate	4.095	0.393	4
Income				
\$0 – 49,999	\$50 – 99,999	3.863	0.425	4
\$0 – 49,999	\$100 – 149,999	8.443	0.077	4
\$0 – 49,999	\$150,000+	4.337	0.362	4
\$50 – 99,999	\$100 – 149,999	4.401	0.354	4
\$50 – 99,999	\$150,000+	4.743	0.315	4
\$100 – 149,999	\$150,000+	4.106	0.392	4
<ul style="list-style-type: none"> • χ^2 = chi square value, df = degrees of freedom • Denotes responses to small for comparison with any other group • X – denotes that there was not enough responses between the group and the compared group for a test of significance 				

Appendix 6.2 – Question 6 [In your opinion, you are satisfied with the level of recreation access experienced on the Preserve.]

Aggregate Response Comparisons		Tested Values		
Group	Compared Group	χ^2	p-value	df
Aggregate	On-site	X	X	X
Aggregate	OHV groups	X	X	X
Aggregate	Espanola Sun	X	X	X
Aggregate	Caldera Action	X	X	X
Aggregate	NMWF	18.928	< 0.001	4
Aggregate	Running	X	X	X
Aggregate	ABQWF	3.733	0.443	4
Aggregate	NMWA	17.446	0.002	4
Aggregate	Flyers	X	X	X
Aggregate	.COM	X	X	X
Aggregate	.GOV	13.52	0.009	4
Aggregate	Male	0.606	0.962	4
Aggregate	Female	2.625	0.622	4
Aggregate	18-39	5.64	0.228	4
Aggregate	40-59	0.554	0.968	4
Aggregate	60+	2.511	0.643	4
Aggregate	Democrat	0.566	0.967	4
Aggregate	Republican	5.236	0.264	4
Aggregate	Independent	2.167	0.705	4
Aggregate	Other	X	X	X
Aggregate	High School	X	X	X
Aggregate	Some College	4.483	0.345	4
Aggregate	College Degree	4.295	0.368	4
Aggregate	Post-Graduate	1.612	0.807	4
Aggregate	\$0 – 49,999	4.389	0.356	4
Aggregate	\$50 – 99,999	2.683	0.612	4
Aggregate	\$100 – 149,999	1.806	0.771	4
Aggregate	\$150,000+	5.610	0.230	4

Interest Groups		Tested Values		
Group	Compared Group	χ^2	p-value	df
On-site*	X	X	X	X
OHV groups*	X	X	X	X
Espanola Sun*	X	X	X	X
Caldera Action*	X	X	X	X
NMWF	Running	X	X	X
NMWF	ABQWF	12.715	0.013	4
NMWF	NMWA	X	X	X
NMWF	Flyers	X	X	X
NMWF	.COM	X	X	X
NMWF	.GOV	37.08	< 0.001	4

Running*	X	X	X	X
ABQWF	NMWA	13.011	0.011	4
ABQWF	Flyers	X	X	X
ABQWF	.COM	X	X	X
ABQWF	.GOV	4.118	0.390	4
NMWA	Flyers	X	X	X
NMWA	.COM	X	X	X
NMWA	.GOV	31.711	<0.001	4
Flyers*	X	X	X	X
.COM*	X	X	X	X

Demographic Groups	Tested Values			
Group	Compared Group	χ^2	p-value	df
Age				
18-39	40-59	5.902	0.207	4
18-39	60+	8.496	0.075	4
40-59	60+	3.06	0.548	4
Gender				
Male	Female	4.297	0.367	4
Party Affiliation				
Democrat	Republican	4.774	0.315	4
Democrat	Independent	1.468	0.832	4
Democrat	Other	X	X	X
Republican	Independent	8.184	0.085	4
Republican	Other	X	X	X
Independent	Other	X	X	X
Education				
High School*	X	X	X	X
Some College	College Degree	7.680	0.104	4
Some College	Post-Graduate	3.757	0.440	4
College Degree	Post-Graduate	7.688	0.104	4
Income				
\$0 – 49,999	\$50 – 99,999	2.892	0.576	4
\$0 – 49,999	\$100 – 149,999	7.077	0.132	4
\$0 – 49,999	\$150,000+	9.148	0.058	4
\$50 – 99,999	\$100 – 149,999	4.231	0.376	4
\$50 – 99,999	\$150,000+	8.906	0.063	4
\$100 – 149,999	\$150,000+	1.948	0.745	4
<ul style="list-style-type: none"> • χ^2 = chi square value, df = degrees of freedom • Denotes responses to small for comparison with any other group • X – denotes that there was not enough responses between the group and the compared group for a test of significance 				

Appendix 6.3 – Question 21 [In your opinion, the protection of important Indian and Puebloan cultural and religious sites inside the Preserve is more important than access for recreationists.]

Aggregate Response Comparisons		Tested Values		
Group	Compared Group	χ^2	p-value	df
Aggregate	On-site	X	X	X
Aggregate	OHV groups	X	X	X
Aggregate	Espanola Sun	X	X	X
Aggregate	Caldera Action	X	X	X
Aggregate	NMWF	10.724	0.030	4
Aggregate	Running	6.211	0.184	4
Aggregate	ABQWF	4.201	0.379	4
Aggregate	NMWA	3.031	0.553	4
Aggregate	Flyers	X	X	X
Aggregate	.COM	X	X	X
Aggregate	.GOV	1.997	0.736	4
Aggregate	Male	8.058	0.090	4
Aggregate	Female	31.920	<0.001	4
Aggregate	18-39	8.129	0.087	4
Aggregate	40-59	1.697	0.791	4
Aggregate	60+	0.708	0.950	4
Aggregate	Democrat	21.465	<0.001	4
Aggregate	Republican	14.978	0.005	4
Aggregate	Independent	1.425	0.840	4
Aggregate	Other	X	X	X
Aggregate	High School	4.266	0.371	4
Aggregate	Some College	11.453	0.023	4
Aggregate	College Degree	4.258	0.372	4
Aggregate	Post-Graduate	0.468	0.977	4
Aggregate	\$0 – 49,999	8.391	0.078	4
Aggregate	\$50 – 99,999	1.575	0.813	4
Aggregate	\$100 – 149,999	3.453	0.485	4
Aggregate	\$150,000+	4.049	0.399	4

Interest Groups		Tested Values		
Group	Compared Group	χ^2	p-value	df
On-site*	X	X	X	X
OHV groups*	X	X	X	X
Espanola Sun*	X	X	X	X
Caldera Action*	X	X	X	X
NMWF	Running	10.336	0.035	4
NMWF	ABQWF	11.711	0.020	4
NMWF	NMWA	0.847	0.932	4
NMWF	Flyers	X	X	X
NMWF	.COM	X	X	X
NMWF	.GOV	11.692	0.020	
Running*	X	X	X	X
ABQWF	NMWA	7.647	0.105	4
ABQWF	Flyers	X	X	X
ABQWF	.COM	X	X	X
ABQWF	.GOV	3.645	0.456	4

NMWA	Flyers	X	X	X
NMWA	.COM	X	X	X
NMWA	.GOV	4.084	0.395	4
Flyers*	X	X	X	X
.COM*	X	X	X	X

Demographic Groups		Tested Values		
Group	Compared Group	χ^2	p-value	df
Age				
18-39	40-59	11.567	0.021	4
18-39	60+	7.707	0.103	4
40-59	60+	1.581	0.812	4
Gender				
Male	Female	52.369	<0.001	4
Party Affiliation				
Democrat	Republican	43.346	<0.001	4
Democrat	Independent	15.669	0.004	4
Democrat	Other	X	X	X
Republican	Independent	9.819	0.044	4
Republican	Other	X	X	X
Independent	Other	X	X	X
Education				
High School*	X	X	X	X
Some College	College Degree	18.860	<0.001	4
Some College	Post-Graduate	12.075	0.017	4
College Degree	Post-Graduate	2.105	0.716	4
Income				
\$0 – 49,999	\$50 – 99,999	10.046	0.040	4
\$0 – 49,999	\$100 – 149,999	6.517	0.164	4
\$0 – 49,999	\$150,000+	10.506	0.033	4
\$50 – 99,999	\$100 – 149,999	3.355	0.500	4
\$50 – 99,999	\$150,000+	2.208	0.698	4
\$100 – 149,999	\$150,000+	6.842	0.144	4
<ul style="list-style-type: none"> • χ^2 = chi square value, df = degrees of freedom • Denotes responses to small for comparison with any other group • X – denotes that there was not enough responses between the group and the compared group for a test of significance 				

Appendix 6.4 – Question 23 [Currently, access is minimal to places like Redondo Peak because of their important cultural and religious significance. In your opinion, places of cultural significance inside the Preserve should be open to recreational visitors.]

Aggregate Response Comparisons		Tested Values		
Group	Compared Group	χ^2	p-value	df
Aggregate	On-site	X	X	X

Aggregate	OHV groups	X	X	X
Aggregate	Espanola Sun	X	X	X
Aggregate	Caldera Action	X	X	X
Aggregate	NMWF	8.158	0.074	4
Aggregate	Running	X	X	X
Aggregate	ABQWF	6.829	0.145	4
Aggregate	NMWA	4.900	0.298	4
Aggregate	Flyers	X	X	X
Aggregate	.COM	X	X	X
Aggregate	.GOV	1.309	0.860	4
Aggregate	Male	7.163	0.128	4
Aggregate	Female	29.483	<0.001	4
Aggregate	18-39	3.893	0.421	4
Aggregate	40-59	2.87	0.580	4
Aggregate	60+	2.242	0.691	4
Aggregate	Democrat	10.435	0.034	4
Aggregate	Republican	7.374	0.117	4
Aggregate	Independent	0.771	0.942	4
Aggregate	Other	X	X	X
Aggregate	High School	X	X	X
Aggregate	Some College	4.81	0.307	4
Aggregate	College Degree	1.313	0.859	4
Aggregate	Post-Graduate	1.672	0.796	4
Aggregate	\$0 – 49,999	11.080	0.026	4
Aggregate	\$50 – 99,999	2.862	0.581	4
Aggregate	\$100 – 149,999	1.031	0.905	4
Aggregate	\$150,000+	5.55	0.235	4

Interest Groups		Tested Values		
Group	Compared Group	χ^2	p-value	df
On-site*	X	X	X	X
OHV groups*	X	X	X	X
Espanola Sun*	X	X	X	X
Caldera Action*	X	X	X	X
NMWF	Running	X	X	X
NMWF	ABQWF	13.131	0.011	4
NMWF	NMWA	2.834	0.586	4
NMWF	Flyers	X	X	X
NMWF	.COM	X	X	X
NMWF	.GOV	11.566	0.021	4
Running*	X	X	X	X
ABQWF	NMWA	10.233	0.037	4
ABQWF	Flyers	X	X	X
ABQWF	.COM	X	X	X
ABQWF	.GOV	5.965	0.202	4
NMWA	Flyers	X	X	X
NMWA	.COM	X	X	X
NMWA	.GOV	6.532	0.163	4

Flyers*	X	X	X	X
.COM*	X	X	X	X

Demographic Groups		Tested Values		
Group	Compared Group	χ^2	p-value	df
Age				
18-39	40-59	7.340	0.119	4
18-39	60+	3.066	0.547	4
40-59	60+	6.288	0.179	4
Gender				
Male	Female	48.491	<0.001	4
Party Affiliation				
Democrat	Republican	20.690	<0.001	4
Democrat	Independent	6.225	0.183	4
Democrat	Other	X	X	X
Republican	Independent	6.600	0.159	4
Republican	Other	X	X	X
Independent	Other	X	X	X
Education				
High School*	X	X	X	X
Some College	College Degree	6.426	0.170	4
Some College	Post-Graduate	6.469	0.167	4
College Degree	Post-Graduate	2.480	0.648	4
Income				
\$0 – 49,999	\$50 – 99,999	15.998	0.003	4
\$0 – 49,999	\$100 – 149,999	7.769	0.100	4
\$0 – 49,999	\$150,000+	16.903	0.002	4
\$50 – 99,999	\$100 – 149,999	2.420	0.659	4
\$50 – 99,999	\$150,000+	1.192	0.879	4
\$100 – 149,999	\$150,000+	5.387	0.250	4
<ul style="list-style-type: none"> • χ^2 = chi square value, df = degrees of freedom • Denotes responses to small for comparison with any other group • X – denotes that there was not enough responses between the group and the compared group for a test of significance 				

Appendix 6.5 – Question 15 [Do you believe increasing recreation would have a negative environmental impacts on the Preserve.]

Aggregate Response Comparisons		Tested Values		
Group	Compared Group	χ^2	p-value	df
Aggregate	On-site	8.419	0.015	2
Aggregate	OHV	X	X	X
Aggregate	Espanola Sun	X	X	X
Aggregate	Caldera Action	1.516	0.469	2
Aggregate	NMWF	0.646	0.724	2
Aggregate	Running	3.554	0.169	2
Aggregate	ABQWF	3.371	0.155	2

Aggregate	NMWA	6.034	0.049	2
Aggregate	Flyers	0.359	0.836	2
Aggregate	.COM	0.623	0.732	2
Aggregate	.GOV	0.900	0.638	2
Aggregate	Male	2.185	0.335	2
Aggregate	Female	8.176	0.017	2
Aggregate	18-39	2.508	0.285	2
Aggregate	40-59	1.073	0.585	2
Aggregate	60+	0.846	0.655	2
Aggregate	Democrat	5.87	0.053	2
Aggregate	Republican	0.859	0.651	2
Aggregate	Independent	3.488	0.175	2
Aggregate	Other	1.407	0.495	2
Aggregate	High School	0.568	0.753	2
Aggregate	Some College	0.797	0.671	2
Aggregate	College Degree	0.872	0.647	2
Aggregate	Post-Graduate	1.066	0.587	2
Aggregate	\$0 – 49,999	2.498	0.287	2
Aggregate	\$50 – 99,999	0.001	1.000	2
Aggregate	\$100 – 149,999	1.414	0.493	2
Aggregate	\$150,000+	0.065	0.968	2

Interest Groups		Tested Values		
Group	Compared Group	χ^2	p-value	df
On-site	OHV	X	X	X
On-site	Espanola Sun	X	X	X
On-site	Caldera Action	X	X	X
On-site	NMWF	6.434	0.040	2
On-site	Running	7.131	0.023	2
On-site	ABQWF	X	X	X
On-site	NMWA	12.515	< 0.001	2
On-site	Flyers	X	X	X
On-site	.COM	X	X	X
On-site	.GOV	7.664	0.022	2
OHV*	X	X	X	X
Espanola Sun*	X	X	X	X
Caldera Action	NMWF	1.844	0.398	2
Caldera Action	Running	X	X	X
Caldera Action	ABQWF	X	X	X
Caldera Action	NMWA	X	X	X
Caldera Action	Flyers	X	X	X
Caldera Action	.COM	X	X	X
Caldera Action	.GOV	1.772	0.412	2
NMWF	Running	1.993	0.369	2
NMWF	ABQWF	3.654	0.160	2
NMWF	NMWA	3.640	0.162	2
NMWF	Flyers	0.674	0.714	2
NMWF	.COM	1.197	0.462	2

NMWF	.GOV	1.270	0.530	2
Running	ABQWF	7.382	0.025	2
Running	NMWA	1.184	0.553	2
Running	Flyers	X	X	X
Running	.COM	X	X	X
Running	.GOV	4.589	0.101	2
ABQWF	NMWA	9.855	0.007	2
ABQWF	Flyers	X	X	X
ABQWF	.COM	X	X	X
ABQWF	.GOV	2.610	0.271	2
NMWA	Flyers	1.076	0.584	2
NMWA	.COM	X	X	X
NMWA	.GOV	7.736	0.021	2
Flyers	.COM	X	X	X
Flyers	.GOV	0.511	0.775	2
.COM	.GOV	X	X	X

Demographic Groups		Tested Values		
Group	Compared Group	χ^2	p-value	df
Age				
18-39	40-59	3.911	0.141	2
18-39	60+	2.578	0.276	2
40-59	60+	1.989	0.370	2
Gender				
Male	Female	14.428	< 0.001	2
Party Affiliation				
Democrat	Republican	5.526	0.063	2
Democrat	Independent	10.730	0.005	2
Democrat	Other	6.382	0.041	2
Republican	Independent	2.350	0.309	2
Republican	Other	0.569	0.752	2
Independent	Other	0.688	0.709	2
Education				
High School	Some College	0.685	0.710	2
High School	College Degree	0.858	0.651	2
High School	Post-Graduate	0.518	0.772	2
Some College	College Degree	0.159	0.924	2
Some College	Post-Graduate	1.199	0.369	2
College Degree	Post-Graduate	2.632	0.268	2
Income				
\$0 – 49,999	\$50 – 99,999	1.957	0.376	2
\$0 – 49,999	\$100 – 149,999	4.281	0.118	2
\$0 – 49,999	\$150,000+	1.830	0.401	2
\$50 – 99,999	\$100 – 149,999	0.947	0.623	2
\$50 – 99,999	\$150,000+	0.045	0.978	2
\$100 – 149,999	\$150,000+	0.688	0.709	2

- χ^2 = chi square value, **df** = degrees of freedom
- Denotes responses too small for comparison with any other group
- X – denotes that there was not enough responses between the group and the compared group for a test of significance

Appendix 7 – Open-Ended Survey Responses ⁶

Appendix 7.1 – Question 1 [What recreational activities do you engage in on the Preserve?]

1. restricted access - to a national treasure
2. photography tours
3. spring flowers Aug
4. would like to hunt, but have not been drawn
5. Horseback riding
6. Archery Elk Hunt
7. Primitive Skills Workshops
8. Photography
9. star gazing
10. tour of the Preserve (first year it was open)
11. Clinics Aug
12. Current hiking is so restricted as to be useless!
13. Have applied for elk hunts but have not been drawn
14. archaeology tours, Hemish elders tour
15. archaeology, geology
16. classes w/my son provided by the Staff
17. Horseback riding
18. Photography Aug
19. trespass hiking at the fringes of the VCNP boundary
20. been on 3 of the organized hikes
21. Tours and special programs
22. Single track trail bike riding / snowmobiling
23. Running
24. Running
25. van tours
26. snowoeing [sic]
27. skiing, snowshoeing
28. just watching the landscapes
29. I would also hunt but it's too expensive and opportunities too few
30. Horseback riding / backcountry horse packing
31. I apply for hunts there but have not drawn.
32. Snowshoeing
33. oil painting
34. running
35. volunteer on all Wildlife projects
36. hunting lions, trapping coyotes, overnight camping, looking at steam wells, working on projects for Dunigan and Homer Pickens
37. field trips for plants, Indian culture, geology; summer camp through PEEC in Los Alamos
38. Never been there Aug 16, 2010 8:57 PM
39. None, because I disagree with the management.
40. camping
41. night sky programs
42. Viewing grazing livestock
43. When I was 9 years old and this was the Baca; I rode a horse to the top of Rendo [sic]. I have never forgotten [sic] that day.
44. Observing livestock interact with wildlife.
45. None
46. would like to take my horses in to trail ride
47. Star Gazing
48. Too Costly!!!
49. viewing grazing and multiple use of species domestic and wild species
50. volunteer work for most of the above

⁶ Responses are taken directly from the survey - no grammatical or spelling changes were made by the researcher.

51. I guide anglers on the Preserve
52. running (run the caldera, JMTR)
53. running (run the caldera, JMTR)
54. I would love to backpack there, but it is not allowed and could be!!
55. Would love to hunt but have not drawn a license
56. Work as one of the 'Amigos'
57. There should be no more lodging on the preserve.
58. volunteer habitat work
59. Watershed assessment and restoration
60. volunteer projects thru NWTF and AWF
61. snowshoeing day/night, New Year's Eve, Run the Caldera
62. stream restoration project with AWF
63. stream rehabilitation
64. Assisted Alb Wildlife Federation in watershed projects
65. volunteer projects
66. Photography
67. bird watching, plant identification
68. I left the region about 20 years ago.
69. 4 wheeling
70. off roading [sic]
71. Running
72. running
73. van tour
74. Jeep Trails, currently not available [sic]
75. Running (I ran the last 4 editions of the marathon)
76. trail running
77. Haven't been there
78. running
79. spiritual work
80. would like to though. Have applied to hunt there.
81. Van tours
82. Rented Kiva in 2008
83. botanical activities, historical documentation
84. Night sky
85. photography, lectures by guides
86. I use to fish when it was private
87. None, because it is closed to OHV recreation.
88. motorcycling
89. I would like to ride my motorcycle there.
90. Equestrian
91. My taxes pay for it!! Make it National Forest the way it should be!!
92. work on Preserve-lots of hiking and wildlife viewing for work
93. XC Skiing
94. Photography
95. Photography
96. running
97. Photography
98. Supervised tours
99. Viewing the landscape from Hwy 4
100. photography, visited one of the hot springs
101. Horse back riding (endurance ride)
102. Photo Opportunity
103. Horseback Riding
104. My daughter participated in PEEC activities; however, for general use we find it very difficult to access to the preserve. Events are organized which requires planning (e.g. we are not able to plan/go for a hike or bike ride same day). We also found the events costly e.g. \$20 per person to bike.
105. horseback riding
106. geology
107. volunteering
108. Geology tours
109. 4x4
110. unable to draw resident tag

111. volunteer dendroglyph survey
112. Photography
113. Photography
114. I have never been on the Preserve. (To competitive) However I would someday like to hunt the Preserve.
115. wildlife viewing
116. horseback riding/endurance competitions
117. Photography
118. Mountain Biking
119. Off road motorcycling
120. geology/archaeology tours
121. I refuse [sic] to pay the "fee" for land bought with my taxes. I had more access when the Texans owned it.
122. photography
123. Running
124. conduct research and fund remediation projects
125. have never been able to draw a permit for hunting and cannot afford he fishing.
126. Photography
127. Photography
128. Volunteer with Restoration [sic] Projects O
129. Restoration Projects
130. Would like to do other things
131. Restoration Projects
132. Volunteer Sevice [sic] Projects
133. Restoartion [sic] Projects
134. Would hunt if I could draw a tag. Fishing is too expensive so only have done it a few times.

Appendix 7.2 – Question 2 [What recreational activities do you engage in on public lands outside of the Preserve?]

1. Hot spring soaking
2. Water sports (kayaking, rafting, swimming, wading)
3. wildlife photography
4. Boating
5. Horseback riding
6. hiking with my dogs
7. rock climbing, mountaineering
8. Running
9. Photography
10. kayaking/rafting; ski racing
11. running races
12. archaeology, geology
13. Horseback Riding with camping
14. Photography
15. wildflower identification, wild food foraging,
16. climbing
17. backcountry camping
18. Single track trail bike riding / snowmobiling
19. Running
20. trail running, rock climbing
21. snowshoeing
22. rock climbing
23. Climbing
24. Horseback riding / backcountry horse packing
25. painting
26. nature walks and talks (Audubon, PEEC, etc.)
27. photography, botanizing
28. Viewing grazing livestock
29. Observing range stewardship techniques of ranchers.
30. horseback riding
31. viewing multiple use and grazing of domestic livestock and wildlife
32. cutting firewood

33. dispersed camping
34. There should be no more lodging on the preserve.
35. Landscape Painting
36. habitat work
37. mushrooming, birdwatching, hunting is primarily birds and small game, inc. turkey
38. trail running, snowshoeing, xc skiing
39. rock climbing
40. volunteer projects
41. Photography
42. In my younger days
43. 4 wheeling - full width
44. Running
45. running
46. Jeep Trails
47. Mushrooming
48. Climbing
49. Running
50. Trail running
51. walking/jogging
52. climbing
53. running, trail maintenance
54. Climbing
55. photography
56. Horse back
57. botanical activities, historical documentation
58. sporting clays, skeet
59. photography
60. Observed Trials
61. motorcycle trials competition
62. snowmobiling and ATV riding on designated trails/roads
63. non-campsite camping
64. Art, Equestrian
65. XC Skiing
66. Photography
67. pop-up camping, photography
68. Photography
69. ATV Trail Riding
70. scenic drives, picnics, hot springs
71. Mushroom hunting
72. OHV dirt bike riding
73. horseback riding
74. Horseback Riding
75. volunteering
76. river boating
77. Photography
78. trail running, climbing
79. Off Road Motorcycle Single track riding
80. photography
81. OHV, specifically 4WD vehicle exploration
82. Photography
83. Single Track Motorcycle
84. photography
85. Photography
86. Observed Trials motorcycle competition
87. geology/archaeology/history tours
88. Off highway motorcycle recreation
89. 4wd and off road motorcycles
90. Observed Trials motorcycling-Ironicly [sic] the most enviroment [sic] friendly yet
91. endangered motorized activity on public land
92. birdwatching, photography (should be separate categories)
93. occasionally rock climbing
94. Running

95. Photography
96. Photography
97. Restoration Projects, swimming
98. primitive cam
99. Restoration Projects
100. Have done all of the above through the years
101. Horseback riding

Appendix 7.3 – Question 3 [What recreational activities would you like to see more widely or frequently allowed on the Preserve?]

1. more photography events
2. I think its fine the way it is
3. up to date lodging, not what currently exists
4. BACK COUNTRY CAMPING BY RESERVATION
5. Need campside [sic] camping, small, scattered, sites.
6. Horseback riding on other days besides Fri, Sat, Sun
7. hiking with my dogs
8. Primitive Skills Classes and Workshops
9. Limited access so as not to spoil the beauty and wildlife.
10. star viewing Aug
11. The entire preserve should be open to hiking as is the adjacent National Forest
12. I think it is fine.
13. ski racing; bike racing
14. none
15. ADA
16. more free trails
17. Do not allow overnight camping or campsites on the preserve,
18. archaeology, geology
19. More areas to horseback ride & camp or use the lodge, plus camp sites for use for the hunters to leave their horses. There are corral areas that are not being used.
20. Photography
21. hiking in from anywhere along the VCNP boundary.
22. I would like more educational class experiences
23. Neither are easily accessible at this time. I have wished for greater opportunities.
24. lodging only to be able to provide controlled "base camps" from which to hike, bike on existing roads and backpack
25. Fishing should be catch and release only. I've witnessed this fishery go from "amazing" to "below average" in two years.
26. climbing
27. backcountry camping
28. Single track trail bike riding / snowmobiling
29. Running
30. photography
31. Current activities are fine.
32. trail running, rock climbing
33. motorsports on roads
34. Please, no motor sports to ruin the peace of the place. How about cross country skiing in the winter?
35. more hunting besides elk and turkey, other animals
36. Limited campsite camping.
37. no change
38. trailhead parking at various access points in the Preserve
39. I like the current level of access
40. I'd like to see the above, but not with the exorbitant fees currently charged
41. Horseback riding / backcountry horse packing
42. Being able to hike with my dogs on the two free trails
43. Hikes off of the VC-1402
44. photography
45. nice the way it is.
46. Horseback riding

47. field trips
48. none I think it is fine the way it is
49. Free, unguided hiking
50. I think that the caldera is open to more than enough activities.
51. grazing livestock
52. Livestock observation and study.
53. Grazing cattle
54. livestock grazing
55. Stop overcharging! Only the wealthy can afford to visit!
56. livestock grazing
57. I want to see the property returned to a working ranch.
58. trapping
59. These items can be located and managed so as not to spoil the experience.
60. ALL NM BIG AND SMALL GAME HUNTING. ALLOW SHED HUNTING BY PERMIT OR REASONABLE FEE. NOT JUST YOUTH GROUPS
61. Allow for dogs to enjoy along with their owners.
62. Grouse and small game hunting in certain areas. Perhaps less elk and more bison if appropriate. No non-native species should be introduced for fishing, hunting, etc Biking might be limited to some of the existing roads. Perhaps a small primitive campground in one of the areas that was already habitated [sic] earlier.
63. Do not allow ORVs
64. Open more existing roads to use non-motorized vehicles [sic]
65. 4 wheeling - full width
66. full-size 4wd vehicles on existing roads only
67. Running
68. running
69. Open area to Jeep trails
70. Mushrooming
71. But keep running, photo, etc events
72. Trail running
73. running
74. I think how they operate it now is appropriate
75. I would like to have increased access to low-impact recreation (hiking, backpacking, wildlife viewing). For example, I'd like to see the preserve get rid of the limited days on which hikes are allowed, and instead, allow hikers to obtain a hiking permit online for any day of the year. Expanding the number of trails available for hiking would also be good so that more people could use the preserve.
76. No motorized activity off currently existing roads! Day hiking only.
77. landscape viewing - just let people LOOK at the place
78. No motor sports or RV camping please!
79. Leave it the way it is! Don't ruin it with more and more access!!!
80. logging and grazing
81. motorcycle trials riding
82. Area for motorcycle trials riding
83. Equestrian
84. Overnight (Yurt) Skiing
85. Photography
86. Boy Scout Camping
87. Photography
88. No additional at this time, there seems to be good balance.
89. Leave the way they are.
90. Leave the way they are.
91. personal scenic drives and use of hot springs, by limited permit-- picnic areas
92. Mushroom picking
93. Horseback riding
94. Camping only with severe penalties for littering
95. Limited campsite camping or RV camping.
96. more horse trails
97. volunteering
98. youth activities
99. Low impact, non motorized, w/ registration, weighed packs, designated areas or "zones" to reduce impact
100. photography
101. rv camping or tent camping VERY limited
102. Photography

103. the current activities suffice for the mission of the VCNP
104. horse access
105. Single track trail riding
106. Photography
107. Observed Trials motorcycle competition
108. educational tours and programming
109. Field archery, stump shooting, dogs on leash
110. It's Public Land all users should have access. Allowing larger or more vocal user groups to exclude others is wrong.
111. birding, wildflower tours
112. snow shoeing or cross country skiing
113. keep the same
114. Biggest problem is access
115. horse back riding

Appendix 7.4 – Question 4 [Are there any recreational activities that you would not like to see on the Preserve in the future?]

1. Reduce the hunting, remove some of the fences: fatal for young elk
2. snowmobiles, ATV
3. Still keep some limits on the other activities - don't want the VC to turn into the main use areas at Yellowstone!
4. Firearms sports such as skeet and trap. Air tours.
5. ATVs and Motorcycles should be kept out of the preserve but passenger vehicles should be allowed for recreational driving (wildlife viewing, etc)
6. Motorized vehicles should restricted to limited roads
7. ORV
8. ATVs and motorcycles trash the environment.
9. snowmobiling is OK with me, if it is restricted to 1-2 weekends per winter
10. I love to camp but don't want the Valle overwhelmed like the Jemez sites
11. cattle
12. No motorcycles or offroad vehicles period.
13. GRAZING
14. limited campsite camping
15. no ATV's or off road vehicles should be allowed at all
16. Absolutely no motorized vehicles whatsoever! Guaranteed to ruin the preserve and the experience.
17. the preserve needs much less motorized traffic
18. Don't mind most of the activities, but they should consider delaying them until later in the summer, close the VCNP during Elk calving season.
19. use only the existing cabins on the preserve
20. RV camping would be OK if appropriately sited on Preserve periphery
21. Our federal lands are best managed through multiple use including livestock production.
22. leave as is or increase [sic] all uses
23. horseback riding
24. See Yellowstone for the habitat damage of overuse
25. government employees
26. The historical significance of a working ranch.
27. NO ATV's, no off-roading, no loud, disturbing activities, no fireworks displays, no long-range firearms allowed. Cycling restricted to certain trails.
28. off road vehicles
29. That powdery, dry soil can take much in the [sic] later summer.
30. none
31. ATVs, motorcycles
32. none
33. Apparently the Valle Vidal is a well known area for horseback trailrides—Valles Caldera could be the same
34. rv and campsite camping should be limited
35. Overnight lodging should be restricted to valid scientific researchers and bonafide education organizations
36. No Motor Sports and Ruining the roads and streams and calmness.
37. commercialization, hotels, gift shops ect [sic]
38. The preserve has already seen enough high-impact activity; it's time to open it up to more low-impact recreation.
39. cycling

40. no motorized recreation
41. motorized activities [sic] should be minimal, but they pay for the place too.
42. cattle grazing
43. hunting only as prescribed herd control
44. I think [sic] the wording on this was copied from #3. This one should read (I would like all activities increased)
45. confusing question. do not want those checked.
46. please keep the motors out. it makes impacts wildlife, the ecosystem, and all other activities negatively
47. overwhelming infatuation with religious ruins
48. Keep OHV's out!
49. I would like all recreational activities [sic] increased, it is a great place and we should all enjoy it.
50. No, it should be open to all to use
51. Would like to see hunting limited as much as is reasonable.
52. Anything involving motors or firearms !!!
53. livestock grazing
54. No group camping, limited and spread-out individual camping
55. snow mobiles, 4-wheelers, dirt bikes
56. Definitely not ATV, motor bike activities
57. Fire danger extreme: campsite camping will aggravate it.
58. General picnicing [sic] type activities.
59. NO large group stuff
60. I would like micromanaging controlled/reduced
61. All should be kept on a restricted
62. No restriction of responsible nonprofit public use.
63. snowmobiles, other things that would interfere with wildlife habitats [sic]
64. Limited Campsite Camping
65. No lodging structures
66. Dogs
67. specifically, ORVs

Appendix 7.5 – Question 7 [What circumstances have prevented you from participating in more, or any, recreational activities on the Preserve?]

1. young children
2. not being drawn for elk hunting
3. time
4. draw results
5. Travel distance to preserve. I live in CA.
6. I live in Albuquerque, so it is easier to go to the Sandias
7. Initial closure and persistent attitude that the public is dangerous.
8. some activities are too expensive
9. Hunting and fishing is very exclusive [sic]
10. MY OWN LACK OF TIME
11. I live in California - it is a fair distance for me to travel to the Valles.
12. long distance from Houston and have not made the trip
13. lottery system for fishing - I tried...
14. cost of activities
15. not enough time off from work
16. Horseback riding is only allowed 3 days a week
17. Distance from park
18. Distance to the Preserve--I live in Colorado.
19. not drawn for license to hunt elk
20. Distance from the preserve
21. Non-resident, I live in WA State
22. Time Off Work
23. distance to get there
24. Also live 700 miles away.
25. Dates and times are sometimes inconvenient...long drive to the Preserve.
26. n/a
27. We live too far away
28. Would love to elk hunt but haven't won a tag

29. Lack of free time
30. Distance from the preserve (aka finances if you will...)
31. Preserve officials don't like hikers.
32. Have not been drawn for elk hunt
33. work get in the way of fishing
34. distance, and cost-I live in SC-elk is expensive in the preserve
35. I can't take my handicapped husband with me even though he is to [sic] fragile to participate. I have to full price to have him watch me fish
36. Ability to engage in similar activities easier outside the Preserve
37. Do not live in the area, so distance does not allow me to participate in more activities.
38. Millions of acres of adjacent free land. Why would I pay for access?
39. Limited use to horseback riders to use the lodge and the paddock area. More Wagon Rides and Sleigh rides in the winter. Currently, the VCNP stopped those activities.
40. Don't live in New Mexico
41. time
42. I've grown to so dislike the present system that now I actively boycott going there at all. I resent not being able to buy an annual pass to hike on the VCNP whenever I wish during their normal operating hours. Also, they close up the entire place too often. The time between when hunting stops and winter recreation begins, the VCNP is closed to the public. I deeply resent that!
43. lack of time.
44. time to do them, I'm a senior and access is limited for me.
45. Visitor center not helpful or welcoming. Information not readily available.
46. haven't drawn a tag
47. Your current (relatively new) schedule of events and access has greatly increased my belief that the Caldera is finally a reserve for the public good BUT it clarifies that it is a Preserve and is not a park to populate with recreational vehicles, all-terrain vehicles, radios, volleyball nets, generators, etc. It must be treated with quality nature, backcountry and wildlife experiences in mind.
48. Moved out of state.
49. If I get drawn for Elk hunt I would be hunting every year.
50. I think access should be strictly limited
51. was not drawn out for hunting
52. Distance from home
53. time and distance
54. We live in Texas and only get to NM once or twice a year. We didn't know how amazing it was until recently.
55. Looks more like a private preserve for the benefit of the few.
56. i [sic] live in calif. [sic] only get to go once a year
57. Time.
58. there is no public access at this time
59. work
60. Lack of time
61. hiking only permitted at certain times with supervision
62. Time: two small children at home
63. Fortunately [sic] similar activities preferred by me are possible outside the preserve
64. Dogs not being allowed on the free trails
65. distance
66. Not enough time
67. Lack of personal time
68. age
69. While the fees are not high, they are discouraging.
70. distance I live from it
71. distance
72. time
73. time
74. Distance from the Preserve
75. Unlimited opportunity to hike alone at random does not exist.
76. live in another state
77. finding time in my schedule
78. Job
79. National Environmental Policy Act Analysis required before activities could begin
80. I grew up here in the Jemez [sic]; I had to go to volcano NP to learn this is the largest crater [sic] in the world.
81. Lack of time
82. Distance from the Refuge and closer access to other public lands.

83. Preserve is for the rich folks only and Environmentalists
84. controlled access
85. I live in Colorado and do not have close access.
86. distance from home
87. other recreational activities have taken precedent A
88. Limited time off of work.
89. case-in-point, when they opened for the day a few years back, it was a mad house, and kind of sad
90. If it is not kept as a working ranch, my participation would be reduced
91. government mandates including the National Environmental Policy Act requiring endless analysis ore use; special interest groups who want to horde the Preserve for themselves
92. I live in a real world and absence of leisure time.
93. live outside the state
94. Unable to draw and elk tag
95. Not only does the Caldera seems difficult to gain access to on a whim, I have almost no idea of what activities are available. It seems that a trip to the Caldera might take a fair amount of preplanning, instead of just showing up.
96. For many others - the cost! It is elitist and caters to hunters!
97. CHANCES OF DRAWING A HUNTING TAG SLIM TO NONE, AIMED THE WEALTHY BY SELLING UNLIMITED CHANCES FOR EACH DRAW.
98. Not allowing me to bring my dog, thus I NEVER participate
99. injury
100. Alternatives – Bandalier [sic] and National Forest
101. My own lack of free time.
102. Lots of other places to visit too!
103. lack of time
104. Distance from home. Cost.
105. It's quite expensive.
106. I live in ABQ so don't make it up there often
107. time
108. so many other places to visit for free
109. nor really finances but costs to access
110. timing of projects/events
111. TIME
112. Time is always to [sic] short
113. distance
114. Cannot do anything, uless [sic] they let you.
115. Lack of time
116. Time
117. Early on fishing was pretty restricted
118. Motorcycles and thugs
119. Rules are to strict on where you can park or not park while fishing the preserve
120. The preserve should use an access model similar to what most national parks and monuments use for controlling backcountry and hiking access.
121. out of state
122. Unable to draw a elk tag to hunt the
123. I have had special permits, but am distressed that the rest of the public doesn't have the same access.
124. beauracy [sic] of the preserve itself, ie permits etc
125. None. It is accessible now! Leave it alone. It only costs 25 dollars for a chance to hunt one of the most beautiful places in the world. We all have the same chance to access the preserve!!
126. lack of time
127. Have not been selected to hunt on the Preserve.
128. none
129. No OHVs allowed
130. Time available to go to the preserve
131. Lack of OHV trails and roads.
132. Government restrictions/ beauracracy [sic]
133. Would like to see a dedicated trials riding area
134. nothing that you have control over, I would be there more if I could.
135. nothing - equal access is provided by the lottery system
136. Opportunities to recreate elsewhere
137. Too many restrictions on hunting
138. live out of state

139. I work there
140. limited time
141. only go there when i [sic] am in NM live in Mn [sic]
142. Lack of unsupervised access, unpredictable access closures due to snow, thunderstorms, etc
143. Keep the damn livestock out of the preserve entirely.
144. Distance from my home
145. limited access of days and vehicle (jeep needed in winter, I don't have one
146. None
147. Personal lack of time.
148. I live part-time in New Mexico
149. No OHV opportunities
150. time
151. needing to make reservations / plan in advance
152. time
153. Visits are infrequent, but thoroughly enjoyable.
154. Travel time
155. travel
156. Distance from Preserve
157. I am good with the chances that I have had to visit
158. None Sep
159. no motorcycles
160. Bad experiences in the past on the Preserve due to micromanagement
161. At 58, my endurance is decreasing. I need base camps!
162. Time
163. Many choices in NM
164. Distance from home.
165. lack of time
166. Ridiculous fees to use land we already paid \$100 million for.
167. not sure what I can and can't do at what times
168. Personal interest in reducing human impact
169. live out of state
170. Distance from my home
171. cannot backpack across – laeve [sic] no trace primitive camping. Everything is guided and supervised
172. not enough restoration projects in the Preserve
173. Too restrictive. Doesn't make sense to pay fees for something we already own.

Appendix 7.6 – Question 13 [Should there be a limit to the recreational access on the Preserve?]

1. There should be a limit; but it should be much greater than what is currently allowed
2. but my taxes paid for the Caldera. there are toooo [sic] many elk - and cattle - for the grazing - perhaps not this year, but in normal years
3. people need to be held accountable--pack it in -PACK IT OUT!
4. no studying rocks, reclaim the northeast corner. it should not have been given to those stupid indians [sic] anyway. Allow for commercial logging on a limited basis.
5. If the VC is opened 100% I'm afraid it will become overrun & the ecology/cultural areas will suffer
6. I think restrictions on types of recreation would naturally limit the amounts. For example, a NO ATV policy would keep roadways fairly uncrowded.
7. need for good lodging, on or near the preserve,
8. Maybe, how many now come, damage?
9. Yes, to a certain extent but again, I think a balance can be met and it should not be exclusive (like it is presently)
10. no motorized vehicles except possibly in winter snow.
11. however all recreation needs to be managed. If the impact tittle resources is unacceptable, then limits can be instituted as needed. Currently it is very restricted but they really have no idea of how many people would be there at any one time because [sic] of the restrictions.
12. Maybe allow horseback riding on more days, but fewer riders per day than 45
13. It is a very unique place, and preservation of the resource should be balanced with recreation activities
14. has been way too restricted and WAY too expensive
15. A controlled/balanced access rather than a limited access.

16. Use limits are reasonable, but they should be set by the carrying capacity of the landscape and the need to avoid degradation as determined by professionals. By the way, none of this was done for cattle grazing in 2008 when almost 2000 steers were allowed to camp out in the east Fork and the San Antonio. That was a bad situation where the Board did everything to accommodate the grazing permittee to the exclusion of other uses.
17. The Preserve is surrounded by forest with unlimited access. Why not "Preserve" it and keep a portion of the Jemez beautiful?
18. The elk herd will disappear if open access is allowed.
19. this is unclear, what kind of recreation, ATVs-no ATVs, motorized-no motors, hiking-more hiking, hunting-less killing, NO vehicle access off the VCNP roads
20. Look at your question #14 and you see the issue. The Preserve doesn't have the facilities to handle the recreation that it could. Build two campgrounds, 1 tents 1 RVs and don't try to pay for it all in one season and you would have the same numbers as belos [sic]
21. OFF ROAD VEHICLES OF ALL TYPES SHOULD BE BANNED Aug 12, 2010 4:42 PM
22. the question is too open ended. it is public land so it should be accessible but it should also be protected from abuse
23. Restrictions are needed to limit impacts
24. I'm counting the days until the legislation passes that does away with the current management.
25. destructive access such as motor vehicle use should be held to minimum
26. except for restricting access to extra sensitive areas (ecologic or cultural)
27. not sure
28. hunting, horseback riding, snowmobiling must be scheduled as they are not compatible with other activities
29. HUNTING AND FISHING ONLY
30. Don't love it to death.
31. We have to protect the resources, and even though I said I would prefer quantity over quality, that does not mean I want to be elbow to elbow with crowds.
32. At least a portion should be designated as a wilderness. Allow access to the current headquarters area location and restrict access to the rest.
33. having some limit, again depending on the activity
34. Limited in some places, maybe not all
35. Beer-bottles and boombox campers and visitors will destroy this area in less than 2 years if the general public is given [sic] free access.
36. But we are far from that limit...miles from it.
37. My answer would have to be Yes and No. I would trust that the National Park managers would sensitively manage the Preserve to allow recreation but not let it be trampled to death. That's where the other management objective of "Ecological Restoration and/or resource protection would enter and protect and conserve the land.
38. I would love to have full access to the preserve, but to do so for everyone would have a negative impact. And then again is it fair to restrict use to those who can afford to pay. I enjoy the solitude of my visits to the preserve and that it is so pristine.
39. This is a loaded question, you have to have some limits while maintaining quality. However I believe that you can have more access and still retain the quality
40. There must be balance between people and place.
41. there is a limit to the number of people that could visit based on the facilities
42. to ensure resources aren't overused
43. Allowing a certain number of people per day is fine.
44. I think limited, well placed minimal lodging will allow for overnight access for more hiking or biking on existing roads and provide comfort for group/family experiences without resorting to campgrounds, more roads, parking lots, bathrooms and rvs.
45. Of course...this is a special place!
46. Single track trail bike riding / snowmobiling
47. Out of state individuals should be more limited.
48. limited by campsites or picnic sites
49. That is, if there is no destruction of habitat, etc.
50. I don't want to see 4-wheelers tearing up the palce [sic]
51. There can certainly be limits on camping and even backpacking, but there should be unlimited access to the complete area for day hikes.
52. There should be a daily visitor limit in order to preserve and protect the pristine qualities.
53. I go there because I can escape people and feel like I am enjoying nature on a personal level.
54. that's a no brainer, there are safety issues, archeological places, that need to be off limits.
55. again no ATV's or off road vehicles should [sic] be allowed ANYWHERE on the preserve
56. If you sacrifice quality for quantity you will lose the allure.
57. YES and NO. Certain areas need protection while others can handle more use (NOT abuse). Maybe the preserve should look at their way of handling hunting and cattle grazing as a guideline to how to look at recreation.

- Letting hunters roam Redondo Peak while recreationists are completely excluded (supposedly for religious reasons) does not make sense.
58. You can see the damage done in other areas of the Jemez by too many people
 59. not respecting the land or anyone else's [sic] right to use it.
 60. Once again, limit access of the preserve during the Elk Calving season the bike races and marathon can be pushed until later in the summer was a huge impact observed during those times.
 61. Make it like the Valle Vidal for amount of access and have the USFS manage it!
 62. limits only on cultural, religious, or environmentally sensitive places
 63. This is not a yes-or-no question. It should be addressed in a comprehensive management plan with full opportunity for public input.
 64. While I believe that access has been too limited I don't think it would be prudent to allow unlimited access.
 65. I'd like to see more access for NON-Motorized activities
 66. Yes, it should be limited to the extent that the quality of the area does not degrade to much of the surrounding area in close proximity to populated areas. Specifically, congestion and the disgusting filth [sic]/garbage that is prevalent [sic] in many areas of NM.
 67. Any given piece of land can only stand so much impact. Access should be based on what the environment can handle.
 68. To [sic] much of anything can be bad.
 69. As a working ranch, balance must be included in the management otherwise, it will become another USDA FS managed disaster!!
 70. This is a stupid question. Management is always critical.
 71. If access is limited, only a small part will be over used.
 72. like in Q7, I guess it's a trade-off, although I'd like more open access, LIMITED access keeps the preserve beautiful and healthy, if it was totally open and chaos happened like it did on "open" day, the preserve would be a mess, I'm [sic] thinking access similar to what Edward Abbey describes in Desert Solitaire is not a bad idea
 73. access should be balanced with the needs of the environment, which are ever changing.
 74. Follow the Congressional mandate. Make the place self sufficient! If it cannot be fire the entire staff and lease the place out to somebody who can make it work.
 75. similar to national parks, may limit number of back country camping permits, etc.
 76. Limited yes, but perhaps a bit more than what is available now.
 77. Backcountry permit system [sic]!
 78. Uncontrolled access will damage the preserve, fishery, and wildlife
 79. target high use areas, allow for backcountry access and allow for dogs.
 80. Recreational access conflicts with resource protection (even petroleum conservation).
 81. The application and lottery system has been a good limiting factor, I believe.
 82. Of course it can't be wide-open do-anything-you-want, but it should be far less limited than it is now.
 83. Even a small fee will greatly limit casual access to the preserve. I chose to hike elsewhere this summer due to the \$10 fee for a short hike. Would gladly pay that fee for better access or backpacking access.
 84. Present limit is way too low
 85. Keep your eyes on soil and plant indicators that pinpoint site health.
 86. Recreation should be balanced with resource protection
 87. limits are not needed yet
 88. definitely ... but at least some trails should be freely accessible all year long to non-motorized users - i.e. hikers, runners, bikers
 89. but not by income
 90. Prohibit Motorized Travel outside of designated [sic] roadways
 91. No motorized recreational access
 92. In places is how I would limit.
 93. permit system like bandelier [sic] except in a few day hike areas and around perimeter in FS land which should be unlimited.
 94. No guns; no cows; no freebies to groups that ruin the environment
 95. Preserve is self-limiting from location for now
 96. There should be a limit, but minimal limits
 97. You cannot just open it up to all comers it would destroy its pristine value.
 98. There should be limits on recreational access, but so far, the preserve has unduly limited access for low-impact recreation such as hiking.
 99. Consistent with national park, monument or if necessary wilderness limits
 100. No additional motorized activity from current level. No overnight camping/lodging- day use only. Prohibit foot traffic in specified areas to maintain current environment. Minimize animal contact during late winter, spring.
 101. not sure, don't [sic] know the facts involved.
 102. Again it was bought with tax dollars. I pay taxes and I can't draw a tag to go on a preserve I helped buy. I've been applying since the preserve [sic] opened and I have never been on the land.

103. Why do we have to pay for this since the government [sic] bought this with our tax dollars!!!
104. There should be no limit on foot travel on the Preserve. Motorized travel should be severely limited.
105. There already is!! New boss same as the old boss! "
106. Just look at other national forests and how they are misused when wide open.
107. other than hunting or fishing will disrupt hunting and fishing
108. Leave it the way it is!
109. Because of the appeal of the Preserve, quantity would have to be regulated until such time as demand has leveled out.
110. Public lands should not be limited to users or uses...Strong management and community support will assist in upkeep and maintenance.
111. This is a pretty wide open question, but everything [sic] has limits.
112. OHV trails should be designated. 112 Within reason. You don't want to create a Disneyland experience but it needs to be more open than it is now.
113. public land should be open to the public not just limited interest groups
114. without control the beauty of the preserve will be ruined, just look at the over use of the nearby national forest
115. I would like to see an area dedicated to motorcycle trials use
116. This is our land.
117. particularly motorized recreation
118. See hunting comments above. I realize this is the largest revenue pool for the VCNP, but it is not compatible with other activities.
119. The property was funded by ALL taxpayers. Access should be equal for all US citizens.
120. Hunting-Fishing-Camping-Hiking [sic]
121. Higher access fees would limit activity
122. Motorized access should be limited to those with disabilities who would not be able to access Caldera otherwise
123. Limited roads, limited development, but fewer limits to low impact hike/ski/ride
124. no motorized uses, or grazing
125. Should be limited but more than there is now
126. Camping should be very limited. Hiking, biking and individual exploration should be encouraged. No firearms allowed. I like the idea that a shuttle can take people out to remote places and allow them to explore areas not easily accessed by day-hikes from the entrance.
127. too many outdoor places in NM are spoiled with beer cans and broken glass and RV's, so I believe in limiting access to prevent that. And NO hunting or livestock on the Preserve, please!
128. Limit access based on natures needs first, then human needs.
129. There should be roads/trails that people are allowed to use, per their recreational method (OHV, hike, etc.). It should be stressed that the route's traffic is to STAY ON THE TRAIL.
130. But we are far from that limit and unlikely to reach it in the foreseeable future.
131. This is a unique treasure that cannot be opened to the public as some other parks such as Yellowstone
132. limited number of permits daily.....some available online....some at the gate, unreserved
133. Ban all motorized activities, such as four-wheelers, motor bikes, and limit overnight camping [sic] to five days.
134. Yellowstone National Park is almost as crowded as Central Park in New York-- no quality.
135. A big part of the attraction for me is that it is not overrun with people, as is the rest of he [sic] Jemez area.
136. I strongly agree that allowing unlimited access will harm the Preserve; it must be managed carefully. I am vehemently opposed to allowing off-road motorized vehicles (4 wheelers/jeeps/dirt bikes). I am not opposed to hunting if it is managed and the hunters are limited to existing roads and do not use off-road motorized vehicles.
137. leave the preserve undisturbed
138. No motorized vehicles/picnicing [sic]/RV/biking/cyclists.
139. The rest of the Jemez is HUGE and very accessible, and it's been trashed. Let's really take care of this amazing place! One of the few pristine areas left...
140. yes, but more access than currently available.
141. Yes - but not to the extent there has been for the LESSER-impact activities
142. that limit has not yet been reached
143. Some limit yes. Obviously you don't want it to be like Yellowstone where it's more crowded than the city. Think back to the day it was open to vehicle traffic. That was the result of TOO MUCH regulation and limited access and bottled up desire. Open it more and with less regulation and much of it will sort itself out.
144. Much more important to protect this land. There are plenty of unrestricted recreational opportunities in the Jemez.
145. Its [sic] the limited access and few people that helps make the Preserve special.
146. Recreational limits should not be designed to pander to selfishness and elitism
147. But we need far more access than we have at present.
148. Backcountry permits
149. There's a reason it's called a preserve.
150. Vehicular access should be restricted. Foot/bike access should not be limited.

151. Grazing should be cut completely out, other lower impacts should be allowed (school visits / research work / reintroduction to endangered [sic] species)
152. yes, in more important (culturally or environmentally) & sensitive [sic] (to destruction) areas
153. with the caveat of safety for visitors as well as local fauna/flora -i.e. if a place is undergoing treatment should be off limits.
154. Use reservation system
155. worst case scenario would be to have it be "loved to death" like many other Parks
156. I don't know
157. limited motorized and mechanized recreation
158. low enough frequency such as to never see trash accumulation
159. no motor, some mech [sic] and horse
160. Model similar to Valle Vidal.

Appendix 7.7 – Question 22 [Do you believe that management can increase recreation while protecting the important Indian and Puebloan cultural and religious sites inside the Preserve?]

1. Puebloan cultural and religious sites inside Bandelier are protected while allowing more access
2. the Indians are as much a danger to the land as anyone!
3. Who deemed those sites important...next thing you know they will want to build a fucking casino on the land. What a bunch of slackers. I'm French/ Irish and I have more indian [sic] in me than those idiots.
4. I hope so, but it may be difficult
5. I regard all land as sacred and I practice land use accordingly.
6. other public lands have achieved this balance
7. Absolutely - Engineering, Education, and Enforcement - the three E's. The two prior questions are weighted...
8. refer to Canyon de Chelly
9. Take Bandelier for example. They protect cultural [sic] and religious site and still have visitors.
10. This depends on the presence of law enforcement and the level of education visitors receive about these sites. And of course there will always be some disrespectful jerk who breaks the rules whether or not recreation is increased.
11. I believe it would be unlikely that the site could be preserved with increased recreational access
12. The first thing the [sic] did was deny access to Redondo Peak, absolutely ridiculous
13. If done slowly while assessing the impacts so that an environmental/wildlife balance can be achieved.
14. you would have to trust people wouldn't take items or abuse these sites
15. Who gets to define which sites are important and what restrictions are allowed? Bandelier should be more significant to local tribes that anything on the preserve and they certainly allow public access. I think the current VCNP management is just using cultural and religious sensitivity as another way to limit public access to the preserve.
16. If done correctly, visitation can be increased without environmental or cultural destruction. Example: Bandelier
17. I hike into the backcountry of bandelier [sic] and EVERY site has damage. Painted cave is a great example!
18. jeez, all of Bandelier and the surrounding national forest gets more than 300,000 visitors and there is no restriction on backcountry recreation, vehicles MUST be restricted
19. Well-planned (and marketed) recreational programs can increase recreation/visitors while protecting cultural & religious sites.
20. The sites on the Preserve are no more important than the many that are in the adjacent National Forest.
21. Having a unique preserve that allows limited access can be a positive situation. There are multitudes of high access preserves, why not be happy with limited access to preserve the quality of the area.
22. assuming that the Pueblos don't consider the majority of the preserve to be "important sites" and "protecting" interpreted to mean restricted access to most areas
23. Access limitations currently protect native american [sic] sites - this is not a new thing.
24. If the pueblos are actively using religious sites that is one thing, but if cultural sites have been abandoned they can be used for educational activities.
25. Negotiation and compromise need to be used to address this issue. Maybe areas can be closed for specific dates according to cultural/religious needs. Also visitors need to be educated re: appropriate behaviour [sic] around the whole area, not just religious sites.
26. Again, I believe designating the Valles Caldera as a wilderness area will both increase access and protect cultural and environmental resources.
27. Keep those areas off limits, and those areas should already be off limits to the public

28. There are lots of important Indian and Puebloan cultural and religious sites all over the Pajarito Plateau, including the Santa Fe National Forest and Bandelier National Monument. I would let their protective management strategies be a guideline. I can hike in the Bandelier backcountry to any one of these sites.
29. without a doubt
30. limiting access to certain areas would be an acceptable strategy
31. Sensitive areas can be made off limits or with limited controlled access.
32. I've visited the VC a dozen or so times and never really knew there were any important cultural sites on the property.
33. Access restrictions, like current ones, should continue to be effective
34. I sick of all this indian [sic] crap. my ancesstors [sic] lived here, drank water, breathed air, same as them.
35. It just might be a site to see...hopefully people would respect it.
36. We should protect cultural sites . It will be a draw to the area and can be managed without harming the sites.
37. Too often the means of protection is denied access to all but the self appointed.
38. wheres [sic] this question on wildlilfe [sic] breeding site and cultural site I beilieve [sic] they incombent [sic] more area that the pueblo sites.
39. Bandelier does it!!!! You don't have to reinvent the wheel, look around, see Yellowstone!!!You are making it harder than it needs to be.
40. under hte [sic] current managment [sic] and "Board of Trustees" the answer would be no
41. difficult implementation, possibly expensive
42. Just what Indian and Puebloan sites are you referring to? The state already gave the Indians 11,000 acres of this preserve. How much more do we need to do? Enough is enough!
43. If there are religious sites of major concern, they should be protected by fencing, by making them inaccessible to the regular recreationist or have them protected by rangers/guards depending on the situation. The Santo Domingo's reject most human activites [sic] in the Jemez which obviously has not stopped anybody from developing the mountain range ... nobody is even thinking or talking about it. Are their concerns less valued than the Jemez' Indians believes? My point, I suspect that religious and archeological concerns are used (or better said abused) as an excuse to keep people out of many areas on the preserve.
44. Let's use a little common sense here.
45. When it was a ranch, did these sites receive protection? Why make them so
46. mportant [sic] now?
47. It's possible but probably not likely.
48. I do believe that important sites inside the preserve should be protected and preserved, but I am also very concerned that too often the definition, or those defining, important sites abuse this classification and extend it to too large an area.
49. What protection and visitation was in place when the VC was privately owned?
50. Teach
51. No one can answer this question sensibly.
52. government is not a good land mamager [sic] because the bureaucrats have nothing at stake. They do not own the land.
53. Again, it can be done well, so that both are respectfully managed.
54. see Acoma, Puye [sic], Bandelier 54 Another question with not enough information to answer. How fragile are the sites? When are they being used by the Puebloan culture? How high do bees fly?
55. Seems that ever site is important to the native americans [sic]. There needs to be a balance since we pay for it.
56. Remember ALL the pepole [sic] purchased this property. Exclusion of all people except a select few from SIGNIFICANTLY large tracts of land should be prohibited.
57. Protections would need to be put in place. Not everything should be freely accessed. Something like SiteWatch would need to be employed.
58. Sites can be protected by ensuring trails do not lead toward/adjacent to tmen [sic].
59. Cultural resources should be protected from damage and degradation by any kinds or recreation
60. I don't support increased recreational use, but believe important Indian and Puebloan sites should be respected. I would hope that both of these objectives could be realized.
61. Controlled recreation can include education about these sites and their history.
62. depends on management styles and decisions Aug 26, 2010 2:09 PM
63. It shouldn't have to be either/or. I believe ways can be found to accomodate [sic] both.
64. cordon off such sites, clearly prohibit entry, levy serious fines for breach
65. We/our nation doesn't have to preserve every native American anything. If some Indian tribe wants something protected, let them do it with their funds and resources. The NPS, USFS, USFWS, BLM shouldn't be using their funds to protect Indian sites. Let the Indians do it if it's so important to them.
66. Bandalier [sic] is open to the public and is an important cultural and religious site, why not on the preserve.
67. The problem is "Managent [sic]" is one persons view of how they want to allow others to use an area. Their [sic] is a big push to close roads because management does not want to patrol or maintain them. People have been

- driving and walking [sic] around the area for 100s of years, the Puebloan cultural sites are still their [sic]. Do not cut off my ability to go to the places I like because of an assumed impact.
68. The indians [sic] themselves have open sites (Mesa Verde)
 69. disallow access to those sites
 70. It is already done everywhere else.
 71. Recreation and protection are not mutually exclusive.
 72. This is done in historic sites throughout the country. Why not here?
 73. Well of course you can. Look at Bandelier, that's all people go there for.
 74. Everything is sacred to someone. We should protect and honor these however there are more Indian and Puebloan sites on the National Forest than the Valles Calderas. Why pick and choose what gets protected and what's not? Currently the SFNF is looking to close down more areas thus restricting even more of an already diminished [sic] National Playground.
 75. It depends on what you use for a definition of "recreation." Allowing hiking but not camping would have minimal impact. There is no need for any paved roads inside the Preserve boundaries.
 76. To a limited amount
 77. give me a break! It doesn't [sic] belong to any tribe or group! it belongs to the U.S. What rights did the tribes have when it was in private hands?
 78. extend opportunities to involve Native people in the Preserve to explain and teach about cultural resources present
 79. hunters generally [sic] respect this more than the casual visitor
 80. Strong Management can allow all users to work together keeping areas under control.
 81. depends on what kind of recreation we're referring to, and how well it is controlled
 82. This Indian Idolization is way overboard, get over it they lost and need to become complete american [sic] citizens
 83. We do it at the dedicated BLM San Ysidro Motorcycle Trials area
 84. It would depend on how the recreation is managed and how the archeological sites were protected
 85. If they are dedicated to that goal
 86. you can do both
 87. Yes, but it wouldn't be easy Sep
 88. It depends on how effective VCNP management could be.
 89. This is a very difficult challenge but I believe it is doable.
 90. management should not endeavor to increase recreation! It should allow recreation and support [sic] protecting and preserving the natural asset.
 91. If there are important cultural and religious sites, they need to be placed off-limits and site stewards need to be appointed to monitor them.
 92. Why can't these areas be restricted? Obviously a road through a religious site is inappropriate. But if a whole Peak (as below) is a religious site, that seems like it is too much area to cordon off completely.
 93. As long as the tours are guided by a ranger.
 94. as at Chaco Canyon and other parks, some areas can be designated as off limits
 95. There are many opportunities to increase recreation in the Preserve; keep the sites protected.
 96. this again needs more thought and information on its management
 97. as big as the preserve is, certain areas could be restricted, or by guide only?
 98. # of visitors per month may not be the right metric for a park like this. Sometimes making some things difficult to achieve is a good thing. For instance, I think further improvement of roads into Chaco would be a mistake, it would bring too many people. Some things should remain primitive, especially when there are valid alternatives
 99. Enforce current laws and regulations.
 100. Respect is important, but so is access for the public. They got some pieces of the deal, and other adjacent lands in an unrelated deal, that I cannot access because I am not a tribal member. I have family history on those lands too. Not generations, but history nonetheless.
 101. Sacred sites should be protected per mores. Cultural sites could be observed with management.
 102. Possible but very difficult if increased recreation means more open unsupervised use and access.
 103. Your questions are prejudicial and 'loaded', such as 21. It assumes that recreation and protection are not compatible.
 104. It depends on whether or not people truly want to work together to make the best decisions, not based on greed.
 105. its [sic] possible
 106. would like to think so, but doubt it. there are always those to abuse privileges
 107. what were done with these sites when [sic] the Caldera was a private ranch?
 108. by keeping [sic] recreation increases to a minimum
 109. ask the pueblos
 110. What sites are there? I do not know what [sic] these are and cannot comment without further information
 111. education on sensitive cultural areas is key
 112. walk in only

Appendix 7.8 – Question 23 [Currently access is minimal to places like Redondo Peak because of their important cultural and religious significance. In your opinion, places of cultural significance inside the Preserve should be open to recreational visitors.]

- 1 I cannot judge what is deemed sacrilege.
- 2 it shouldn't be open PERIOD! and the Indians don't deserve special treatment!by [sic] the way I am Indian
- 3 Any cultural/religious site claimed by the indians [sic] is shit. Build more cell towers on top...the indians [sic] are fucking dead, they wont [sic] know the difference.
- 4 Open to recreational visitors under supervision (guided hikes) or with some areas restricted
- 5 Educating visitors prior to certain types of activities is essential. Some types of activities on religious sites are inappropriate but others would be.
- 6 in a controlled setting
- 7 Why should one segment of the culture get exclusive use? If there is a ceremony going on, close it for the day.
- 8 Possibly on a limited basis with the involvement of the puebloan people.
- 9 We can be respectful of tradition and still experience the preserve, something like Bandalier and he outlying Tsankawi (sp?)
- 10 I think some balance can be reached that won't offend anyone while still allowing a "near" approach to significant places and things.
- 11 If alot [sic] of visitors would destroy these areas, than [sic] don't have that area open to the public or limit access. The presreve [sic] is huge, not all of it has to be completely open, but not all has to be closed off either.
- 12 I don't think they can be protected without significant additional resources and infrastructure. Therefore, I disagree that they should be open to recreational users, unless a guided tour can be made profitable
- 13 See above comment
- 14 Open, but with limits and controlled access.
- 15 Bandalier [sic] has removed religious sites from their maps due to misuse and looting.
- 16 The preserve has a lot of acreage. Limiting access to protect a few sacred areas is not detrimental to recreational activities on the preserve
- 17 you can't minimize the importance of places like this to the spiritual needs of a people and they should be respected - they were here first.
- 18 Ummm [sic], there would be no access to the Sandias, no access to Denali in Alaska, no access to anywhere if the Native claims were accepted, our tax dollars are not for protecting their religious claims
- 19 Places of cultural significance can be visited without damage. You do not need to facilitate or encourage access to such sites.
- 20 All kinds of places have recreational activities [sic] around cultural/religious areas without impact
- 21 PEOPLE WHO DO NOT UNDERSTAND THE SIGNIFICANCE OF THESE PLACES SHOULD NOT BE THERE
- 22 Access is OK, along with some protection and appropriate [sic] signage re. respect, etc.
- 23 AS long as the public access does not interfere with religious ceremonies.
- 24 But they either need to be guided or the sensitive areas need to be off limits
- 25 The Preserve is Public Land paid for by taxpayers. We should have full access.
- 26 Open with restrictions as to time, duration, etc., closed during times of ceremonial significance. Rendondo Peak, in particular, as the high point in the caldera and a major geographic landmark, should not be entirely closed to the public. Note that Chicoma Peak is also an important site, with shrines on top, yet the USFS sees no need to restrict access by foot.
- 27 guided tours would be good bit not free access to limit damage by careless folks
- 28 As at Bandalier, open with restrictions and always with respect. Aug 12, 2010 11:36 PM
- 29 Redondo peak doesnt [sic] have to have private vehicle access. A shuttle to the top and a docent to explain the geology, views, and historical significance is enough. From day one there should be steep fines for artifact removal of any kind.
- 30 It seems like every location in NM is sacred to someone - as places are protected, the list will grow
- 31 I have hiked all over Redondo Peak, not that significant to limit access to the public.
- 32 See above comment

33 The pueblo was already given a sizeable portion [sic] of the preserve.
34 Maybe have special permits with shuttles to the top of Redondo Peak, with the speaker from the pueblo
35 I think these are the types of areas where limited visits in the reserve's vans is appropriate.
36 It's totally ridiculous that I'm not allowed to hike up Redondo Peak. The original Valles Caldera Preservation
legislation only said that motorized vehicles were not allowed above 10,000'. Hikers were never excluded. It's the
same way for the easement on the northeast corner of the Preserve that abuts onto Santa Clara pueblo land. The
original easement agreement between the Dunnigan's and Santa Clara (I have a copy) DOES NOT exclude hikers
within 1,000' of the boundary, only motorized vehicles are excluded!!
37 Controlled access to these areas should be allowed to allow others to view.
38 Access to important cultural/religious sites should be closely attended by preserve personnel and educational in
nature
39 limited visitors
40 These spiritual place [sic] must be protected from the general public. They cannot be replaced.
41 I am not knowledgeable about the religious sites. There should be an ability to handle both.
42 Limited numbers and access is fine.
43 guided tours only
44 Perhaps small groups can be lead there by the cultures to whom these areas have religious or cultural significance.
This would be a way to create proper understanding and respect for these areas and provide income to preserve
them.
45 These folks were here before any of us so respect should be given to the cultural significance of the area as long as
they realize that they don't own the property and that access is a privilege [sic] and not a right.
46 Work on coordination of limited but additional access
47 I sick of all this indian [sic] crap. my ancestors [sic] lived here, drank water, breathed air, same as them.
48 Too much attention is given to Indian religious beliefs and what they consider sacred. Does anyone stop an indian
[sic] from going into a church?
49 allow limited supervised access
50 Why does "sultural [sic] significance" mean no one else is allowed to visit there, like a mountain top. Protect
cultural structures like Kivas but a mountain top or the whole preserve [sic] or all of NM? I would draw the line
quite differently.
51 By negotiating with sensitivity this can be agreed upon.
52 Look at what you are asking. Should this be the general rule for all national sites of "important cultural and
religious significance" or for just the sites of selected groups? Public lands should be public.
53 guided tours??? or off limits.
54 I do not know the particulars of the cultural sites and the wishes of the tribes involved.
55 see above ... don't use these concerns as [sic] an excuse. Deal with these concerns in a reasonable manner that
works for everybody.
56 I agree, but make more of an effort to educate visitors regarding the cultural and religious significance.
57 Trash is already being left on the peak.
58 Not all recreationists are destructive. I can see limiting access during ceremonials ect.
59 yes, at certain times. My culture finds Redondo peak important, but I do not have access. Who decides what
culture is important?
60 I should think Jemez Pueblo could be engaged in making this happen in a sensitive way.
61 i think that minimal should work
62 open at certian [sic] times of the year
63 I think it would have to be determined on a case by case basis. 64 In Bandelier a hiking trail goes right past the
stone lions. However, hiking trails should be located at a fair distance from important religious sites, but hikers
should not be prevented from going to the tops of Preserve peaks.
64 The Valles Caldera Preserve is a federal preserve owned by all citizens.
65 Many important cultural places across the country and of numerous cultures are open to the public. Why should
some of these be any different? I am willing to accept that there may be some areas of very special meaning that
can be kept off limits, but not as many as is often claimed necessary.
66 Restriction of significant cultural and religious areas is appropriate within reason.
67 How fragile is the area? How many visitors can the area withstand?
68 If done out of respect, and teaching anglos [sic] the proper cultural edact [sic]

69 Respect these areas
70 Too blanket-depends on the individual place.
71 It depends on what is located at the cultural/religious site. Limited, supervised access may increase knowledge, but prevent damage to sites.
72 These places are sacred to many people of all faiths. Like the Pyramids, or Chartres Cathedral, management can allow access while halting desecration.
73 Again, what is the basis for this question? How fragile is Redondo Peak? What is the access to the area? How many bees fly?
74 See #22. I enjoy the view from Redondo Peak, it's a rather religious [sic] experience for me to.
75 Aug 20, 2010 3:36 PM
76 My Church of the Morning Sunrise should have equal access to the top of Redondo Peak since I am part of the group that purchased this property.
77 Perhaps open only with an interpreter or other guided access.
78 Only with cooperation of pueblo groups claiming historic and cultural significance.
79 I have no faith in the general public's ability to leave sites intact and untouched.
80 Places of cultural significance should be closed to both recreational and religious/cultural visitors.
81 Important cultural sites such as Redondo Peak should be respected. Recreation can proceed away from these areas and both interests are served.
82 I don't want a road to the top of a cultural site, but backpacking trails and the like enhance the cultural experience.
83 Not all sites equally important, need individual evaluation
84 Within reason. Other cultural/religious areas are with certain parameters established.
85 Native rights should be respected, at the same time allowing for public use, we paid for the land with tax dollars, mostly borrowed for future generations to pay off the debt, its [sic] absurd to limit access in the current ways
86 If tax payer dollars are involved, then tax payer should be able to see, visit, climb, eat on or do anything in keeping with decency and respect. Again, if an Indian tribe wants something placed off limits, then they should do it with their own funds and manpower.
87 Bandalier [sic] is open to the public and is an important cultural and religious site, why not Redondo.
88 Let people see what this is, if people disturb or steal, put them in jail for a week.
89 It's the property of the USA not Santa Clara
90 If two sites had the same trail quality/view, I would be just as happy to visit the one without "cultural significance[sic] "
91 maybe limited tours
92 Non motorized [sic] access only.
93 Open but controlled routing avoiding such areas.
94 Leave the religious areas alone.
95 Qualify interested rather than merely casual visitors?
96 Who currenly [sic] uses it for religious purposes? If it is in current use for religious purposes that is fine. Cultural importance is a non-factor because it was bought with taxpayer money and should be open to all.
97 Limit access where appropriate and consistent with national standards
98 To maintain the quality of the experience, access must not increase.
99 Restricting the whole mountain is discrimination. Management can avoid cultural sites as recreational areas.
100 This country is for every citizen not just a few. Do christians [sic] close whole mountains in the US and keep them off limits just because they have religious significance?
101 My mothers [sic] ashes are scattered on Redondo Peak. Does the fact that my family is buried up there give me access to Redondo over everyone else including the Puebloan people? I think not, yet I am subjected to their religious rights and views. Equality is a one way street here and will always be. Redondo Peak has religious significance to me and I want it shared.
102 There is no reason for non-Pueblo people to be on Redondo Peak and perhaps other peaks.
103 nobody says they cant go there and "practise [sic] thier [sic] culture" just dont [sic] tell me I cant [sic] go there and commune with my "maker". why [sic] are they allowed to have exclusive rights to what belongs to all of us?
104 see comment on #22
105 No difference with other sites, like Chaco Canyon.
106 Keep religious areas difficult to reach in order to protect their significance.

- 107 Someone like myself who wants to ski Redondo in the winter will have no effect on the environment or cultural sites.
- 108 It depends on the rationale.
- 109 It is public land; while creation mythology should be respected it should be open to everyone.
- 110 close em [sic] down - keep people out - we have no business at those sites any way - leave them for the archeologists
- 111 with possible limitations
- 112 specific sites can be protected while still allowing access
- 113 That is a question that should be wholly addressed with the tribes. There might be one or two sites available to the public, but we must respect traditional religious sites.
- 114 the land belongs to all of the people especilly [sic] the people who give to the government not those who take
- 115 Let the native american [sic] places be protected and allow limited access to the rest
- 116 Don't know enough details
- 117 Just like other public places with similar artifacts etc..
- 118 If tribes want sacred space they should buy it (and not put a casino up there)
- 119 Limited access that protects fragile sites.
- 120 Should be open, maybe closed at times for special occurances[sic], but repected [sic] at all times
- 121 Possibly in small groups on a tour
- 122 These places should be open to recreational visitors ONLY when accompanied/led by a ranger or official interpreter.
- 123 Hiking access to religious areas seems OK to me. But not roads and parking lots. I think this survey should better describe the locations and sizes of the cultural and religious areas so people can answer with more confidence. Is half of the Preserve of religious significance? 10%? 1%? Also put this question 23 about Redondo Peak before question 22.
- 124 How can I appreciate Redondo Peak if I can't visit it, but only see it. [sic] I want access to those areas, albeit to stay on the road/trail. It's *culturally* important to me to visit those places.
- 125 With the caveat that protections remain in place. These sites are of historical significance to the preserve and should be more available for viewing in context.
- 126 The Pueblo people have already lost enough of their cultural and religious sites. Let them keep these!
- 127 Again guided tours using buses or shuttles could be used
- 128 Allow visits to such areas only with guides---good for educational purpose
- 129 Littering and other abuses must be heavily policed. Fines should be significant.
- 130 The pueblos have their private land. This is public land and should be treated as such.
- 131 If there are specific areas that the pueblos feel could benefit [sic] from public access/education then yes, but I don't know that an open invitation [sic] should be provided.
- 132 with restrictions, not unlimited or uncontrolled access
- 133 This answer needs more information and thought. to ensure enjoyment and stisfaction [sic] for everyone
- 134 These places should be off limit at times of special significance to Native Americans, otherwise open.
- 135 Depends on the nature of the site & preferences of descendants. And depends on nature of access & protection.
- 136 Guided, or with certain restrictions, higher fees maybe? Or restricted dates like Devils tower
- 137 With a lot of caveats
- 138 Limited access
- 139 They don't own it, therefore the Indians shouldn't regulate access to it!!!!!!!
- 140 Consider continuing minimal (however, I'm not sure what that means).
- 141 The tribes are claiming all of Mt Taylor as 'sacred'. Why don't you just banish all the non-natives from New Mexico? Why are their desires more important than everyone elses [sic]?
- 142 These mountains are spiritual to me also.
- 143 If it were my religious heritage, I would want it to be respected and would want others to also respect it.
- 144 Foot/bike access only.
- 145 Cultural places should be shared, but only if able to be done in a protective / careful way
- 146 What was the status before this became public land? Perhaps visitors could have access to certain parts of those areas only
- 147 I open but with restrictions
- 148 Allow students with permission

- 149 Explain to me more about the religious significance
- 150 Strict code of conduct should be explicit
- 151 Long walk

Appendix 7.9 – Question 18 [If the use of buses and/or shuttles would decrease the need for an additional infrastructure, like paved roads and parking lots, would you support their use?]

- 1 Use 4 wheel drive you dipsticks.
- 2 Support their use, anyway!
- 3 Remote campsite camping would be an exception. So would drive through picnicking.
- 4 good roads would make travel on the preserve more enjoyable
- 5 POSSIBLY PAVE THE ROAD TO THE VISITOR CENTER WHERE SHUTTLES AND/OR BUSES COULD LEAVE FROM AND LEAVE THE REMAINDER OF THE ROADS UNPAVED
- 6 I support the use, but also would like to see the opportunity for personal vehicles as well. Encourage buses, but don't make that the only way.
- 7 The time we went fishing we were in a preserve 2WD van the driver put it in the ditch. My 4WD back in parking lot.
- 8 Can't be done without paved roads, which I'm against.
- 9 we don't need PAVED roads, the existing dirt roads are fine
- 10 The buses at Grand Canyon are a great model.
- 11 Not exclusive use of buses and shuttles
- 12 PRIVATE VEHICLES COULD BE LIMITED TO ONE ROAD LIKE ON THE VALLE VIDAL
- 13 The shuttles are worthless. The roads in the adjacent NF are adequate to get to trailheads. So are the ones in the Preserve.
- 14 Depends on the location and nature of the infrastructure
- 15 I think the dirt roads cover the Preserve adequately, they just need to be paved or graded often.
- 16 The current shuttle roads are so bumpy you can crack your teeth.
- 17 The present rules, using shuttles on the weekend and use of private vehicles during the week seems to work fine.
- 18 Should have one main paved road in and loop in back. Charge to drive through...Wasted exhorbinate [sic] amounts of money on management people, buses, shuttles, typical state run business. Should have put business people in charge and could have made the Preserve self-reliant as it was intended.
- 19 Unless you limit bus access to the current headquarters location.
- 20 Denali National Park uses buses or shuttles to and from the park and hotels. Shuttles could be use for the lodge and to the backcountry areas for hiking, fishing, to some of the old cabins, and the Yurts that are in the back country. Other activities like camping, might need a parking area, and for horseback riding to get trailers to the paddock area, or other areas. Need to have a balance of shuttles, buses, and personal vehicles uses.
- 21 Roads can be improved, e.g., a good gravel road, without them being paved.
- 22 Maybe I would but I think that some upgrading of the road system and parking lots may still be necessary.
- 23 Preservation happens when moving people is done efficiently thru limiting personal cars.
- 24 Can these transports be powered by animals? or by natural biofuels? or by electricity? do they have to be diesel or gasoline powered?
- 25 Shuttles, bicycles and hiking should be the primary means of transportation. Hunting season should continue to allow personal vehicles for obvious reasons.
- 26 Buses should be fueled with CNG
- 27 Busses and shuttles cause people to ride them. We don't need any more people around here.
- 28 Example: fishing parking adequate
- 29 We don't need more roads, we need permission for access.
- 30 I hope there is never a patch of asphalt placed on the Preserve.
- 31 On specific loops. this would require additional trails to be created, designated and monitored to limit folks from going off the road at any given point. But people do wnat [sic] to see more of it in thier [sic] own vechile [sic]. An audio tour is one possiblity [sic] but may not be liked or discussed by all.
- 32 no paved roads past the Kiva! some buses for tours and fishing, SELF guided tours in personal 4wheel drive
- 33 Paved roads should be very limited to limit environmental impact. There should be enough just to increase access to the front (South) section of the preserve.
- 34 Keep the roads the way they are.
- 35 People could drive their cars, unless there are too many like at typical NPS locations where the crowds are thick
- 36 AND start keeping vehicles out of the backcountry. That would be best way to protect ecological and cultural resources.

37 How about making it a wilderness, and limit vehicle traffic. allow people to bike or hike more.
38 I would not use the preserve w buses or shuttles.
39 It's not like we have any choice, but due to extreme weather changes it would be better to have a way out.
40 I used the old van access to fish the San Antonio, not freindly [sic] at all re schedule [sic], yo uhad ato le e [sic] Albuquerque at 4:30 am to ensure you caught the van, a bad idea for trout fishing. Drive yourself helps immensley [sic] with greater access.
41 As with an earlier question, this shouldn't be either/or, but rather both/and. SOME roads, SOME shuttles.
42 people shouldn't be packed into the busses like they were in the vans
43 In No. 15, the KIND of recreation is an important factor, as well DISBURSAL. The Preserve can handle greatly expanded low-impact, disbursed recreation. More than 2-4 paved roads are not necessary.
44 If appropriately maintained the gravel road system should be able to handle a shuttle system. In addition, it would seem that a certain number of private vehicles could be accommodated on a daily basis for a higher "private vehicle use fee".
45 I've used the vans for fishing and just last week drove to the San Antonio in personal vehicle - that was nice but we did not see a single elk whereas in the van we always saw elk and frequently turkey.
46 What part of natural perserve [sic] do you not get? How natural is pavement????
47 Paved road reduce dust, which is captured by streams, so paved roads may be good, just don't need a lot of them.
48 What a crock!
49 Maybe none of the above. The area could likely qualify as a Wilderness Area.
50 Busses are big vehicles and need bigger roads
51 Planning and design of roads critical-it can be done well.
52 geared towards hiking and horseback
53 I don't go to the preserve to ride in shuttle bus with anyone else for any reason. I go to get away from them....
54 Real environmental experience... riding a bus on a paved road... Disney Land does better than that.
55 89k acres is large enough to allow some degree of developed camping and private vehicle access.
56 no to paved roads, yes to more parking areas, let them park and walk from the main roads
57 Paving necessary? Engineered all weather gravel main roads (grades, switchbacks, drainage, etc.) are necessary.
58 It would depend on how often the shuttles run and where they take you. Personal vehicles provide freedom and options for spontaneity. It should be possible to increase access without a huge environmental fallout. Certain protections will need to be in place and maybe not all areas should be freely accessed, but why preserve our public lands if we are not able to enjoy them (in a responsible manner)?
59 I disagree with the need for paved roads or large parking lots. Small, unpaved parking areas would be good.
60 Road improvements shouldn't be needed if numbers of visitors are limited and personal vehicles are confined [sic] to existing roads.
61 Buses are probably a good partial solution.
62 sustainable roads can be designed and made that require minimal maintenance
63 Mass transist [sic] on federal lands is not the answer. Better planning the close watching of soil and plant indicators should be used.
64 I would leave the preserve closed (or very limited access) to motorized vehicles of any sort, but I would open it to pedestrians and runners.
65 Why pave the road? It getting into the woods, if you do not like some mud stay home.
66 Buses need paving more than trucks and cars
67 Handicapped access is essential to me and difficult to provide with buses/shuttles
68 Buses/shuttles limit the outdoor experience, but roads/parking areas should be limited to protect resources.
69 I don't want roads, lots or buses.
70 Just keep the beauty that's there. Human beings tend to ruin what is already there.
71 You don't need paved rds [sic] or huge parking lots, make the parking lots modest size 20 veh max keep it all dirt.
72 The number of recreationists should be restricted to no more than currently use it. Don't turn this place into a commercial endeavor.
73 This is what they do now that gets so much criticism. Sep 8, 2010 10:46 PM
74 I don't want to be on a bus with a bunch of people. I want to have my own place to be with my thoughts and my family.
75 I would support ttheir [sic] use as tour buses only. Persons who board the buss[sic] must return on same bus, same day
76 Look at Arches Natl. Park. One main paved road through and dirt roads for those that have the vehicle for access.
77 Cost
78 There is no reason to have parking lots inside the Preserve boundary except along State Road 4. There is plenty of space for parking lots outside the Preserve on Forest Service land along the north and west boundaries.
79 what are you afraid of disturbing [sic]? the cattle! put a few roads through for vehicular observers, like yellowstone [sic]. allow hikers to roam the 'perserve'[sic]
80 Need hybrid or electric vehicles: minimize co2 emissions in Preserve
81 Unless it was tour shuttles for groups, not families or individuals.

82 if they would drop you and your gear off at a base camp
83 roads that are properly planned can also help protect the preserve
84 Allow users to access the land responsibly.
85 don't add more paved roads. too much additional cost to acquire, maintain, and operate the buses/shuttles.
86 trails and road (not paved) for access should be developed
87 As long as the access is limited to the general public
88 Busses are not practical for usage by OHV recreationists
89 this is not disney land [sic]
90 loaded question
91 Heavier vehicles would increase the need for additional infrastructure and maintenance [sic].
92 Dirt roads such as F.R.144 and F.R 20 would be greatly appreciated!!
93 fishing parking example of success
94 The costs outweigh the benefits [sic] for buses/shuttles. Strict guidelines for personal vehicles would be better.
95 Like other National Parks, allow personal bicycles on the routes used by shuttles and buses.
96 If the weather turns bad or an emergency occurs, having to wait for the return of the shuttle to leave or get help seems impractical. I don't favor unlimited vehicular access to all parts of the Preserve, but being able to have your vehicle nearby in a designated parking area would improve the quality of the visit to the Presesrve [sic].
97 YES YES YES [sic] to buses and shuttles! I don't want to buy a truck or SUV.
98 Both should be used depending on the area of the preserve & activity (Example: Denali National Park)
99 Paved roads in a Preserve??? No, please. Just a dirt road/route or trail. To be caged up, to see the outdoors is contrarian to the desired experience.
100 Only if access continues at current levels
101 getting into shuttles opens a whole new can of worms that won't be run well either, because is it run by the government. you have to have a private entity operate teh [sic] VCNP.
102 BETTER: more well gravelled [sic] roads with limited access (limit no of vehicles/day). Maybe paved around the perimeter only.
103 If we had to be bussed into our hunting areas we would no longer apply to hunt on the preserve.
104 No paved roads PERIOD!
105 If they were not only fuel effeciant [sic] vehicles but also managed efficiently...
106 some of these question like this have so may other questions and solutions for the preserve to function best
107 Private vehicle access has over-run some other parks and reduced their quality. Free shuttles may be funded by parking fees.
108 I'd pay (\$5) more bucks for this... drive me up the road, drop me off in my "zone", and pick me up the next day or two!!
109 This should not be Disneyland. If that is the only way, sell it back to the Dunnigans. Buses could be part of the solution, but not the only way things are done.
110 Road work should be minimized to what is necessary to keep roads in good repair and avoid erosion and impacts to resources.
111 Allowing people to disperse reduces impacts. Shuttle or bus systems concentrates impacts and reduces the experience
112 Whole place has been logged. There are many old logging roads to use.
113 Again, I don't know how fragile the landscape is but less cars and roads generally equal better care of the land.
114 this is important Oct 26, 2010 5:30 AM
115 depends on timing and frequency

Appendix 7.10 – Question 10 [Do you value the quality or quantity of you recreational experience? For instance, would you prefer to have one hiking trail or campsite to yourself for the day (quality), or have the option of many trails and campsites that are open to many recreationists (quantity)?]

1 none of the above, camping will screw it up...there is a campground down the road, jemez.
2 Maybe not all to the trail/campsite all to myself, but not with hordes of people
3 Winter recreation can be as crowded as can be made and it still wouldn't be too crowded.
4 I think a balance can be obtained
5 Personally, I prefer quality, but I believe public lands should be accessible to all, so I responded "I prefer quantity."
6 It's a 5 hour drive to get there and I need to be able to reserve a spot months ahead of time.
7 No campsites or activities that will damage it's [sic] natural state.

8 I don't like the current paternalistic restrictions on recreation. I think it is possible to have more open access with freedom to roam, without overpopulating the backcountry. Reservation systems are used on public lands all over the US and they work pretty well. The VCNP needs to take some lessons from the professionals.

9 If I want quantity, I can go next door to Forest Service

10 Quality requires reservations thus more planning

11 Quality trails/access, exclusivity not required, but limits on quantity/access

12 I would like more opportunities for bicycling (more days). The quantity of roads and trails open is currently sufficient.

13 It is large enough [sic] to allow for both quiet hikes and large area usage

14 Many national parks have long reservation waits. This should too

15 But I don't think quality is a trade off for quantity. The wilderness areas don't limit access [sic] but the quality is still high.

16 Permit use for campsites to help monitor the campers in the areas

17 The real value is the pristine conditions at the Valles and the limited number of people

18 But will happily take anything that enables more access.

19 I think the size of the place will space people out well enough. There may be areas that are more congested than others, like campsites, but I believe I'll always be able to hike far enough away from crowded areas.

20 I believe that quality can be maintained and allow more access to the preserve

21 More access but not overcrowding. Now it is too limited.

22 I actually prefer balance between quality and quantity. We should not restrict the number of people, yet offer quality experiences.

23 this questions lates [sic] a middle road, I think there's a balance between the quality and quantity [sic] options describe above.

24 more access but not completely unrestricted

25 Catch and release fishing!

26 Single track trail bike riding / snowmobiling

27 But the quantity has to increase from present levels

28 Are these mutually exclusive? Bad question.

29 I really prefer both

30 I hope there will be a balance of the two; plus we need better access to hiking trails.

31 Your examples limit the issue. There should be more availability of land use.

32 My draw to the Valles has always been about the quality of the experience.

33 I would prefer more open, free access similar to other wilderness, but no additional roads on the preserve. Limiting the number of roads would support both quality and quantity

34 I do not understand why quality and quantity are seen as mutually exclusive. With some better planning more use could be possible without dimishing [sic] quality. The preserve has not been very successful at offering either.

35 It would be nice to take my dogs for a hike on the free trails

36 There can be a reasonable balance.

37 Actually I'd like both.

38 we need a balance; some places for many folks, some for only a few

39 balance of the two

40 Number of trails must be determined by carrying capacity of land and numbvre [sic] of users.

41 Properly disbursed/managed, the public can have both

42 If I want quantity, there are many other options in NM. It is very important to me to have at least some areas that offer high quality outings.

43 not necessarily trail or reach to myself but fewer people than outside the Preserve

44 Both. This is the most biased survey I've ever seen!

45 We don not want another Yellowstone Park

46 Mix of both. Some areas that have easy access and some that are remote.

47 Quantifying nature with a 2 choice question????? There are myriad choices, why not let the people choose from the smorgasbord of nature?

48 I prefer that the Congressional mandate be achieved.

49 Somewhere in between.

50 How about several trails and campsites so that a larger number of people can be spread out more. Limited people and limited opportunitis [sic] does not make a lot of sense, but lots of people and lots of opportunity could be too much. Something in the middle is needed.

51 There's a balance!

52 I am opposed to camping on the preserve. I think it would be a bad idea.

53 If the Preserve was in a remote area, quantity (many trails to enjoy - like the wilderness) might make sense. But the Preserve's is so close to ABQ and SF, it would quickly be overrun with careless folks - just like the hotspings and many roads with camp sights along them. ATVs and bikes will always make themselves welcome in an easily accessed situation that isn't closely monitored.

54 Quality can be costly, but for this special place certain protective measures are warranted [sic].
55 limited quantity
56 Find a balance where human use doesn't significantly alter the ecosystem
57 With quantity, there are many options and so it is less likely to see other people
58 large quantity often equals quality
59 numbers should balance "preserve" with use; don't let it be "loved to death"
60 A mix of both would be nice
61 Why not have both. A site or two for multiple, and several for individual use.
62 I prefer both.
63 but I think there could be both quality and quantity in different areas
64 camping: quality; hiking/biking: balance of both
65 In moderation
66 I strongly disagree with the designation of individual [sic] trails. I do not hike on trails.
67 both objectives should be met, some [sic] sections where quality important others where unlimited access should
be allowed.
68 moderate amount for both solitude and accessibility [sic]
69 Quality is better, but the preserve has so far not allowed enough access.
70 I believe that both quality and quantity can be had.
71 I would prefer a little of both, keep the quality with low campsites, however multiple [sic] trails for wildlife
viewing and recreation are still possible. With the reduction of hunting the elk herd now on the preserve and put it
back to the levels of private ownership!
72 All 89,000 acres should be open to hiking. With 1.6 million acres of National Forest across the boundary, there is
no reason to have any overnight camping on the Preserve.
73 quite after 10:00pm
74 you could designate half for both.
75 WITH A BALANCE. ASSIGNING ONE PERSON TO A LARGE AREA IS NOT REALISTIC
76 Because of the appeal of the Preserve, quantity would have to be regulated until such time as demand has leveled
out.
77 Quality over quantity can generate more use do to limited area. More area assists to generate lighter use given
more opportunity and less density.
78 mix use as required - common sense prevails
79 I think it's selfish to have trails to one's self or group.
80 which can be balanced with quality, Nat. forest concept
81 I prefer quality but recognize [sic] that everyone wants that. In order to meet the desires of many there need to be
many options.
82 all types of recreation should be encouraged
83 Need trails for OHV usage
84 considerations of mixed possibilities- i.e. compatible events :limiting hunting when other humans are around
85 I pay enough in taxes anyway!!!
86 This question begs an oversimplified [sic] conclusion/result.
87 this should [sic] be managed as a natural/cultural preserve. Revenue generation should be the least important
criteria. Since the preserve now falls under NPS management, not the BLM, forget making a profit for once.
88 these are not mutually exclusive ideas
89 I think camping is going to degrade the environmental and recreational value unless limited and under strict rules
and inspection. I don't need the trail to myself.
90 But not too much
91 Roads or trails that are designated within, for various recreational purposes. Some OHV trails/areas, some hiking,
etc. The main reason I don't visit the Preserve now is that the Board does not offer recreation opp's that meet my
needs.
92 LIMITED quality....i.e. a max limit (10?) of current use of any one trail
93 I realize the awesome beauty of the preserve and to claim all for one's self would be selfish
94 but think that there needs to be balance between the two
95 The preserve is huge. Because of this I believe both could be offered; many hiking trails in a limited area
including campsites and fewer long distance hiking trails which would be less easily accessible, allowing for a
quality experience.
96 the preserve needs to stay unaffected by man to remain peaceful and undamaged
97 Keep the remote/isolated feeling!
98 Having a designated "zone" to one's self would be great and would decrease overuse, and "partier" camps. Easier
to "track" those who "trash" an area. Make them PACK stuff in (and out!), not drive it in!
99 Quantity, but with balance.
100 Here's where it seems a balance could be achieved....
101 given the right circumstances and management an increase in quantity available may also increase the quality...

- 102 About equal for this. What is in place now has neither. You can't get in, and when you do for something like fishing it feels MORE crowded than even something like the Rio Costillo, all because of how it is micromanaged.
- 103 Putting people together could foster a base of support for the Preserve.
- 104 Stupid question, public land should not be managed to give selfish people the illusion it is their private paradise.
- 105 quality!!!!
- 106 a quantity of quality is preferred
- 107 I prefer to the option to choose, that day.
- 108 I believe a model similar to the Valle Vidal would work. But the current model for Valles Caldera is too restrictive

Appendix 7.11 – Question 12 [If you answered yes to the previous question 11, how much additional money would you be willing to spend on quality?]

- 1 none, hunters already spend tons of money just to try to be sucesseful [sic] on a hunt when the odds are less than 1%
- 2 More for camping, less for skiing.
- 3 How about an increase in grazing fees instead???
- 4 A yearly Pass for say \$100
- 5 depends on quality
- 6 The current fishing access fee is \$35, and I would be willing to spend as much as \$50.
- 7 An annual pass would be a good idea. For example, I'd pay \$50 for an annual pass.
- 8 The answer to this question depends on what is meant by "higher quality" and who is defining it. \$35.00 per day for fishing is pretty high if we have to share the stream with cows or horses as in past years. How would the preserve raise the quality of the fishing to justify a higher fee? Likewise, for hiking. Experienced hikers just ant to pick their own routes and schedules and then be left alone. Would the Preserve charge more for that case than the highly regulated hikes presently available? The current dissatisfaction with VCNP management is that neither the quantity nor the quality is adequate for the general public..
- 9 I'd recommend a yearly pass, including winter
- 10 7 day pass @ \$30 or annual pass @\$50
- 11 Would like a annual pass for a fixed price
- 12 have to define "additional"[don't know the base]
- 13 don't exclude low income families. VC already has a reputation as elitist.
- 14 Depends on what access I would have to what activities..
- 15 Although I said I preferred quantity over quality, I would definitely be willing to pay increased rates for special activities
- 16 Designated wilderness areas are high quality and free.
- 17 depends on the activity
- 18 But this should not be necessary.
- 19 Annual fees should be offered just as they are at the National Parks!!
- 20 This depends on the activity
- 21 I answered no to question 11
- 22 It depends: fishing/hiking: 10.00 - Hunting, not much more than the current pricing for a cow elk but another \$100.00 for a trophy bull wouldn't be out of the question providing that the quality of bulls is managed properly..
- 23 several hundred a year
- 24 Per family! Keep it in touch to ave [sic] people
- 25 Too high a fee will result in greatly decreased numbers .
- 26 That depends on the particular activity. Awkward qesiton [sic]
- 27 I think the preserve should offer annual passes which are good for a varierty [sic] of unguided activities
- 28 I think the present is satisfactory
- 29 different amounts for different experience. but charge more for all.
- 30 annual pass
- 31 This is PUBLIC land. Access should not be limited by ability to pay.
- 32 This also depends on what the activity is. For example, I would pay more for a great elk hunt than for a hike or backpack trip.
- 33 \$15-30 / day use , \$30 - 100 / camping or lodging
- 34 depends, elk hunting would be \$100+, fishing have been doing \$35, I use the free hiking trails
- 35 Let existing funding distribution work: taxes
- 36 I have paid a fortune in taxes. This should not be determined by community effort. Achieve the congressional mandate or lease the place to somebody who can make it work.
- 37 Depends on the type and duration of visit
- 38 ONLY if allowed to bring my dog, otherwise, I will continue to not go

39 I would pay \$30 (pp) for campsites that were *VERY* limited in availability
 40 Question is unclear - governmental or private money?
 41 5 to 20 depending on type of experience
 42 User fees should be use base not frequency of use
 43 I would like a seasonal pass so I can run in Caldera whenever I can/want ... maybe 50-70\$ a year would be OK
 44 out of state visitors [sic] should pay more
 45 \$50 for a year pass
 46 I would like to see a sliding scale based on income. Not everyone can afford \$30+ but I can.
 47 an annual pass for locals \$30-50/year would be ok.
 48 It depends on the activity, i.e., less for a day hike, more for a hunt opportunity
 49 We shouldn't [sic] have to pay higher fees, we are already using our money to buy the preserve and keep it
 running, with tax payers money.
 50 equal to similar local fees (like Bandelier).
 51 People are willing to pay for quality. I don't make a lot of money but if you price the low lifes [sic] out, the
 preserve will stay nice. So have it cost more than an 18pack of beer and you'll keep the low lifes [sic] out.
 52 \$50-\$100 per year for open hiking.
 53 The public already bought the land REMEMBER! why is it any different than any other forest/wilderness?
 54 Depends on the amenities provided.
 55 RV camping would be higher based on services
 56 charge the same fee for and all uses
 57 This land belongs to we the people how dare you charge for what we have paid for !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
 58 It's already tooo [sic] expensive!
 59 What I pay for any other national forest parking site!
 60 I would like to see a pass system for families; 1 day, 1 month, 3 month, 1 yr etc. individual fees of 25/visit make a
 day trip for middle class fam [sic] of 4 unreachable
 61 another bad question. Would gladly pay \$400 for a Yurt overnight. For a low impact hike/ride/ski I dont [sic] mind
 paying but don't think it's best to have season passes and self-serve parking lot fees.
 62 I will be willing to pay if I don't need an jeep/SUV to get in
 63 \$8
 64 offer an annual pass
 65 Some fees are excessive now.
 66 only because it prevents those that could care less from entering
 67 Depends on the activity. As stated above, I don't care to spend \$20 per bicyclist to ride trails on the Preserve when
 I can readily access trails near the Preserve; I think biking and hiking should no additional cost other than a
 reasonable access fee to the Preserve. That said, I would be willing to spend money to participate in a recreation
 experience such as XC ski yurt-to-yurt or trout fishing on streams which can only support limited numbers of
 anglers.
 68 Have an annual pass system for all recreations.
 69 would prefer to be able to use my national parks pass actually - else \$10 PM
 70 hiking only- 5-\$15; overnight - \$20-30 for one tent (2ppl)/fire ring, etc. per night
 71 What's the current cost?
 72 Depends greatly on mix of rules and opportunities. 30+ is not out of the question,
 73 \$0, already paid for it with tax money.
 74 \$50 for a yearly pass
 75 for trailhead vandalism protection and insurance

Appendix 7.12 – Question 14 [The Preserve (89,000 acres) currently sees less than 16,000 recreational visitors every year. By contrast, the adjacent Bandelier National Monument (32,000 acres) receives more than 300,000 people each year. Based on these numbers and experiences you have had on other public lands, how many visitors would you think the Preserve can reasonably accommodate while still providing an acceptable experience for most visitors?]

1 hunters, fishers and ranchers alone....and maybe bikes and hikers limited to trails and roads.
 2 Low end of the selected range- I'd say current levels to 25,000 or 30,000
 3 This depends on the type of visit. Camping visits must be fewer than drive-by visits. Drive through visits must be
 fewer than bicycle tours.
 4 MUST COMPARE HIGHLY VISITED PARTS OF BOTH AND BACKCOUNTRY AREAS OF BOTH TO
 GET AN ACCURATE COMPARISON.

5 Bandelier is acceptable - go with that. Most of the visitors stop at the visitor center and at one or two viewpoints. The same would be true with the caldera.

6 people would disperse across the landscape if allowed and therefore more people could be accommodated [sic]. Again if impacts are too great then management and limitations can be imposed as needed.

7 acreage has nothing to do with it. Most of VC's 89k are unusable

8 This question is oversimplified. For example, what percentage of the 300,000 Bandelier visitors venture outside of the main trail to the cliff dwellings? Probably not more than 16,000, so you could potentially have a very private experience in an otherwise crowded area. It's all about how you move people through the landscape.

9 Ask yourself why this disparity?

10 Too many variables to make that call.

11 The answer to this depends on what the visitors are doing. If they are driving or cycling a loop road with turnouts for wildlife viewing, a lot can be accommodated. If they are fishing, 40 or 50 people per day total would probably be the most that could be handled without ruining the experience. Even that may be too many to justify the present fee.

12 20-30,000

13 It depends on whether visitors can go on their own or need to be guided

14 The Bandelier backcountry is never crowded.

15 I can't place a specific number on it, but the current amount is too small

16 Bandelier is a totally different ecosystem. Don't [sic] compare it to the Preserve.

17 Perhaps 20,000 to 25,000

18 Depends on what access is granted

19 Do not know

20 How many recreational visitors does the San Pedro Parks or Pecos Wilderness have each year?

21 For fishing the fees are reasonable, it would be nice to have a longer day, but not a big issue, I think the number limit should be close to the current allocations of rods per beat.

22 I honestly don't know the answer. That is best left to the National Park Service management.

23 Currently the preserve is run as a play ground for the management to increase their hierarchy [sic] in the community

24 don't have enough information to answer

25 The Valles Caldera does not have the cultural attraction that Bandelier has (thankfully) so comparing the two is not sensible. Actually, I'm surprised that 16,000 people visit this place per year which is the charm of the VC. I sincerely hope that the VC never turns into the mob scene that is Bandelier [sic].

26 maybe as many as 20,000

27 #15 If it is properly managed

28 The two locales are not really comparable because of Bandelier's unique dwellings that attract so many people. I suspect a much lower number actually visit the reaches of the Monument.

29 Who are we to quantify this? We need to see the trails and the availability [sic] before coming up with this answer. Most of Bandelier's [sic] visitors are on the main loop and that is under five miles!

30 You are comparing two very diverse venues with very different offerings. Not to mention Bandelier has much better advertising.

31 More than this would make it like a typical NPS junk site and overcrowded

32 This is too general a question for too complex a problem. To compare Bandelier with the preserve is spurious [sic]. The preserve should - like Bandelier [sic] - have a small high use area near the Hwy [sic] 4 and "build" barriers to overuse of the backcountry by making it less accessible to vehicles (including [sic] for scientists who are all over the backcountry in their SUVs and ATVs). Many people only want to visit, get a nice vista point and learn a few things and then move on. Let the ones who are willing to explore do so on foot or horseback so but don't make the backcountry too accessible. Bandelier [sic] could serve as a good model for this approach.

33 just what it is for quality

34 90% of them won't leave their vehicles anyway, or walk more than a half mile

35 bad question. Bandelier is completely different entity and handles people differently

36 I can't comment as I have never been there

37 The latest use number for Bandelier visitation, which I heard from Jason Lott, Superintendent, a few months ago, is above 200,000 but below 250,000

38 How many times have I been hunting at Bandelier? Zero How many times have I been fishing at Bandelier? Zero

39 32,000

40 This is a completely unfair question. Due to bureaucratic hurdles and special interest groups, the Preserve has not been operating at full capacity and that capacity will vary due to climatic conditions from year to year. Also see answer #13.

41 Let the scientist [sic] determine when adverse impacts are occurring [sic]

42 For heaven's sake, how on Earth could you answer this question?

43 less than 5000

44 With current infrastructure, see how 32K/yr works

45 shame on you... really, really bad question. How are people supposed to have the knowledge to answer this.
46 Not the same values, almost all of 300k visits are on 100 or so acres.
47 Undetermined . . . irrational question. Something that would be discussed in a Friday night drinking seminar.
48 don't know?
49 don't know?
50 Bad comparison: apples and oranges. Nearly all BNM visitors are concentrated in Frijoles Canyon with facilities to support them. The largest single attraction at VCNP is the open space with big views with critters.
51 should be similar to Bandelier
52 These numbers dont [sic] mean much to me. I would tend to say that the Preserve could accomodate [sic] more people than it does now, but there should should [sic] still be opportunities to get away from groups of people at times. So, more than now, less than Bandelier.
53 Visiting should be permitted but not generally encouraged.
54 Are you counting folks that drive into the little gift shop? I'm sure a large number of Bandlier [sic] visitors don't get far from the Visitor's Center, and if the VCNP had a classy VC, many of its visitors would stop there only.
55 no idea
56 Yes, but probably 90% of Bandelier visitors concentrate on the liff dwellings.
57 more and different constraints on visitors here than at Bandelier
58 VISITOR #s DEPENDANT ON ACTIVITIES e.g. HIKERS=MANY VISITORS, MOTORIZED=FEWER VIVITORS
59 more people would need visitor center and picnic areas that don't currently exist
60 You can't compare Bandelier NM use to Valles Preserve use. Apples and Oranges.
61 visitors at present collect at very few places--spread them out
62 People do not step on every acre, some could be for vehicles, some for people or bike only
63 Most of the visitors to Bandelier and other parks stick to the areas around the paved trails and visitor centers, leaving the backcountry free to more "quality" visits. The same could be true of the Preserve by limiting where people could go. The presence of so many roads is not a natural limitation.
64 don't know
65 Most visitors to Bandelier concentrate their use in a very small area; in contrast, the preserve's resources are more spread out, so use should be similarly dispersed within the preserve.
66 I would embrace a limit to the visitors per week with amounts varying by seasons and environmental conditions. For example, if the fire danger is high, the number of visitors should be at a lower level and reasonable restrictions should apply.
67 Experment [sic],
68 10,000
69 not sure, this should be determined by ecological preservation experts only.
70 more
71 Bandelier's visitation has been quite variable, and generally not over 300,000 per year.
72 It was payed [sic] for with public funds!! why do you talk about restricting people?
73 Maybe up to 20,000 per year. Not many more.
74 the current number works if only for hunting and fishing
75 ? depends on what they visit for...hunting or biking or...????
76 If people keep coming, they must think it's acceptable. Those that don't won't come. If people stop coming, then maybe something needs to be done.
77 The Caldera is not a Monument like Bandelier. People who visit VC have to put some effort into the outdoor experience.
78 What do you not understand about the term "preserve"?
79 this is our land
80 ?
81 Our National forests already flourish!!
82 25,000
83 let it self adjust - do little to attract additional visitors
84 don't know
85 A lot more people can be accomodated [sic] if they are allowed to explore more widely and not concentrated in a few areas.
86 Bandelier seems like it is still a quality experience and uncrowded [sic]
87 Increasing the recreational opportunities would draw in additional visitors. Those opp's [sic] would need to be appropriately managed.
88 There is no hunting in bandalier [sic]
89 Depends on what the visitors are doing.....
90 20,000---25,000
91 20,000-25,000

- 92 Would prefer to see numbers kept low, but in order to generate income, higher numbers of visitors would be necessary.
- 93 I think that this too should be balanced with the amount of revenue generated to provide the right amount of staff to properly manage the preserve.
- 94 I think the Preserve can reasonably accommodate more than 50K visitors but would prefer the numbers be kept low and stress the use of low impact visits i.e. hiking, biking. I would hate to see the Preserve become an "amusement park" similar to Yosemite and other Nat Parks.
- 95 only allow a given amount of visitors [sic] at any one time, but more frequently if needed
- 96 Maybe up to 20K.
- 97 I do not have enough data to respond lucidly. I do bot [sic] think that a direct comparison is necessarily valid.
- 98 25,000
- 99 40,000 - 50,000 visitor/year
- 100 Depends significantly [sic] on infrastructure. With current infrastructure, 20-50K is a better answer. With more, 50-100 maybe.
- 101 Start smaller and add more if manageable.
- 102 20-25 K
- 103 another stupid question, depends on what type of recreation, what season etc.
- 104 If people want to come, let them come, it is their land.
- 105 I don't know -- it depends on how fragile the landscape is.
- 106 don't really know, but leaning on the side of environmental protection is best
- 107 not sure, however i [sic] don't see this as a valid comparison, many people go to bandelier [sic] for the cultural uniqueness not available at VCNP
- 108 15,000
- 109 I have no way of knowing this; however, perhaps a way to balance priorities is to give wide access to certain areas and limited or no access (for public) to others
- 110 I am not familiar with all the data
- 111 60,000-70,000
- 112 20,000-50,000 if by car; 50,000 - 100,000 if by train' 100,000-200,000 if by foot

Appendix 7.13 – Question 9 [What management objective do you think should have the highest priority on the Preserve?]

- 1 keeping it preserved and untouched!
- 2 ranching hunting and fishing. the culture aspect is bullshit. as is the tree hugging sector. if it was managed as a "ranch" there would be no need for "revenue generation" It has been mismangaged [sic] since the beginning due to do-gooders, that are actually costing it money. Personally, i could cut the budget significantly [sic] from 4 MM. Who spends that kind of money? There is absolutely nothing to show for it other than regulations. The management is a joke.
- 3 I hate cows, but that was the legislation. I think the govt. should stick to their word instead of having a bunch of NIMBYs come in and change everything up.
- 4 wildlife management
- 5 All except livestock grazing
- 6 HUNTING
- 7 Revenue generation should NOT be a high priority.
- 8 become part of the park service no ranching/hunting
- 9 I don't believe that all objectives should be equally weighted but "Science and research" and "Ecological restoration and/or resource protection" also deserve high priority in my mind. I believe respect should be given to the Pueblo Indians' desire for "Cultural and Religious Protection" but that should not be an over-riding factor. The VCNP was purchased, after all, with funds from the Land and Water Conservation Fund which, in addition to fostering conservation and protection of federal and state lands, has a strong recreation component. The Land and Water Conservation Fund does not favor one class of citizen over another but tries to "ensure equal access to parklands for all Americans" (quote from Trust for Public Land website)
- 10 but preserving for future generations should be foremost
- 11 thin the trees to reduce wildfire
- 12 except not too hot on grazing -- elk ok, cows not
- 13 Once it is gone it cannot be replaced, resource protection must be the highest priority.
- 14 I think that for the VC to be self-sustaining, all facets of the property must be taken into consideration, including [sic] profitability. Ideally, however, the spirit of the place's heritage and pristine condition will be taken into consideration.
- 15 Single track trail bike riding / snowmobiling

16 hunting, fishing and hiking
17 Revenue generation should be the last objective for a jewel such as this. It does need more publicity.
18 It should be run like a national park
19 Livestock grazing should be totally prevented. It does not belong in such a splendid national treasure.
20 Education
21 conservation
22 the preserve should remain as a PRESERVE
23 resource protection and recreation as two top priorities
24 However, cultural and religious protection have little bearing on the use of the preserve.
25 Resource protection closely followed by recreation ... after all this land belongs to the The People
26 Use of wildlife resources
27 sustainable multiple use, including grazing, recreation, and resource protection, but whatever you do, do not
reintroduce wolves!
28 get rid of the science and research, cultural protection. not necessary on the preserve in the magnitude it exists.
29 strongly support recreation, cultural and religious protection, and ecological restoration too
30 Eco restoration, low-impact recreation, science (not high-elevation cattle breeding programs, which are not
appropriate at high elevations because of short growing seasons and growing concerns about the trend toward
hotter, drier conditions in New Mexico, both actual and predicted for the future).
31 education
32 Sustainable use by all resource, grazing, timber, recreation, while conserving wildlife
33 This was a working ranch for over 200 years, how do you think it was in pristine condition when the US gov.
bought it.
34 Livestock production as one of multiple uses that enhance the habitat for wildlife.
35 logging and thinning
36 Omit grazing, logging and mining permanently
37 This should con't [sic] to be a working ranch!
38 without management of the resource, the entire place will burn, then no once [sic] can use and enjoy it.
39 The congressional mandate was to be selfsufficient [sic]. . do it!
40 All the people purchased the preserve. Exclusive use of parts of the preserve by some groups should be eliminated.
Actually, all objectives should be equally CONSIDERED, not necessarily weighted.
41 Hard to say, almost all of these deserve attention. Resource protection would be my highest priority I suppose, but
not by much.
42 Preservation, outreach, and education!
43 WILDLIFE MANAGEMENT
44 Carefully manage the fish and wildlife
45 "Science is bogus" - it encourages risk at margins
46 Preservation as pristine wildlife habitat.
47 No Grazing! Cultural and Religious Protection only makes sense if it is indigenous - manifest destiny does not
lend itself to Ecological restoration
48 The Preserve must follow its mission. Until its mission changes, it is trapped in an impossible task to be self-
sustaining [sic]. Either move it to the NPS or NFS, but probably better as a special unit of the NFS with limited
access and activities. Cattle grazing should be diminished.
49 Don't cave in to environmentalist who want to lock up everything
50 distance for lots of people makes recreation most desirable
51 balance use with preservation
52 Sell Grazing Rights To Non-Livestock Growers to allow removing the acreage from overgrazing and habitat
destruction
53 all objectives except grazing, which though possible should be less extensive and managed very carefully.
54 Getting rid of the damn cows and grazing.
55 hunting and fishing should be weighted the heaviest
56 Ecological resource protection, cultural/religious protection, and low-impact recreation should have the highest
priorities. Grazing should be done with bison to more closely mimic historical processes (bison would also help to
increase user visitation). Revenue-generation shouldn't even be part of the mandate; the preserve is a national
treasure that does not need to generate revenue.
57 Activities consistent with national monument status
58 Hunting
59 More hunting opportunities. Upland Bird and Turkey for openers.
60 it should be treated like yellowstone [sic] OR a wilderness area
61 Recreation, habitat restoration, research equally.
62 Hunting and Fishing
63 OHV gets no priority. There isn't any.
64 No grazing. Cows damage riparian areas and compete with wildlife.

65 trails set up for motorized recreation
 66 Hunting
 67 trick question
 68 Hunting & Fishing like all other national forest activities.
 69 Hunting of all species
 70 best variety of uses with protection of resource
 71 It should be run as the trust charter intended.
 72 Recreation WITH ecological restoration
 73 I think all objectives need to be carefully considered and ranked. Long term plans and goals must be made for all objectives.
 74 Please no grazing!
 75 Low impact recreation: fishing/hunting.
 76 greater hunting options
 77 Public access, lose the cows.
 78 get the cattle and horses off the preserve
 79 Recreation without adverse impact
 80 equal importance as wildlife conservation
 81 Recreation should be balanced with EcologicalRestoration [sic]; then grazing, science and research, cultural and religious protection,a dn [sic] finally revenu [sic] -generation

Appendix 7.14 – Question 25 [Do you think that grazing in the Preserve would diminish your recreational experience?]

1 The cattle fences are fatal for baby elk and have to go.
 2 Get a real rancher in there, graze the correct amount of animals, not those dinks the natives raise and make some fucking money
 3 A bison herd would be nice & possibly economically feasible?
 4 Very limited grazing far away from forests, roads, trails, and recreational sites ought to be just fine.
 5 we should be interested in the wild life so visitors can view natural-native species
 6 If grazing is managed proprely [sic] it will be fine. Don't put too many cows out there, and move them around.
 7 cattle have negative impact on fishing. They're stupid! But the \$ they generate is good
 8 I believe that there is good evidence that cattle grazing is harder on the land than elk or deer. My personal experience is that it also makes certain fishing area dangerous to travel through (e.g. East Fork Jemez marshes).
 9 500 head of cattle (kept away from streams no less) don't do squat verses 5,000 elk...or a gazillion grasshoppers.
 10 It should be for the benefit of the native wildlife species, which are at odds with grazing
 11 Virtually every piece of dirt in the west has been overgrazed. Who is worse for your streambanks [sic] backpackers or cows?
 12 People don't come to see a Ranch and herd of cattle.
 13 leads to over grazing like on all the surrounding federal lands
 14 It has already.
 15 What about grazing bison?
 16 If done correctly and not overgrazed, it would be ok
 17 Grazing in reasonable numbers. Cattle trash streams.
 18 there is already destruction of fencelines [sic] and riparian areas caused by cattle, there is NO need for cattle, the research need is false
 19 Grazing by domestic livestock (if allowed) should be limited.
 20 SHOULD BE LEFT FOR THE WILDLIFE
 21 Grazing is revnue [sic] for the Preserve
 22 I would not support increased grazing if it reduced the elk herd
 23 Stepping in cow pies is no fun. Cows belong in feedlots!
 24 Limited grazing, focused on ecological management, is appropriate. But the herds of recent years, and the trampling that has occurred because of them, has been most unfortunate and counter to sound ecologic management.
 25 I think grazing for scientific purposes is a joke. We are keeping grazing going to placate certain interests - it's not economically viable.
 26 I question the value of grazing on the preserve; I don't see what purpose it serves and it appears to generate very little income for the Preserve.
 27 I have heard that the grazing has caused damage to the Preserve. Who is in charge of this. I don't want the creeks fouled by cow patties. There are millions of cattle grazing in NM already. Leave the VC to the elk and deer. hunting can controll [sic] them. Game meat can be served at a lodge or lodges. If the feds want increased income

from the VC, it means increased people, so dump the cows. The state legislature is controlled by ranchers and oil and gas. To say grazing the VC is scientific research is like saying that the Japanese kill whales for Science.

28 Again, within reason and using science to make decisions. I really disagree with overgrazing, but OK with good grazing management.

29 Cattle are also encountered in the current designated wilderness areas.

30 The Baca Land and Cattle Company, use to put 8,000 - 10,000 head of cattle on the ranch, moving them all over and there was never over grazing. In dry years, they would only put maybe 3,000. The wranglers were great on the moving the herds. They even would burn the grasses before the cattle came to make the grass healthier [sic]. Cattle with the elk herds make the grasses healthy.

31 Controlled areas only

32 It probably would somewhat but I already have to hike amongst cattle and cow patties in certain parts of the Santa Fe National Forest.

33 As long as it doesn't do significant harm to the ecology, I don't object to grazing.

34 Grazing of cattle has no place on this [sic] Preserve. Cows are not a natural part of this environment.

35 cow patties are a negative effect, overgrazing can have negative impact, cattle crush stream edges, and cattle are found everywhere else on public land in NM already

36 Right now, cattle have more rights here than people do.

37 some negative experiences in the Lincoln Nat Forest

38 It is a big valley that is older by far than 100 years. What research occurs around cattle and sheep grazing and why protect an invasive practice not natural to the Caldera? Grazing by increased elk or deer is a better solution than continued cattle grazing and may provide valuable scientific research. And talk about a biased question: #24

39 I'm not a rancher but from what I've read, cattle are contractually part of this place. I'm not necessarily opposed to this and, in fact, I believe that the VC should be a study in modern grazing/recreation management.

40 Properly managed grazing is good. Overgrazing is bad, especially in riparian areas.

41 If grazing is properly managed

42 Grazing causes more damage than OHV use.

43 a good balance is necessary.

44 limit grazing to selected areas

45 But not enough to call for its elimination

46 i have hunted elk all my life and i have found where there is cattle on public land there is less elk when the cattle are moved the elk come back

47 Grazing is OK as long as it is carefully limited and controlled, as it is.

48 I don't like cow pies on my trails or in my camps. I question the need for further scientific research (like whale hunting in Japan?) except for the need to channel funds to academia.

49 Education should increase on cattle grazing at the visitor center to let folks know where there food is coming from.

50 So far it has not.

51 all the many years my family had access, there has always been grazing. When a Conservation approach is taken, grazing works!!!and is needed.

52 Grazing is tricky, really the issue is whether that grazing is kept to a limited area, and the wildlife able to thrive.

53 Algae/moss levels in the rivers is much higher due to cattle urine/feces

54 All within reason. Don't overgraze [sic]. Use range riders to keep cattle out of wetlands. Provide for stock tanks away from streams and bogs. Use cattle as an additional recreational [sic] experience such a cattle working clinics [sic] on horseback and the like. That would create more revenues than cattle grazing alone like many dude ranches in the West have discovered.

55 No, not as long as it is properly grazed. I would have an interest in leasing the grazing for a summer yearling operation if it was available.

56 Only if I have to fish / hike with a herd of cows. I hate being surrounded by cows. Seriously.

57 In the past, it has highly effected fishing experiences

58 grazing for scientific research? Get rid of the scientific researchers and just graze. Ask the previous ranchers how it worked...cause it did and they didn't need scientific research!

59 It depends on how much grazing takes place and how it is controlled.

60 If managed properly no. I also think that bison and yak, which are more suited to the altitude are more appropriate.

61 grazing has never diminished my trips into the Preserve before, over-grazing might. whatever that number is

62 Grazing when done correctly keep the brush down in places

63 In July of 2010 I visited the Preserve and there were cattle from an adjacent ranch grazing there. I asked about it and was told that they were not supposed to be there. I personally think much of the West would be in much better shape if not for the cattle overgrazing, causing water pollution with feces and disturbing the soil on stream banks. There are plenty of areas for cows outside of the preserve. Lets keep them there! That cattle grazing is a part of the history there is no excuse or argument for their continued existence there. Slavery is a part of our history too! The use of Lead in paints and gasoline. Just because something has been done in the past does not condone it's continuation in the future.

64 Try backpacking in San Pedro Parks Wilderness, where cattle have destroyed large segments of trails and torn up and polluted riparian areas and the streams. Also, it's not pleasant to find cow pies in limited camping areas.

65 First and foremost any domestic animal grazing must not impact native wild species such as elk, deer, bear, cougar, bobcat, etc.

66 negatively reduce water quality

67 There are many areas of NM where grazing just doesn't make sense. It is not an efficient use of the land. Unless there is a tremendously significant financial benefit to grazing on the Preserve, it should be discontinued! I grew up on a farm and farmland, I am very tired of seeing overgrazed and abused land. It is wonderful to see areas without cattle!!! The grass is tall and the water is clean! I have nothing against ranchers or agricultural use of the land - I grew up that way - but the best use of the Preserve land is NOT grazing.

68 As long as it doesn't [sic] impact elk grazing. As always, everything in moderation.

69 Elk are fine. Cattle are too destructive. Aug 18, 2010 8:44 PM

70 Without grazing, sooner or later the entire Preserve is going to burn... what happens to the recreational experience then?

71 Well managed grazing with quality [sic] livestock would enhance [sic] it, the western image you know.

72 Livestock production provides a significant contribution to the balance in the multiple use concept.

73 Cattle grazing is good for the environment and helps control the grasslands. Ranchers strive to conserve natural resources as they are vital to their success and crucial to future use.

74 Grazing by bison would be much improved over cattle.

75 Livestock grazing is essential to managing [sic] the preserve and to provide resource enhancement [sic]

76 As long as it is limited.

77 Again, properly done, grazing is part of a healthy watershed

78 Grazing is foremost a profiteering enterprise with land protection a far second. Must have grazing? Then let it be publicly owned grazers. Buffalo & elk are of and for this land. Graze them for the public good, not for private gain on public land.

79 It needs to continue to be a working ranch!

80 Without grazing the future of the Preserve is doomed.

81 Cattle need to be fenced from the wetlands and developed recreation areas.

82 Not at all . . . in fact, it could be used as a tool to enhance the cultural experience to the mindless visitors

83 Use of ALL of the Preserve's resources to make the property self supporting are part of what sold this property to the people... grazing, timber, recreation, etc.

84 As long as it is properly managed for elk and cattle.

85 Grazing has to continue to maintain the ecosystem.

86 Though I am not necessarily against it, cows and sheep (and their waste) in my campsite or hiking trail would certainly be less than ideal.

87 Controlled grazing is acceptable but not overgrazing Aug 25, 2010 3:34 PM

88 Rotational andd [sic] controlled grazing is a good use of the Preserve and can add to the rec. experience

89 More importantly, grazing is in conflict with resource protection

90 I have had my recreational experience on the Preserve greatly diminished by livestock grazing in the past, and feel it has no place on the preserve and that is merely a historical relic. There are plenty of places where grazing research can be conducted away from special areas such as the Valles Caldera

91 grazing is a tool to assist in managing grass lands

92 Reintroduce wolves to control the elk. Eliminate subsidized livestock grazing! No Cows on Public Land! Enough!!!

93 Use bison instead of cattle for management of grasslands.

94 While I can ignore the grazing, I don't think it should be allowed.

95 Grazing by non-native species always diminish's [sic] the natural experience. Bison, elk, no problem.

96 management critical. so often allowing grazing at any level leads to overgrazing.

97 limited grazing may be ok. It should not become like areas of the Jemez. Should not have to repair damage.

98 over grazing is a problem

99 grazing should be kept to small numbers and moved frequently

100 lets face the facts, the West is getting drier, and cattle/sheep grazing on public lands [sic] is an outrage anyway, because the fees typically are less than half of similar private leases

101 If there are special areas within any reserve that need protection from cattle use, fence them out.

102 Except for the bloody flies!

103 grazing is detrimental to mountain streams

104 imported elk stripped willows from stream banks : significantly changing the fly fishing experience; get rid of cows introduce [sic] wolves

105 If it cost rancher more, they will pass the savings on to the consumer.

106 depends on stocking rates, and my use - i.e. if I was backpacking, i would not want cattle using my water source.

107 the current grazing intensity didn't detract from my visit, but I wouldn't want to be hiking through cow pies

- 108 it does diminish the experience in traditional grazing format with cows. go [sic] for buffalo and i [sic] would feel better.
- 109 If grazing happened at low levels with no impact on the riparian areas it would be an acceptable trade-off to have the NPS take over management [sic]
- 110 Why should the Ranchers profit from this? What do they give back?
- 111 Perhaps limit
- 112 minimal grazing
- 113 As long as it was minimal
- 114 Cattle grazing diminishes one's recreational experience. I'd strongly favor allowing bison grazing, which would improve the recreational experience.
- 115 grazing should [sic] be limited and monitored to prevent ecological damage.
- 116 Grazing should be restricted only to scientific research and not financial gain.
- 117 Grazing is currently utilized in our national forests as well.
- 118 If managed properly I don't think grazing would diminish the experience. But, cattle should be managed based on scientific principles and operators should pay a fair market price for access to the land, not the current rates.
- 119 But they should still let locals graze their small herds.
- 120 Depends who owns [sic] the cattle or sheep ! 121 Grazing greatly diminishes rec [sic] experience. manure, flies, bellowing cattle all night, compete for food with wildlife. Bad Bad Bad. And a money loser. Why?
- 121 It is good that the survey does not use the term "ranch." Baca Location No. 1 is not now and never has been a ranch. It's only ranching function has been to provide summer forage for livestock.
- 122 Domestic livestock feedlots and auctions are private business that should not be conducted in the public land. "Ranching" can be defined to be profit from products (meat, art, hide, etc) of elk, deer, bear, coyote, maybe wolf -- native wildlife species -- as well as need to reduce methane in air and watershed fouling from cattle.
- 123 cattle culture ISNT endangered!! At the very least cattle should only be allowed during summer months like most wilderness areas.
- 124 I've seen first-hand what cattle/sheep grazing is doing to parts of the Gila National Forest.
- 125 grazing was not the original intent of this land. the cattle are not indigenous [sic] to this area.
- 126 Provide management plans to allow all users to interact in harmony with each other.
- 127 Grazing certainly would damage the ecosystem more than my hiking, skiing [sic], or biking would. If grazing is allowed, I cant accept the "preservation" excuse for keeping me out.
- 128 grazing is detrimental to indigenous wildlife and habitat. just because it's been going on for a while doesn't mean it's a good idea.
- 129 BLM or appropriate agency needs to charge FAIR MARKET VALUE for grazing not some ridiculously low subsidized amount because of lobbyist [sic]
- 130 Absolutely. Destruction of riparian areas, displacement of wildlife, stench, and flies definitely diminish my recreational experience.
- 131 as long as the numbers are limited and done within sound scientific limits
- 132 However, grazing must be done within the ecological limits of the area and account for annual climate variability
- 133 There again, it depends on the quality of management
- 134 I'm sure the preserve was once home to unregulated hunting, fishing historically, before it became private property. Doubt anyone would advocate for either to continue based solely [sic] on what's happened in history.
- 135 I am really concerned that the presence of grazing animals has very negative
- 136 potential, despite the best intents of those controlling [sic] the grazing.
- 137 please keep this treasure as pristine as possible it is a magical place
- 138 Prefer hunting to grazing (and I'm not a fan of hunting.) I believe Elk hunting revenue far outstrips grazing revenue.
- 139 Have encountered grazing cattle in many places; damage more than people on foot & can be nasty
- 140 As long as the grazing areas were not intersecting with the recreational trails, I don't see a problem.
- 141 A lot depends on the number and location of the animals. I prefer NO livestock unless very limited.
- 142 NO to grazing!!!
- 143 Eventually, I think it would.
- 144 Seeing the grazing taking place (and the ranch houses) is part of the recreational experience!
- 145 Per #26-I am also a property owner in Jemez Springs, NM
- 146 minimal grazing is acceptable, so [sic] elk herds are supported [sic] .
- 147 Some HIGHLY REGULATED grazing in small areas is best.
- 148 Yes, the cows graze on the head waters of major streams and contamination hurts everyone.
- 149 only if it is overgrazed
- 150 this again needs more thought and control or management not based on income or etc
- 151 Primeval experience opportunity with Elk replacement [sic] cattle. Cattle are plentiful elsewhere, Elk are rare.
- 152 If properly done.
- 153 i.e.- San Pedro parks is "no impact" yet due to cow feces everywhere [sic], you can't pull water from even the springs sometimes! You can't find a clean spot to pitch a tent or cook, and twist an ankle in the holes their hoofs

- leave everywhere . Everything in moderation, though I know certain ranchers locally make that hard sometimes!! ;)
- 154 I am torn on this. On Q24 my inclination is that grazing should NOT be allowed, again, I really don;t [sic] have enough data to make an informed decision.
- 155 Grazing causes more environmental damage than most forms of recreation. There's nothing historically significant about "more than a century" of grazing....
- 156 Cattle grazing destroys the land, yes? Why do it? Otherwise, perhaps restrict it to a very small-ish area....
- 157 I feel that grazing of bison should be considered, although it is not the "historical" grazing animal of the area there are some benefits...
- 158 Grazing has pluses and minuses. It is historical, sort of sustainable, and has research value. It also has quality of experiecmna nd [sic] water degradation. If I had to pick keeping grazing or allowing more access and mild development, grazing loses.
- 159 There is real no need for it there and I'd prefer the forage to go to the elk.
- 160 SELFISH !!!! This is PUBLIC land paid for with PUBLIC money. It's NOT your private playground or 'church'.
- 161 I ride motorcycle and these cows already have more rights than I do.
- 162 slightly, but this can be tolerated
- 163 If grazing is damaging the land or habitat, I would be against it.
- 164 possibly, but hopefully not often
- 165 Part of the experiment with grazing was to manage the cattle. Water quality downstream on the San Antonio has been severly [sic] impacted because management style seems to be to keep the cattle on the riparian and streams. (
- 166 depends on how and where it is allowed
- 167 it dmages [sic] the land
- 168 bovine are invasive, non-native additions to the landscape

Appendix 7.15 – Question 29 [Party Affiliation?]

- 1 None of your business
- 2 that shouldn't matter unless some dumba** in Washington screws things up!
- 3 you don't need to know to make Valles decisions-how dare you ask this
- 4 Like that makes a difference
- 5 Libertarian
- 6 none of our business
- 7 Very inappropriate question for a research poll
- 8 This does not matter
- 9 I don't believe this is relevant - we should not have political parties
- 10 lliberal [sic] republican or a conservative democrat...both heads of the same snake:0)
- 11 Don't affiliate with parties, just with what's ritght [sic].
- 12 none of your fucking bis [sic]
- 13 N/A
- 14 Currently undecided
- 15 What does this question have to do w/this?
- 16 Don't wish to state.
- 17 This is a really stupid question. Grow up
- 18 What has this got to do with my responses?
- 19 tea party
- 20 None of your business
- 21 My party affiliation has no bearing on the situation of the Valle Grande.
- 22 What difference does it make?
- 23 liberal with conservative tendencies depending in the issue
- 24 none of your business
- 25 Conservative, native New Mexican
- 26 none of your business
- 27 Green
- 28 REFUSE TO STATE
- 29 Green
- 30 none of your concern
- 31 Prefer not to disclose, not appropriate [sic] for this survey
- 32 American
- 33 AMERICAN
- 34 Why in the hell does this matter?
- 35 none of your business

36 None of your damn business
 37 Green
 38 social progressive, economic conservative(the way it used to be used)
 39 What do you care
 40 Green
 41 Non US citizen
 42 none of your business
 43 none of your business
 44 non demononational [sic]!
 45 I am registered as "declined to state" because I am disgusted with the party msystem [sic].
 46 None yer bizness [sic].
 47 not a question you should even be asking
 48 how i feel about this matter has nothing to do with politics.
 49 it seems there is little difference. we have no real voice.
 50 Conservative
 51 Conservative,
 52 I would like to think that doesn't matter.
 53 not required
 54 No affiliation
 55 I'm an american [sic] and should not be locked out of my land
 56 Not a viable survey question
 57 Green
 58 this is none of your buisness [sic]
 59 Huh?
 60 what difference does this make?
 61 how is this important?
 62 I support only the United States of America and no affiliation [sic] to any parties.
 63 Green. But politics shouldn't be on the survey, in my opinion.
 64 green party
 65 Not relevant to the protection, study and use of public lands.
 66 Libertarian
 67 libertarian
 68 This violates my privacy act.
 69 Tend to vote Republican but am Independent
 70 Conservative
 71 What does Party Affiliation have to do with this?
 72 why are you asking this question??
 73 Tea Party
 74 Green Party
 75 seriously??
 76 crazy question
 77 STUPID QUESTION!!!!!!!!!!!!!!!!!!!!!!
 78 non-demoninational [sic]
 79 non-confidence

Appendix 7.16 – Question 33 [Please provide any additional comments or thoughts about recreation on the Valles Caldera National Preserve]

1. love it just the way it is. hate the thought of it changing
2. Cost of recreational activities is prohibitive, which may be the preserve's way of limiting the number of visitors. The last "free day" several years ago was a fiasco because of all the visitors. A happy medium between these two extremes.
3. I just hope the NPS does not take over operational responsibilities in the reserve - look @ Rocky Mtn & Yellowstone wildlife issues.
4. The Caldera needs to be turned over to a Fed Agency ASAP, with all fishing and more hunting opportunities provided. While "cultural sites and issues" exist, they should not be a controlling factor in the use and enjoyment of the Caldera by the American people - not just native americans [sic]. Their tax contribution is a minor fraction compared to the rest of the American tax payors [sic].
5. Do NOT let Albuquerque residents trash the place like they do EVERY weekend at Fenton lake
6. turn the Valles over to the National Park Service. Access is far too limited the current situation.

7. A quality trail system for hiking, biking, and backpacking is missing and needs to be built and maintained before the preserve will be taken seriously as a park!
8. You could open certain areas on certain dates or even days of the week to increase access while minimizing total impact... charge fees comparable to state parks. Limiting auto access to existing roads would certainly help, but limiting bike access would not.
9. It belies all common sense that no more than the Preserve does, it has an annual budget of 4MM. That is a typical government black hole. I should have filed an RFP and shown those dipsticks how to make it work...only when they stopped doing things like the previous owner did it go downhill. The other guy made it work. since the govt took it over, it has become a regulatory nightmare, with everyone and their brother (employees) dipping their finger in the government pie....its a ranch, with outstanding elk hunting, why must it be treated different. needs to go back to private hands.
10. Preservation of the Preserve in it's current state is paramount. Any activity with the potential to compromise the preserve or it's quality should be prohibited. The preserve is of such value that close management is absolutely necessary to maintain it's quality. This is more important than providing access. Increased access will destroy it. Put simply, some places should stay as they are. This is one of those places. God forbid that it turns into an amusement park, like Yellowstone or Yosemite.
11. Hope to be fortunate enough to hunt the Preserve
12. Move the main access road to a less visible place. Require an orientation prior to camping, cycling, trail use, equestrian activities. If camping is allowed, NO FIRES is mandatory policy: fuel stoves and propane "campfires" only. NO ATVs, even on trailers. Park them at the gate. Single access point. If a perimeter trail is developed, access should be controlled via locked gates and permits.
13. the current programs has not worked, poor organization, hard to make contacts via phone or internet. reservations are lost, when staff does not show, you find out when you arrive for your planned activity. believe strongly that the National Park Service and and will do a better job at the caldera I have worked for and with with the NPS as an employee and an advisor through friends groups, and find they are much more responsive to the public need than the current do nothing organization. If possible I would like to talk with you my cell number is: XXX-XXX-XXXX
14. It is supposed to be run like a private endeavor bur since it is run by public agencies and their employees it is actually run like a bureaucracy. The operation of the VCNP should be leased or contracted out to be run like a alef sustaining private enterprise which was the original intent of the Trust. This can' t be dome with bureaucrats at the helm.
15. I THINK THE LEGISLATIVE REQUIREMENT FOR SELF SUFFICIENCY SHOULD BE TAKEN AWAY AND THE PRESERVE SHOULD REMAIN WITH THE VALLES CALDERA TRUST. WHEN THE VALLES CALDERA WAS OPEN TO THE PUBLIC THE EXPECTATIONS WERE UNREALISTIC ABOUT HOW FAST IT WOULD BE READY FOR PUBLIC RECREATION AND HOW MUCH PUBLIC RECREATION AND ACCESS THERE REALLY COULD BE. THE RESTRICTIONS UNDER THE NPS WOULD HAVE TO BE SIMILAR OR MORE RESTRICTIVE BECASUE OF THE AGENCY'S PRESERVATON MADATE. RESTRICTED USE OF THE PRESERVE UP TO THIS POINT WOULD HAVE BEEN NECESSARY REGARDLESS OF WHICH ENTITY WAS MANAGING IT BECAUSE OF ALL OF THE EIS AND INVENTORY WORK THAT HAD TO BE DONE.
16. Need campside [sic] camping, small, scattered, sites. Walk in, or bus only.
17. The Valles Caldera is a very special place. It is truly a national treasure. The wise use of this resource is necessary so that future generations can enjoy this land.
18. Need more access to rim areas. This is the jewel of the Valles that is not accessible or rarely is.
19. I am concerned that the current management has limited recreationists use because of preconceived notions about the posible [sic] impacts rather than factual information. They also have not communicated well with the public on opportunities or the rationale for their decisions.
20. The Feds can screw it up. They can't even manage Yellowstone. No \$\$ - I'm sure Obama will tax SOMEBODY, but the VC will never see it.
21. In my opinion, the preserve fails because no one can agree on anything; therefore, no decisions are ever made. The ranchers and the environmentalist follow such extreme view points that no middle ground is ever reached.
22. Should be a National Park
23. I believe access should be increased. If this access is well managed, then negative impacts on the environment and cultural aspects of the VCNP can be minimized. This is what I would like to see happen.
24. I understand that the charter requires the Valles Caldera to be profitable (i.e., self supporting) within a certain period of time. However, too much access or recreational use will destroy the very item we are trying to protect and preserve. It is a National Treasure and should be preserved at all costs. Privatization would destroy the resource! If necessary, reduce access even more to balance costs. If grazing is to continue, it should be at a premium price, not the NFS or BLM rates. Resident Elk hunter's should be charged a premium for the opportunity to hunt ch preserve. Also, a portion of the monies collected from the NM G&F department for the 'Quality' elk tags paid by non-residents should be given back to the Caldera.

25. I personally think this area has been dreadfully mismanaged, takeover by the NPS could not come a day too soon. The day we went fishing was awful, the two best parts of the day not allowed, van left 45 minutes late, spent about an hour getting your van unstuck, bunch of little tiny well fished browns. What? No natives? For \$35?! I will never support VCNP again in any way, won't be back, no more elk lottery tickets, nada. Such a great opportunity squandered, good goin [sic].
26. Most of your questions are not cut and dried. More visitors and more frequent/controlled access is doable, but only with more personnel to manage it. Can those additional personnel be funded by the increase in visitors would have to be determined? You can't compare the Caldera with Bandelier because you have to balance/manage many more entities (hunting, fishing, larger area, more road structure, etc). Too many visitors will upset the environmental and wildlife balance, thus adversely affecting all aspects that the Caldera offers. Much harder to manage than a Park such as Bandelier, which I don't want to see it become. I hope you can keep it as much a natural and preserved environment as possible.
27. with the need for reservations it has been too difficult to have access to the preserve
28. I want to see the grazing continue. I think the elk hunting could be enhanced [sic] with better genetics. It used to have them. I think they could take more elk each year. I don't think they are making the most of that commodity.
29. I have fished and hunted the preserve on many occasions [sic] and I fear that once the gate is open to the extent that Bandelier is the elk will be too disturbed to stay on. I would prefer the status quo in regards to how it is run for that reason. It truly is a world class hunt now and I feel that I have a good chance to pull a tag.
30. My race and amount of income are not important for the survey
31. there is recreation already occurring despite the restrictions, VCNP management cannot prevent it, just validate it and quit threatening us with trespass. You must control the unmanaged destruction that is occurring in the SFNF on the periphery of the VCNP but you must allow the tax payers to have more unfettered access to our lands
32. VCNP should be allowed to finish out its original 10 year mission. Congress should take out the provision to make it self sustaining. That is not going to happen under any condition.
33. The Preserve is a valuable and beautiful natural asset to the State and to the public. But in order to keep the 'specialness' of it, recreation does need to be limited. However, in order to increase revenues, I believe SOME additional recreational activities can be added.
34. this is a national preserve the people need access [sic]
35. I would like more opportunities to camp with my family. It needs to be used but, very wisely
36. I do believe that most recreational activities are compatible. However, the proliferation of off highway vehicle use can significantly diminish the quality of outdoor recreation for non motorized recreationalists. There is more than adequate recreational opportunities for OHV users on national forest land and should be restricted on the preserve.
37. Your question 20 doesn't have to be negative. You can increase access with minimal impact to the environment
38. I think the Preserve could offer a lot more recreation if they managed it as Bandelier [sic] does.
39. I believe it is possible to allow more access to the Preserve without destroying it.
40. if the preserve was purchased with federal money, then nonresidents should have an equal chance to draw elk tags as nm residents. all should be drawn from the same hat.
41. Gravel roads are acceptable, they don't have to be paved. Limit motorized traffic to roads and restricted trails.
42. Beautiful place. Wish it had more hiking/biking trails (not roads). Keep it limited - don't mind paying a little more for the exclusivity.
43. It is too valuable a property to lose it's very special flavor.
44. Question # 5 "adequate" may mean many things. I agree that the access has been adequate given that I know that the VCNP is a new preserve. However, I have been checking out the VCNP since 2005 and would have loved to participate in more hiking if it were open. Good luck with your masters thesis.
45. thank you for doing research and the survey
46. I do not want to see increase access and usage fees in Valles Calderas. To the extent mineral and timber extraction as well as grazing is permitted on public lands, these funds should subsidize public access and use on all public lands, including Valles Calderas.
47. The new legislation transferring the Preserve to the National Park Service is long overdue. The current management is utterly incompetent.
48. I believe this is a preserve and as such should be maintained in the present condition for future generations. If that means limiting the amount [sic] of visitors, then that's [sic] what I would do.
49. Let's support the change in management of the Preserve to a National Park Preserve - so, that it can benefit from professional land management.
50. The Preserve seems to be underutilized right now. Access is very limited to many parts of the Preserve. I would like to see a lot more low impact activities allowed in the Preserve.
51. I WOULD LIKE TO SEE THE PRESERVE STAY AS IT HAS BEEN SINCE 2000. I ENJOYED MY ONLY VISIT THERE AND LOOK FORWARD TO COMING BACK....IT'S FINE WITH ME TO HAVE TO WAIT FOR SUCH A GREAT EXPERIENCE
52. All weather yurt camping with a lodge for programs, meals, and relaxing at each camp ground. If it is too awkward to use buses or shuttles to get to the yurt/lodges, have pull carts, wheelbarrows or electric carts to move camping equipment/food to the yurts from the parking areas. Stock ponds for family or handicap fishing to protect

- the meadows that the creeks/rivers run through. Where the yurt camps are, run boardwalks over wetlands and near creeks. Have designated family and handicap trails in the area. Use shuttles to trail heads further away. Open up the Seven Springs access and campground to tent campers. Encourage BIA and Pueblo LEOs to work with NPS LEOs in the VC.
53. it would be nice to have blocks of time to use the Caldera instead of just certain days like the bike rides are only offered on weekends and I have days off during the week. I would love to bike and hike in the fall and the last bike was last weekend (aug.7) it is so hot there in the summer!! thank you
 54. I have a pass to fish on the San Antonio River this August, It will be my sixth visit to the preserve. Please keep it as natural as possible, no more roads, no paved roads. Thanks for the opportunity to visit and enjoy this fabulous place.
 55. We have wasted a great opportunity here. Sad that we allowed politicians to manage instead of real managers. Funny how the local Casinos don't hire politicians to manage, but hire politicians to protect their interests (or culture) as they may call it. Survey was poorly done, too vague.
 56. I have enjoyed geology van tours but what was about all I could do since it seemed to require so much planning ahead to do things on the Preserve, & we live several hours away.
 57. I believe the Valles Caldera is a NM jewel of a natural resource and should be afforded some degree of protection. This, in itself, is a testament [sic] to the value ranchers have placed on their ranch lands and the stewardship of the lands they have provided over the centuries. However, like the adjacent National Forest, unrestricted access will quickly degrade the quality of this resource. Perhaps a wilderness designation will provide the balance of increased recreational access and environmental and cultural resource protection. Most NM public lands need to be accessible to all. But not all public lands need complete access by all. Some need protection. The Valles Caldera needs protection. We are not making any more of the pristine lands that I have witnessed first hand on the Valles Caldera.
 58. The current management including the trustees [sic] of the VCNP, have limited access, never use any of the great recreational suggestions that was provided by staff and provided with the Public Input Meetings. You should gather that information, from all of those meetings that happened. Those meetings suggested lodging, with horseback riding to different locations, by a local guide; snowmobile use with a local guide; cookouts with a local mobil [sic] vendor; camping with permits; etc. VCNP paid to have a company come out to access Public Input. A lot of the areas were never opened like the Paddock area for horses, because it was never finished in a survey to be open. Please gather that information to complete your survey.
 59. Never allow mortorized [sic] recreational vehicles (ATV's, dirt bikes, snowmobiles etc).
 60. I would like to see more access allowed without roads/shuttles. IN other words, you have to walk or pedal yourself in.
 61. In today's word we, the people of the United States, have been handed a very unique opportunity the visit, fish, and hunt this pristine wilderness area. The fees and limited access are reasonable, it is not reasonable for the site to be selfsufficient [sic] form a financial perspective. The real focus should be maintianing [sic] the individual experiences available at the site, and the access fees are reasonable an do not really prohibit anyone from access. The fees and reservation system help ensure the people visiting have a strongdesire [sic] to experience and presereve [sic] this unique asset. If it is open to the general public all hope is lost and the pristine and unique flavor will be lost forever; how truly sad that would be.
 62. The Caldera should be treated as a national park. Environmental damage to some degree is inevitable, but need not be serious, much less catastrophic. If the NPS can figure out how to protect sacred places such as Yellowstone and Yosemite while permitting millions of visitors, there's no reason a wise and workable plan can't be conceived for the Caldera. As for cattle grazing, I'm sorry, but who really cares? This public asset should not be a scientific station to to service the cattle industry. And I certainly don't think cattle ranching should be preserved for "cultural" or "nostalgia" reasons. That's almost laughable. The big issue here is infusing the Preserve with enough capital to build a reasonable level of infrastructure. Then devise a responsible usage plan that lets people finally enjoy this wonderful place in a way that's open but mindful of abuse. As I said, it's been done successfully in parks all over the nation. There's no mystery. All that's needed are the resources and the political will.
 63. Maintain it as a wilderness area at all costs, while allowing limited controlled recreation. The fishing and hunting program access is about right.
 64. I thank you for this survey. I loved answering the questions you asked. Why, though, do you want to know my income and party affiliation? I am so hopeful that the National Park Service will take over management and that then we all will have greater access to this beautiful, geological wonder in the Jemez Mountains!
 65. The preserve is a magical place. I have enjoyed the many visits there. And even though on a selfish level I would love to be able to camp and spend more unrestricted time there, I don't want that to happen. Too often on hikes or camping in other areas I see trash, destruction and complete disregard for the enviroment [sic]. It would break my heart to see that happen at the Valles Caldera.
 66. I believe that quality can still be maintained while allowing more access. However, in order to increase recreation, management should hire someone with business experience and vision. Someone that has had to make sales, earn the money for their business. It should not be run by ex-government employees that do not know how to create income, they only know how to spend government budgets

67. I love the preserve, but I wish it was possible to see more of it without ruining the nature of the experience.
68. Hope we get easier access to hiking, biking 7 days a week...
69. As a retired National Park Ranger I spent my career balancing protection, preservation, and promoting use of our natural lands for the enjoyment of our citizens, both for the present and for the future generations. I believe in that premise.
70. Grazing and hunting are important for the Valle because of the vastness of vegetation. Hunting has been a large asset for the Valle and a benefit for many people. Grazing keeps down the fire danger. Access has always been an issue. Sometimes the ability for sustainability [sic] and protecting conflict. Public access is important, but needs to be controlled at some level.
71. I treasure every minute I can spend here.
72. ample access with patrolled [sic] supervision and education can work if income can offset expenses
73. Your current (relatively new) schedule of events and access has greatly increased my belief that the Caldera is finally a reserve for the public good BUT it clarifies that it is a Preserve and is not a park to populate with recreational vehicles, allterrain [sic] vehicles, radios, volleyball nets, generators, etc. It must be treated with quality nature, backcountry and wildlife experiences in mind. WE CAN NEVER GO BACK if we change the Preserve into a PARK like every other place in NM. We will have missed our chance to save this pristine place and help people engage in it's beauty in a particularly intimate and special way. How else can we truly appreciate nature and change our personal perspectives than doing WITHOUT our daily accoutrements in order to fully engage in nature and listen to it speak.
74. I had the good fortune of hunting a cow elk during the first year that public hunting was allowed on the VC. I will never forget that experience. I also fished the preserve more than a dozen times in the first few years of public access and witnessed the degradation [sic] of the fishery to the point that I really didn't bother going there because better fishing was readily available. This is a special place. It should be managed for quality, not quantity and the prices visitors pay should reflect this. Interestingly, there are so many places to hike and camp that the VC could price itself out of the market unless a marketing angle can be found. Hunting and fishing, however, can collect a fair amount of money only if the QUALITY is there! I love this place and I really miss visiting now that I've moved out of state. I continue to apply for a bull tag every year and hope that one day I'll be a lucky recipient of a tag. Moreover, I hope that the VC can find a way to make a profit while keeping the spirit and pristine feel of the property in place.
75. Access is almost non existent [sic] to most of us. A casual visit is not allowed, most access must be to activities planned weeks in advance. It completely stifles access. Allowing better access would give better public support for the Valle.
76. super place
77. VCNP is a treasure for our state, and I believe balanced management can preserve its beauty and value while offering recreational enjoyment
78. I think hiking, mountain biking and running should be allowed on the preserve, but from a common entrance point. Therefore, no motor vehicles should be allowed entrance. Enter on your feet or not at all.
79. I have had several opportunities to be at the preserve and one of them was an open house a few years back where I was a volunteer. The preserve is so pristine and beautiful and I think increasing recreational activities would be very very [sic] detrimental to it. I would like it to remain the way it is with very limited access and guided tours.
80. Roads on the Preserve should be kept as is, repairing as needed. Keep things as natural as possible.
81. I'd love to see more trails for non-motorized activities in the preserve. I would not like to see the national park service take ownership.
82. the elk hunting should be once in a lifetime (ALL HUNTING) A DEER HUNT SHOULD BE INTRODUCED the fishing is awesome
83. There should be some part of the park that is accessible to people who are just passing by, something like a short drive and picnic areas available at low fees (less than \$5/car). People who are really interested will come back and camp. I agree that there will be some environmental impact around a campground but 90% of those people will not go more than 1/2 mile from their campsite. People who backpack aren't going to pay your prices when there is wilderness available for a parking fee.
84. We took a 3 hour wildlife van tour, and a 6 hour archaeology van tour, and they covered the same territory and information.
85. I feel the preserve offers a unique experience, and that access by various means of recreation can be controlled or moderated if necessary!!
86. The fishing regime as it is this year 2010 is good and should be repeated. There is a need for additional well-considered access points for private vehicles.
87. I have taken both my Dad and Father-in-law to the Caldera. Both of them loved the fact that we were essentially alone with not sounds but the sounds of nature. It is a one of a kind experience.
88. My family has known the Baca/Valle Grande/Valles Cldera [sic] since the 1920s. the current situation is unmanageable because the Board is too large and I am sure consensus is hard to come by. The environmentalist [sic] will not give an inch and Conservationists are not given a chance. My father advised Pat Dunnigan to give the ranch to the Forest Service and that would have happened if Mr. Dunnigan had not died suddenly, and no

- money would have passed hands and all New Mexicans and Americans would have access to a marvelous place and not at our Tax money expense. This place should be shared not kept as a private playground for the majority environmentalists [sic]. Being up there and seeing the Forest Guardians being allowed anywhere, but common everyday New Mexicans not being able to drive through without hiking or biking or going on group tours???? It is a liberal shame!!!!!!
89. during a "drive and discover" held by the Board of Trustees", I was a volunteer, and you can not [sic] imagine the damage that was done to roads. vehicles and their drivers, would not stay or remain on designated roads, they did sever damage to roads, a typical one lane road was turned into a two lane road by the time the event was over. the moved barricades, trespassed,
 90. I didn't like the way the preserve changed the way the youth elk hunts were conducted 2 years ago to where a youth & adult mentor [sic] both draw a tag. I preferred it when all the tags went to youths. When they did this it gave half of the tags to adults & made the odds of a youth drawing a tag 50% worse. In my opinion it is supposed to be a youth hunt for youths & the more youths you can safely allow to hunt the better.
 91. Extremely difficult juggling act to preserve the space and make it available to humans. No easy solutions.
 92. The guided hikes have been wonderful, but they are very limited. More access for hikers, please!
 93. Thank you for doing this survey at this time. I hope the results are beneficial for the future of the Valles Caldera.
 94. The preserve is a beautiful experience. Don't ruin it.
 95. I would not like to see typical NPS infrastructure in Valles. The campsites, RVs, ATVs, bikes, etc. and all the trash and crowding would kill the Valles, too crowded.
 96. I have been volunteering at the Preserve for years plus I am a neighbor. In my opinion, the current management concept has failed due to ignoring public input and hiring people inadequately trained for the tasks at hand. The board of trustee format has failed in my opinion as too many interests are pulling the Preserve in opposite directions. Many residents in the vicinity of the Preserve (many of whom used to volunteer and be in support of the VCNP but have given up on the Preserve) are frustrated. The Preserve is not perceived as a good neighbor by many. I am glad that there is so much beautiful country outside the Preserve which I use a lot while waiting for a more sensible management approach at the VCNP. It does not look too good, though.
 97. The preserve is a nationalo [sic] jewel that everybody should get to see, however limited access [sic] needs to be maintained or we will lose it's beauty [sic] like many other jewels i.e. Yellowstone, Bandelier [sic], The Redwoods, and many others.
 98. I'm a taxpayer and a responsible dog owner but I can no longer hike with my dogs on the Coyote Call and Valle Grande trail and neither can visitors to the area traveling with dogs who might want to stop and stretch their legs.
 99. When I had the time I couldn't win their stupid lottery to get to fish, I'm glad they opened that system up. Not all of us work Monday to Friday. Why can't there be more available during the week when I'm off? I'd rather see them build a few roads and discourage off road travel. Roads can be built responsibly. There should be a middle ground somewhere. The current system has been a failure if supporting itself was a true consideration. Too many opinions trying to keep everyone out. I'm glad it's still in great shape, but I'd like the chance to see it before I am too old to enjoy it!
 100. If the preserve is managed correctly and the visitors are respectful on the area there should not be any problem allowing recreational activities on the preserve. I believe the preserve is being managed quite well and should continue it's [sic] mission to protect this beautiful wilderness while allowing people to experience such beauty without destroying it. It is a juggling act but it can be done!
 101. The Valles Caldera has been exceptionally mismanaged since its inception. Too few and low quality recreational experiences for exorbitant fees, especially at the beginning. It is not surprising that the preserve receives so few visitors. Fantastic opportunity lost.
 102. Well, your sample is biased because, for example, there are no recreational participants who HAVE camped in RVs or done motorsports in the Caldera. This is a methodological observation. I would still favor prohibiting RV camping and motorsports at Valles Caldera.
 103. I think livestock grazing is the single largest detriment to the environmental health of the area. More areas should be opened to artists of all mediums
 104. Get rid of the research and cultural sensitivity. This was a working ranch before, make it so again with public access and fewer livestock. Anything else is a waste of resources.
 105. I have spent many months on the Baca Ranch beginning in 1938 and have observed many changes in ownership and policies ending with Pat Dunigan of Abilene, TX. Pat hired my father, Homer C. Pickens, as his conservation officer/advisor upon his retirement as Conservation Officer for AEC at Los Alamos. The last meeting I attended between Pat and my father was a discussion about the ownership transfer of the Baca Ranch to the USFS. My father, who was the most knowledgeable person about the Ranch's conservation management, recommended that Pat give it to the USFS because of their multiple use policies. Pat agreed and except for his unfortunate death, it would have been that way and your research project moot. For ithe [sic] most current and indepth [sic] information on the Valle Grande, access my father's papers, he was also the former Director of NM Game and Fish Dept., which are archived at New Mexico State University Library (Rio Grande Historical Collection) for a wealth of data. Both Mr. Dunigan and Mr. Pickens were adamant about the USFS management of the Valle. I

- would hope that that request be honored. A management plan like that of Valle Vidal will keep the Ranch as a treasure with access to all the people who would share its God given beauty.
106. Limiting the commercial use of the preserve needs to be weighed against maintaining its status as a preserve vice national park. The caldera was a working cattle ranch for decades holding thousands of cattle, but now is, I'm told, is now limited to approx 500 head. Bad policy due to the misdirected ideas of the enviros [sic]. The preserve could sell at auction or raffle, 20-25 elk hunts, but the local NM hunters had a fit saying you are taking opportunities from working class hunters, again bad policy. It is time to get a set, grow up, and make the preserve a breakeven operation. However, adding use will generate trash in the areas now fished, for example, that are pristine and you do not see other anglers. Tough balance but can and needs to be done. Get the politics out and we can have a truly wonderful recreation area that is well maintained and a great place to visit.
 107. The VCNP needs to have educational programs such as the Nature Odyssey run by PEEC in Los Alamos. Only by helping children understand this place will they learn to support it in a thoughtful way.
 108. personal vehicle access enhances the experience and should be continued but on a limited scale. no paved roads are necessary but better parking areas are.
 109. the Preserve is a special place. i hope it can stay that way. limiting the number of people and opening it up a few more activitys [sic] might work. also, a visitor center out by the highway might draw more people to the Preserve.
 110. More mountain bike trails. I was looking a google [sic] earth of the Preserve. There are many old roads that could be reopened for use of horses, hiking and mountain biking. Creating new roads would be a waste of money.
 111. The Preserve provides unique opportunities for scientific research on climate change and its affect on hydrology, flora and fauna. This information can be used to guide management decisions on other lands- public or private. The Preserve is important for many reasons - wide variety of longterm [sic] data, single pourpoint [sic], geologically unique area.
 112. My only experience with Valles Caldera is in applying for elk hunts in this area. No success to date.
 113. Many of your questions are not questions of either/or; e.g., environment or recreation. Management is key.
 114. I worked on a plant survey several years ago in the back country of the preserve. Before that i felt that more recreational access should be allowed. After spending a day watching the elk, coyotes, raptors live their lives untroubled by people I changed my mind. The preserve should be protected as an example of what wilderness could be like without human intervention. I know that is simplistic but I do feel that human impact should be minimized as much as possible! Good luck with your study and thanks for the nice map.
 115. My view is that the VC National Preserve should be more accessible than it has been while not being as "wide open" as a national park. Furthermore, the current road "system" within the VC seems adequate and greater access should be promoted by increasing the number of hiking trails.
 116. I think cattle and sheep grazing would be fine as long as numbers and locations ensure that the environment is not degraded.
 117. Wonderful place, very good people staffing the recreational side
 118. I was very pleased when the VCNP was finally acquired from private hands. I have been very pleased to have been able to enjoy the Preserve on several outings - it is a very special place. I have been disappointed on how slow and somewhat limited access has been granted. I have lost interest in the VCNP since those early years due to this. I do believe that use can increase, and that the quality of the experience and the "pristine" nature of the VCNP can be maintained. I think that it is very important for people to know that when they come onto the Preserve that it is THEIR responsibility to help maintain it and that if they are caught littering, for example, that they be heavily fined, or escorted off and not allowed to return for some period of time. It is the responsibility of the public to also help keep this a special place.
 119. I've been using the VC since it opened. Two elk hunts, multiple fishing trips per year, hike the free trails, a couple of sleigh rides, and hoping to get my horse up there this fall. Would like to get more elk hunting opportunities but thats [sic] up the State. No motorsports, I have an ATV and they even tick me off cause they drive everywhere. If I wanted to pick up Bud Lite beer cans and other trash, I just go to any place other than the VC. I understand its a balancing act between quality and quantity. Quite a dilemma.
 120. This is one of the worst surveys I have ever seen. It is completely loaded toward a certain outcome and is disgraceful coming from a college student.
 121. I believe that there has been some promise in management of late. I see no rush in the federal government aquisition [sic] of the preserve if the contract is up in the next few years. Continually, facing [sic] the economic environment the state is facing is it prudent to undertake the turnover now?
 122. I grew up in the Jemez [sic] mountains [sic]. The Baca ranch was better taken care of when it was private. However few got to experience it. I have seen public land destroyed by good intentions. Over grazing by Elk and other wildlife at Yellowstone. Aldo Leopold stated "All conservation of wildness is selfdefeating [sic], for to cherish we must see and fondle, and when enough have seen and fondled, there is no wildness left to cherish." The balance is difficult to obtain and under the current restrictions of National Parks can not [sic] be obtained.
 123. The original intent upon the purchase of the ranch was to keep it as a working ranch. That said, you would think that past managemnt [sic] experiences would be used to manage the ranch. what was the past balance of recreation? Keep it that way and you will not go wrong.

124. As a professional who develops surveys and conducts other research efforts, I found this a dreadful survey. Although I admire the effort, the implementation was lacking. Most of the questions are not answerable, so they provide no actionable information. What disturbs me even more is that the results of this survey will affect the future of the Caldera. I realize that this is a student-run project, but I can't believe that someone didn't intervene to make this survey more meaningful. If you choose, you can contact me: XXXXXXXXXXXXX
125. Recreation should be part of the multiple use concept of federal lands. It's about the land....not recreation!!!!!!
126. I work for a land management agency and feel that trying to make this area selfsufficient [sic] while maintaining resource values was completely unrealistic. I like the idea of a Wilderness or Research Natural Area designation for this area. The area is surrounded by accessible public land. We do not need to provide for every use on every acre and could afford to limit access here.
127. Its minimal because the VC has catered to the rich only. The VC has not being a good neighbor to the local communities.
128. I think that there should be free access, but limited access points. Just like Bandelier. Once out in the back country, one can have a very quality experience while many people are able to see some of the park.
129. If your [sic] going to structure the use in Valles Caldera Preserve at the direction of environmental organizations there will be no hunting, fishing, cattle grazing etc. as has been its historic use. To do so will eliminate use by a population of the people. I thought when the preserve was enacted all uses were guaranteed to be continued.....now these activities are on the chopping block.....Bad scam on the user public, a preserve with no public use.....this is not what the original owners intended.
130. Grazing and multiple use has made the Valles what it is today. Responsible grazing with scientific based decisionmaking [sic] should continue the heritage that private ownership started
131. Grazing is done in a holistically, conservative, and sound matter without detriment to wildlife or recreation. It adds to an ecological sound program.
132. This seems to be some pointless questions on this survey. What do I (the public) know about the impacts of a new road or an increase in the number of visitors will have on wildlife? As for the Cattle and sheep grazing, They have been there for almost 200 years, I think with proper management, they should stay.
133. increase grazing, logging and use of horses
134. A very special place. We are concerned that if it does not become financially selfsufficient [sic], access might become more limited, but we are concerned that financial self-sufficiency might result in too much access. Good to see that this is being studied, as compromises will be needed to achieve a good balance.
135. The management is in it for their personal glory to the detriment of the public and taxpayers. They should be removed ASAP and the Preserve run by the Park Service.
136. Good that you are performing this study. May you be impartial. As your heart guided you to ask these very questions, so the heart should guide decision makers to put these questions to the ballot.
137. I wont go up there to ride on a shuttle bus. I don't care if they build [sic] a few more roads, but basically leave it undeveloped. Cattle don't hurt anything, are good for the grass via movement and manure, and "fit" in the environment.
138. If there is an increase in the recreational activity on the presereve [sic] it will ultimately ruin the preserve and cause a diminished [sic] quality of recreational activity. Also, the preserve needs to continue to graze cattle in order to maintain its historical signifigance [sic].
139. You and your advisor should be ashamed of this kind of work.
140. The areas by the existing roads should have minimal reservation only campground that are handicap accessible. At present the usage of the Caldera is only for the privileged few. This is unacceptable.
141. The Valles Caldera needs to be turned into a wilderness area in my opinion. That means closing the roads to vehicle traffic, and letting the Caldera be wild.
142. Keep the cows and get rid of the government
143. The "pristine" qualities or nature of the Valles Caldera which prompted the acquisition of this property by the federal government in 2000 are the result of a long history of active land uses, including those practiced by surrounding native rural communities and families, Hispanic as well as Native American. The continued intense grazing of livestock is an indispensable activity to maintaining the health of the caldera grasslands. In turn these healthy grasslands will continue to support the native fish and rich wildlife habitat of the caldera and its much acclaimed hunting of big game. The Valle Caldera itslef [sic] could suffer degradation of its natural resources, if it's [sic] managers do not make full use of the range and wildlife science available for it's operation.
144. I don't think comparing visation [sic] with Bandalier is useful, it is a destination where mom and dad can take young ones to see the ruins, etc. they would be bored on the VCNP.
145. The Preserve should be open for individuals to enjoy It is a multiple use Ranch and should remain as the previous owners desired It should not become part of the Park Service
146. The Valles cannot be managed as a "commons". It is one of many truly great resources in the West. If it was managed by a steward "who is too poor to pay for his sport" it would be a destination for the world to witness in terms of balance of profit generation and resource benefit.
147. Should the Preserve become a national park, the end result would be a ecological disaster since certain groups would prevent the area from being hunted and the unchecked growth of the elk herd would cause major changes to

- the landscape. This happened with deer in New Mexico in the 1920's and 30's when deer refuges were established and the deer ate them selves [sic] out of house and home.
148. I would like to be able to get in and see the area. I don't believe paved roads are necessary. Good dirt roads that probably exist today would be good enough. The area can be managed to allow additional visitors to drive in and take day hikes. Would not like to see the area turned into a park atmosphere.
 149. The largest flaw in the VCNP legislation [sic] and organization is having a multimember Board in charge of operation of the property. A single, experienced, qualified person with the correct authority and tools is required for success. Remember: a camel is a horse designed by a committee. The Trust has proved that.
 150. the preserve belongs to us why have it if we can't use it. when it was private no one had access [sic] we have plenty of wilderness that has very little use because most people do not have any to access [sic] these areas.
 151. I've never actually hunted or fished there. I may have answered questions differently if I had actually visited the Caldera before. I've been wanting to hunt elk there someday and possibly do some fishing, but non-residents are continually discriminated against in Western States when it comes to numbers of permits issued and the cost associated with those permits.
 152. I understand the need to profit from hunting, but it is unfortunate that the preserve is eliminating the lower income portion of our population and not doing a good job of reaching out to children.
 153. This is a National Treasure that needs to be protected but at the same time, the public needs to have the opportunity to enjoy it.
 154. While I believe that the caldera has great potential for expanded access, so long as they do not allow dogs like the national parks, I will not participate in any of their activities ever! I will continue to choose recreation opportunities in places that allow me to bring my dog. (Forest Service, BLM, etc.)
 155. I really did not like the new shuttle arrangement that extended my hike/day trip by several hours this year - i.e., having to wait for a pick up. I prefer the previous shuttle arrangement for pick up and drop off for specific hikes. I hike annually at the preserve and would like to minimize environmental impact of recreational use. I would donate to help make that happen.
 156. survey monkey stuck [sic]
 157. It would be great to have it as a national park - Development should be very limited. Any development could occur outside of the park, as it could anyway. The Park should have botanical and zoological diversity - but very few people.
 158. I believe the Valles Cadera [sic] provides a different recreational experience than a place such as Bandalier [sic]. It is important to remember that all areas do not need to offer the same experience. Although the task of balancing all the management objectives in the preserve is difficult, so far I do not think access is a problem. You do have to be aware of different opportunities to access the area, possibly as part of a scientific or recreation project, but I believe the skiing and yurt opportunities offer good opportunities for recreation.
 159. current management is protecting a very unique spot in NM. The requirement to be financially self supporting is very difficult with the other legal/natural resource requirements.
 160. The "Valueless Cow Dairy Bust" (Valles Caldera Trust) ran this thing into the ground on schedule with stupid expenditures like a staff 4 times as big as they needed, and cattle grazing. Good riddance to the failed experiment, hello Park Service! I say get rid of the cows, and reintroduce the wolves so the elk behave like wild animals, and the natural landscape may once again provide ecosystem services for free, such as high water quality, flow modulation, evolution, diversity, beauty. This will make a huge difference in the streams, which are listed for not meeting temperature and turbidity standards. Also, we do not need motorized recreation this is bullshit. People can walk or ride a bike. If they are in a wheelchair, they can roll their wheelchair or catch a ride in the shuttle. Note: I will not pay money to go on land which I own. Instead, I shall evict the rancher tenants who are destroying my federal property.
 161. It was a grand experiment with no chance to succeed [sic]. It's great to be in public ownership, but we don't need to pander to the masses, just yet. It is not pristine, and yet somehow has survived grazing and logging for so long, and is still unique and beautiful. The large elk herd is one reason for its uniqueness, but there may be too many for its health. But managing it for cattle allowed it to be utilized greatly by elk as well. And the grasslands should be used by some herbivore.
 162. There is a lot of space on the preserve. A core area could be developed where most high impact recreation would take place within a short distance from the entrance [sic]. The remaining area could be reserved for more low-impact high-quality use. Fewer/no roads in these areas would limit the number of people who use them without having to control everything with an iron fist..
 163. Hiking right now is too limited. More options should be available or a more flexible system that allows better hiker access. We were the only hikers in the whole place, yet did not hike because the scheduled hike for that day was a short guided hike of no interest to us.
 164. The tension between being able to visit such places and loving them to death because of too many visitors is the central dilemma. I see few other solutions than
 165. This is a large area of NM that should be enjoyed by many. But should not be spoiled by too many roads, too many people or too many cattle and NO ORVs.

166. I think initially the Valles was too restrictive with access. It seems to be more open now, but word needs to get out about this and further allowances for more visitors encouraged.
167. it is an unbelievably beautiful place that must be preserved
168. As a Senior who enjoys hiking and hunting with a camera, I appreciate any venues that are not too rugged for my enjoyment. Unfortunately, this often means that roads must be available. Possibly expanded access to remote areas could be offered via "golf cart" type shuttles - without ruining the unspoiled nature of the area.
169. 89,000 acres is NOT alot [sic] of land. Less motorized and more foot/horseback access will better preserve the wildness of the area. One or two roads would allow for a "summary" tour of the area. More intimate experiences should come with non-motorized access.
170. One of the best aspects of recreating in the Valles is that you have to work for it. Losing this aspect of the experience would lead in inexorably to it being overrun [sic], as are so many of our parks/monuments. If it is easy, people tend not to appreciate what is available.
171. Presented limited road access and limited parking is a nuisance that protects nothing. Allowing fishing guides to drive their clients to the upper reaches of the East Fork while requiring that those without a guide walk is unacceptable elitism.
172. To me it is an outrage, that more effort has not been expended to allow more access to the preserve. In 1972, in May a group of us jumped the fence upstream of Jemez Falls campground and climbed Redondo using topo map and dead reconing [sic] to reach the top, greatly aided by elk trails through the scrub at times. We melted snow to drink, and slept in primitive tube tents, and almost froze over night near the summit. I'll never forget this experience, it being my first high altitude expedition in the West, the first of many to follow. Having used public money to purchase this property, the public should have the greatest of access to use this land in appropriately conservative ways. I do not resent the fourwheelers [sic], the dirt bikers, the horsemen, yet I truly appreciate when I can be separated from them when on foot myself. This is the hallmark of the wilderness areas, that many can be accommodated at once, as long as the rules are well published and enforced. I believe many would volunteer to help develop trails, mark camp areas, and generally help police the effort if they were convinced some more equitable system were to be implemented for the use of the land.
173. I lived in Los Lunas for over seven years and used all the surrounding [sic] NF's many times each year. My family and I camped, fished, hiked and did bird watching many times in the Jemez vicinity. Somehow I missed the sale of the Baca Ranch to the US Gov't. What ever [sic] you do, don't allow NPS administration to take control of this area. The NPS never has any funds to do anything right and timely. Keep this Preserve away from them.
174. Keep it rustic and this will naturally limit the visitors.
175. Public lands should be open to the public. Access for all.
176. I have noticed increased access this past year, and increased activities open to the community. Having said that, I think they can go further, especially now with the new overnight lodging for students.
177. While I realize it's probably irrational (and possibly impossible), I would like to go more often to the Caldera myself, and have more people appreciate its beauty and history, while still maintaining it's pristine condition. I don't see how that would be possible, but it would be the best possible outcome, I think.
178. The development of 4 wheel acces [sic] trails, as part of fire access trails and the opening of abandoned trails that are old logging and various use trails. It is a proven fact, when this done, the responsible active four wheel organizations, go at their own cost & improve the trails, (remove blockages, clear over growth to allow passage and in general improve the sites for all. Don't be so naive as to think by banning access, you will enhance the preservation of the site. All it takes is one lightning strike and fire to decimate thousands of acres.
179. I live in Los Alamos and love to run in the mountains. I had chance to run through Caldera preserve on 2 occasions (Jemez Mountails [sic] 50 mile trail run, and Caldera marathon). Both were wonderful experiences. I would love to go out and run on those trails more often, but I hit the barbed wire fence everywhere ... what damage would I do if I would run/hike up the Cerro Grande and back ?
180. I want more people to experience the area but fear we would over-run it do death;
181. It should be public land, with public access.
182. The concept that the VCNP is pristine is flawed. The Preserve has been very heavily worked over in the past and is now a "fixer upper". Restoration should be the primary objective in its management. From the non-native grasslands, to the non-native brown trout in its streams, to the incredible number of miles of roads (mostly logging) per square mile of land, to the over abundant Ponderosa pines invading the grasslands the Preserve needs restoration work , and a lot of it. The Preserve should not be promoted as something which must be preserved in its present condition, and all other activities should be secondary to its ecological restoration.
183. Permitted hiking/camping trips would be great
184. I've never been there, but now that I've heard of it I will likely visit it.
185. Ultra-running and trail marathons are important.
186. Natural and cultural resources should be protected, while allowing more recreational activities in designated locations.
187. I like the preserve just as it is, largely unspoiled and I'd like to see it stay that way for future generations.

188. I spent no money on my visit because I did not like the fee structure. I don't want to decide about paying for every activity. Instead, I would pay ~\$20/car for a few days of admission and ~\$15/night for a nice car+tent campsite (no RV generators), in order to have free use of a few tens of miles of hiking/biking trails.
189. needs to be under Park Service and managed similarly, eg. more money, more employees to manage greater access to the public
190. I am strongly against motorized access. I am strongly against restrictions on access by foot or bike including restriction on Redondo Pk. I believe the preserve should be restored to a more primitive state. All roads should be closed and for administrative use only.
191. preserve it in a way that makes sense.
192. NPS as the management authority offers the best opportunity to provide reasonable access while preserving the resources [sic] for future generations.
193. Leave well enough alone. Bigger is not better. Be environmentally sound on the decisions. No more building or roads. Let the public continue to view the beauty and be done with it. The Valles Grande is not a COMMODITY. Make sure all the players in this are in full communication and that there are no business deals going on that rips off the beauty of the Valles. Protection is the name of the game.
194. Valle Caldera is pretty big so I think we ought to be able to share. I think it should have more open trails and some camping so it can be a destination and be more widely appreciated.
195. more access
196. I believe the preserve's access is good now, What I would like to see though is loosening up on where you can park to fish. Make some additional parking areas a little closer so didn't have to walk so far to some of the holes. I also would like to be able to drive myself wherever [sic] I wanted to on the ranch as long as it is on maintained roads of course. I also think predators need to be managed on the preserve theres [sic] to many.
197. Management of the preserve should mimic how national parks are managed, so that ecological impacts are minimized while allowing recreational access. The preserve is a jewel, so let's let people experience and enjoy it, and not put it off limits. Thank you!
198. This land was purchased with taxpayer money. Let us use it. You will never generate revenue without more public access.
199. The preserve would work best as an addition to Bandelier NM by increasing the professionalism of the staff and delivering consistent, predictable user limits.
200. I would expect that a preserve would maintain the quality of the experience of being in a protected place. Restricted hunting, fishing, hiking, grazing, timber cutting, etc will not not reduce the quality of this experience. If my opinion, all of these will be better in an area with minimal roads and people. If logging were to occur, all roads must be restored to pre-logging condition as much as possible. No source of erosion or access for "off-roaders".
201. Treat the preserve as if was Nat'l forest and people will respect it just as they respect the Nat'k forest now, Right now its just a playground [sic] for the Administrators
202. turn it over to the National Park Service as a National Park.
203. I think the forest service should take over, not state parks, state parks don't have the money to run it efectly [sic]. The forest service can turn it into another Valle Vidal [sic] type jewel for future genorations [sic] to enjoy
204. Let a privet sector run with out Govt.
205. We need the tonic of Wilderness and all that it brings to our lives.
206. Please preserve the wilderness in its pristine state as much as possible as this is becoming a rare thing - no hunting, no RVs, not roads, please just give the native creatures, plants, animals -soil and air -a safe place to exist without fear of extinction or defilement..
207. I had heard that the perserve [sic] might be changed to a national park. The would [sic] give more access to the park. I just want to be able to enjoy the park and its beauty like any other forest in New Mexico. I'm not a rich guy so I can't afford to buy the expensive permits year after year.
208. The public paid \$101M for the place. They should at least be able to LOOK at it, which is not the case now, nor are there any obvious plans for the near future.
209. Manage it like the Valle Vidal, but with less cattle grazing
210. This survey seems skewed to preserving the current management philosophy which should be scrapped. This is now public land and should be managed as any other public land by either the BLM or Forest Service without any special provisions.
211. The preserve should continue to limit fishing and hunting.
212. Should do way more for Disabeled [sic] and/or mobility Impaired hunters & fishermen. Vastly increase Hunting tags/permits for these persons. Discounts on entry fees, if any. Thank You. RVR
213. THIS AREA SHOULD BE MANAGED LIKE VILLA VADAL , IT'S WOKED FOR YEARS .
214. My hope that these results are taken into account when the final decision is made. I would pay a flat \$20.00/day/vehicle fee for full use (understanding all is open to hiking/hunting but roads are limited use). The ability to hunt and fish all areas for all species is a necessity. Conservation is the answer. Not Preservation. This is our tax dollars that purchased this property and entrusted to our government to manage for the people.
215. No additional restrictions

216. Need limits to motor vehicle traffic and redefinition of "ranching" (or at least cut back on the beef industry dominance that gives cattle access to the land for private profit). Hikers, skiers, and cyclists should have expanded opportunity to exercise low impact presence.
217. I believe that it was purchased for all citizens to enjoy and as it stands now, they do not
218. when i [sic] first heard that the baca [sic] might be sold and developed I was heartbroken. then when i [sic] learned it might be purchased for the public i [sic] was excited and wrote many letters urging law makers to do it. After the purchase and i [sic] began to learn of the restrictions and compromises, i gave up and have never attempted to jump through the beauracatic [sic] hoops to visit the 'preserve'. I wish it could change but I wont [sic] hold my breath.
219. make it a National Monument, or satellite to Bandelier
220. Let's not develop it too much or the reason for visiting it will disappear.
221. I believe this should be a hunting and fishing haven for NM residents. Only a limited access of non-resident should be allowed and only they should have to pay an extreme premium to hunt or fish here. There should also be more strick [sic] penalties for poaching or un-ethical behaviour [sic] here to discourage those who don't care about others or the land.
222. If you make turn it over to the State it will never be the same! Leave it alone! If someone wants to visit, they can visit at any time, fish at any time, hike, etc. If they want to try for an elk tag then put in \$20 and try everyone has an equal chance. I love the Valles, I want it to remain as pristine and beautiful as it is today, i want my kids to visit it in 30 years!
223. (1) Went turkey hunting on Preserve and was confined to an area chosen for me. Was treated as a child you do things OUR way. Not allowed to roam and find spots we think were more amenable. (2) Went fishing. The "streams" they brag about are often mere trickles. We did find a patch of stream-sized streams but this was not necessarily typical. They grossly exaggerate the size and quantity of the trout in the San Antonio. I routinely beat their exaggerations on the San Antonio outside the preserve. (and there is not an exorbitant fee to fish there.)
224. The preserve needs to have the Forest Service take over the roll [sic] of managing the property. The cost of the current management seems to have a high payroll of people setting around in offices and spending a lot of money to further a failing project. You only have a few more years left before your [sic] supposed to show you can be self sustaining. Thats never going to happen with the current management. I have set in on a couple of meeting and have heard the spin from the administration and they are all politicians with cush [sic] jobs and they could care less about the VCNP. Look at the track record the last 4 years. Wake up everyone this is not a toy for the rich !!!! Let the Santa Fe take over before you waist another 13 million.
225. Why should it be a preserve? Open it up like the rest of the national forest around it. Stop making it a place that every one [sic] wants to visit, because it's a NATIONAL PRESERVE.
226. With all the talk about either the forest service or NP getting control of this we need to get the FS to take this over. VCNP pays for too many of the research projects [sic] on the Preserve. These entities need to pay for these themselves. I am niot [sic] sure why they are not trying to make this work and see it through to the year of 2015. They are setting themselves for failure
227. Manage the areas and involve the public / user groups to assist in the management of trails, areas, etc. User groups can provide a strong positive presence (regularly) as well as assistance when working together with the management supervisors. Keeping our land clean and under control requires responsible users overseeing the land on a regular basis. The New Mexico Trials Association has a outstanding 30+ year track record of working with BLM to sponsor riding areas assisting to upkeep trails and camping locations. This relationship has spurred positive outlook in regards to user groups assisting to support cleanup & maintenance of dedicated areas in return for keeping a strong family oriented sport thriving within our community.
228. the routine sign in the forests of northern new mexico [sic] read "public lands, KEEP OUT" ... i am the public and i deserve the access my tax dollars support.
229. We need to protect the land FOR the people not FROM the people. I grew up in these mountains and I would love to see this area finally opened up for normal use like the rest of the Jemez. Particularly important for me is more access for OHVs, but I think people can share and I prefer to support all recreation, not just my special interest.
230. Allow stewardship of certain areas trails and recreation areas by individual groups and clubs.
231. There should be a few OHV trails that pass through the reserve to allow OHV riders to see the place. Not a lot, but some that take in some of the scenic areas.
232. Please remove livestock from the preserve. I am a local Hispanic and certainly don't feel that it is part of my "culture" to graze animals on public lands. Animals were grazed on public lands when people were subsistence farming. What was done more recently in the Valle was for-profit. Additionally, allowing of off trail motorized vehicles, even with "enforcement" and only allowed on designated roads, will impact the outdoor experience for most of us. We value quiet and the lack of vehicle exhaust when we visit the outdoors. PLEASE do not allow motorized OHV's.
233. Public lands need to have multiple uses including multiple recreation opportunities.
234. I believe that this public land can and should be used by all members of the public. Preservation of heritage and environment can be accomplished even in an 'open' situation.

235. It is a beautiful place and should be enjoyed by all that can experience it in whatever way that brings them the most pleasure. It is important to take good care of it as well, not easy but defiantly doable.
236. A trials area would have minimal to no negative impact yet provide the opportunity to produce additional revenues. We like to ride in rocky canyons that many people avoid anyway.
237. Hunting and fishing limits should be established to maintain a high quality experience
238. co-operatives between trials motorcycle club and valles caldera [sic] would make a great partnership to devleop[sic] and help maintain appropriate trail net work for motorized recreation and multiple use trails.
239. I've been frustrated trying to get fishing access in the beginning but the system has improved greatly. If you could run VC like the Rocky Mountain Nat'l Park, I would be in favor of that. Opening VC completely would result in trash, forest fires, over use, graffiti etc.
240. The management at the Valle is doing a great job. The whole concept is to "preserve" this national treasure. Opening it up to the general public similar to the existing national forests and parks will clearly defeat the main purpose of the governments' original purchase. Want to see the preserve buy a lottery ticket and take your chances. This belongs to the entire country not just NM.
241. The Valles Caldera should be managed as a National Park, yet there can be measures enacted to ensure that "overuse" is mitigated. We don't need to pave the entire place in order to provide access. I have backpacked and hiked much of Bandalier [sic] and the Dome Wilderness without seeing many people. Most of the visitation within that Monument is at the main entrance. The Valles Caldera could also operate in the same manner. The main point here is that the more education people obtain, and the more chances they have of experiencing wild nature, then the better chances we have as New Mexicans of preserving ALL of our valued wild lands.
242. There is room enough for any and all recreational activities, including OHV trails, hiking, biking, etc. I encourage you to consider inclusion of an area for motorcycle trials riding-it has a very low impact on the environment.
243. this is a partisan racist survey
244. Need more hunting opportunity it was purchased with public money and needs to be treated as such
245. Please do not allow the National Park service to take over the Valle Caldera. It needs management by local people not some federal know nothing in Washington.
246. The Forest Service should continue to manage the Preserve and loosen up a bit.
247. Thank you for undertaking this project.
248. Backpacking opportunities to limited established sites modeled after yellowstone's [sic] backcountry permitting is an excellent suggestion. Singletrack development for mountain biking or bikepacking is highly suggested. Paved roads highly discouraged, no developed car camp sites, no developed RV sites, no increase in lodging.
249. Extreme frustration with the lack of effectiveness in management of the VCNP.
250. A true National Treasure.....thanks for your hard work. Whatever your political persuasion, you will grow wiser and see reality like the rest of us have...
251. Open it to the public as any other National Forest!!!
252. As a retired National Park Ranger, Rocky Mountain NP, I know it is possible to balance recreation with protection - it just takes work. Go for it.
253. I have never actually [sic] been to the preserve. I've been applying for an elk tag for many years and have thus far been unsuccessful.
254. Need to open it up! It is public land!!!! Manage it appropriately.....
255. Expand hunting for all species
256. I believe commercial exploitation of the Caldera, e.g., logging, cattle/sheep grazing, etc., poses serious environmental dangers to the Caldera. Likewise, unlimited, uncontrolled public access poses serious dangers. The caldera is in relatively pristine condition because of it's [sic] isolation from the public. The most damage done to the caldera was by logging and cattle. The caldera is an ideal location for very significant research in several fields of science and research should be encouraged and not limited.
257. This property is a valued asset and needs to be properly managed to encompass a greater visitor program and still maintain its natural balance. It is not in fairness to restrict its occupation to a select few, considering that fact that it is owned by the U.S. Gov't. and available to all peoples. Great care in managment [sic] is essential.
258. This place could easily support more access with less infrastructure and support. Thinking of it as a place to support increased 'recreation' as opposed to better access is a mistake. It is unique and beautiful, and should allow visitors to enjoy it for what it is while protecting the area, especially as an open scenic meadow unspoiled by lodges, roads, water slides, imax [sic] theaters, "staging areas", snowmobile trails, etc. The current "working ranch" approach was a bad idea, and has failed. I do think transferring to NPS is probably a good idea. I really do enjoy the XC ski trails in the winter, but believe they could be handled in a more low-infrastructure manner with a parking area on the road and perhaps with more skier-tracked routes. Possibly with volunteer grooming, and self-pay and season passes to support signing, parking, perhaps limited grooming and patrolling. A Yurt or two hidden away in the backcountry would be great. My understanding is that under NPS there will be fewer problems with risk/insurance about allowing unsupervised visits, which will help.
259. As a professional archaeologist, photographer, kayaker, camper, hiker, and bicyclist I view increased public access anywhere in our remaining wild places as an encroachment degrading the environmental, habitat, sacred/religious, and archaeological character of what remains of such places. If recreational opportunities (including mine) suffer,

- well so be it. There are other, more important qualities. And please, keep the idiots who need guns or motors to enjoy the outdoors out of the preserve. Let 'em walk. Extend the Santa Clara easement to encompass the entire preserve. Livestock do not belong in national preserves. They have already destroyed much of the natural riparian environment of the west, quasi-traditional or not. Time to end that particular subsidy to ranchers.
260. This great resource should be available to more people, to use in a respectful and non-damaging manner. Currently it seems to be for the use of an exclusive few. As a hiker and backpacker following LNT ideas, it is a slap in the face to not be able to use the Preserve, especially when grazing is permitted. The few activities we have seen listed for group tours, etc. are definitely not the type of experience we enjoy.
 261. Some areas of the preserve need to be logged or have controlled burns. Forest is too thick and unhealthy.
 262. The Caldera is a national treasure. I participated in a guided hike there yesterday and it was a wonderful experience. I like the guided hikes and don't want to see those reduced, but would like to have individual access to some trails that I could get to in my own vehicle and hike on my own without needing to take a van or bus to get there.
 263. Preserve economic self sustainability unrealistic. With its record of preservation and habitat enhancement, the U.S. Forest Service is the most experienced agency actively to manage the Caldera for habitat enhancement (burning, thinning, selective logging) and to expand hunting opportunities as well as increase of carefully monitored recreational opportunities.
 264. When higher fees are applied to an area most likley [sic] those who would destroy or deface the property would not enter because of the fees.
 265. It is a magnificent [sic] resource which can be made available to more people without degrading the experience if appropriate planning and procedures are developed. The current level of access is too restrictive. The National Park model would help greatly. Thank you for doing this research project.
 266. Better roads at least to get in to easy trails for day hiking and winter recreation. No RV's, motor sports, hunting or livestock. I think this survey should better describe the locations and sizes of the cultural and religious areas so people can answer with more confidence. Is half of the Preserve of religious significance? 10%? 1%? Also put this question 23 about Redondo Peak before question 22. Put the map at the bottom at the top of the survey and mark the religious areas. Thanks for this survey!
 267. I hope that this beautiful area can be preserved for future use, while still enjoyed in the present. In my opinion, the easiest manner to avoid negative recreational impacts on the Preserve would be to prohibit motorized vehicles.
 268. Again, as the Preserve (and the Board) does not offer the recreational experiences I look for (road/trails for permitted vehicle), I don't visit the Preserve. Hwy 4 suits me fine, as the situation is presently. I also do not take non-residents to the Valle Grande as that office doesn't afford any more viewing opp than Hwy 4. If we were permitted to drive on a route through Obsidian/Toledo/San Antonio/Seco Valleys and to Redondo Peak, I would probably visit then. The roads/routes/trails are already in place, so little work would take place to make those areas accessible by the public. OHV volunteers can be included for road/trail maintenance. They already do ALL the maintenance on the South and North Jemez trails.
 269. I love to visit the caldera, it is a beautiful place. I like that it has fewer visitors but more information about what activities are held there would be great.
 270. With all of the contradictory information circulating about the preserve and it's management lately the best source of information has been actually visiting the preserve and seeing first hand the work that goes on there. It is a pristine area that is a rare environment for research and recreation and access should be limited to preserve the natural resources and splendor of the park.
 271. The preserve is unique, one (or one of the few) large parcel lands that have been conserved by limited access and diligent stewardship of its use. We need to continue limited use of the property in order to maintain its integrity. We do not have to leave our mark on every square inch of the US. This includes me, while I would love to have complete access to the property, I realize my presence and the presence of others with easy access, would permanently damage a thing we are running out of...unique and special places.
 272. Don't screw this up. It is a one of a kind site. We don't need to develop it any more [sic], and we don't need to increase access more than the supervised tours now.
 273. The bureaucrats have to go. Replace government employees with a private sector operator of the trust in order for it to be run in a customer service oriented fashion, rather than in a convenience for the government fashion.
 274. Why is political affiliation on this survey? With good management and careful spending the Valles Caldera should be able to break even or make money.
 275. A balanced mixed use (including motorized) trail system could be created that would blend well and not negatively impact other uses in the preserve.
 276. Perserve [sic] the Land, elk herds, and fishing [sic].
 277. We have many years of visiting the Valle Grande, including visits (fishing and hot springs) when it was owned by the Dunigan family.
 278. Inceas [sic] recreation opportunities BUT with STRICT regulation, oversight and enforcement.
 279. I would like to see activities such as biking events, endurance riding (horse back), hiking, hunting, fishing continue, but please limit overnight camping and do not allow access to ATVers and motor cycles. I think horse back riding should be made accessible in the whole park, but designate certain areas for trailer parking.

280. In our 7 or 8 years of visiting the Preserve for various activities, it has been an absolutely amazing experience each time. We hate to see any deterioration.
281. This is one of the most beautiful places on earth. We need to let people enjoy it but without adding so many roads or campsites or commercial development that it will be spoiled.
282. I have not had the opportunity to take advantage of the preserve and as a local I am ashamed I have not enjoyed it more this past year...especially since economic times have been hard it would have made me feel better.
283. Coyote Call Trail should be open and free 365 days a year.
284. It is currently a private preserve for the benefit of its keepers.
285. I think that in any management plan especially wilderness areas balance is the key...grazing rights are always an issue but often have to happen, cultural areas are sensitive but can also provide amazing educational experiences for an often uninformed public, and recreation can be done sustainably or can go horribly wrong...proper management is the key as is a well thought out, inclusive, balanced management plan.
286. In general I believe the preserve could increase the number of people that have access with out [sic] a significant environmental [sic] impact. I think the only way this can happen is to have multiple access points into the preserve for the various activities. One thing that I would like to see is more camping opportunities on the preserve.
287. I sincerely hope you are able to provide valuable feedback to the Trust and the Park Service.
288. There should be a trail up on the rim.
289. how about changing management to the forest service?
290. leave it alone
291. I enjoy the Preserve as it is currently used.
292. I would like to see a few of the existing unpaved roads opened up to limited private vehicle access. Being able to drive in and park in some of the back areas would provide comfort and shelter from the weather while waiting for and watching wildlife.
293. I would like to see more permitted, dispersed, primitive camping and access allowed with high-clearance, 4WD vehicles.
294. This location is a peice [sic] of NM history and should remain as it has been for years beautiful. But should be accesable [sic] to people to enjoy as long as it is managed and kept perfect. not like many other areas around the state which have become commecialized [sic] for pure proffit [sic] in mind. and in the process pouluted [sic] by man.
295. Some backpacker & hiker only areas; some indigenou-only sites, some easy access sites especially for elderly & disabled, but no motorsports.
296. If I lived closer I'd be there all the time AND volunteer. I'm a member of Los Amigos!
297. Everything in moderation! I grew up near the valle, [sic] and though glad we have more access, CRINGE at the thought of it becoming like the rest of the Jemez. Over used, beer bottles, trash, loud disrespectful camper... I hate to listen to someone's music blaring, a large family cussing and yelling, or fourwheelers or snowmobiles, when I came to listen to the coyote, elk, birds and wind in the trees. I'd rather restrict usage or pay more, than have the area trashed. Thanks for letting me voice my opinion!
298. Valles Caldera belongs to the citizens of the United States. We paid for it, and we should have access to ALL of it. I don't want it tuned into a parking lot, or a collection of highways. However, I think access on foot or horseback should not be limited.
299. I believe a limited amont [sic] of single track off road trails should be provided in the Valle for off road enthusiasts to ride on.
300. I believe that if the preserve reverts to Parks Department control that a negative impact will occur to the present elk population and habitat.
301. I have never visited the Preserve but plan to in the future.
302. I enjoyed the primitive camping that was included with the photography excursion. I believe the Caldera is capable of balancing recreational activities with the responsibility of protecting the cultural/historical sites located in the Caldera. I would welcome more educational opportunities like star gazing, horseback riding, fishing clinics for adults, science days, etc.
303. Should be designed to be financially viable.
304. To care about it, people need access. However, as the survey alludes, there must be balance between access and negative environmental impact. Continue to restrict the more destructive activities but restrict the less destructive activities less.
305. The best option for VCNP is leave it alone and allow local management to succeed!
306. Access is a tremendous opportunity for exposing people to nature and, thus, conservation/preservation/global understanding.
307. We have admired Preserve from highway for decades and only recently made brief stop at Visitor Center (for shuttle tour)... We would like to see controlled access to more remote parts of the Preserve
308. Drive to Caldera, pay \$15, bike all day/any day - no need to have specific days - make it just like the national forest - use at your own risk.

309. Plenty of recreational opportunities are available elsewhere. I would prefer that impacts be minimized by keeping the focus on restoration, science, cultural uses and interpretation. The idea that it should be a money making enterprise is crazy and the product of flawed ideology.
310. The VCNP needs to build a network of single track trail around and within the perimeter of the property for hiking, mountain biking, etc...
311. The primary fact of public land, is that it IS public. If you don't want to see or hear anyone or anything else, stay home.
312. I have limited experience with the reserve as I've been there only once. I do believe there should be more recreational opportunities, but not including ATVs. Limited elk hunting OK w/ pricey licenses. You should charge more for the all-day tour, which I had, very worthwhile, which was underpriced. The fine lodge can be rented for high prices also. Surely the national parks can supply prototypes for the management of the VC.
313. Increased access is a must if this site is to reach its potential.
314. The quality of the tours depends greatly on the quality of information provided by the guides. They must be vetted for their expertise and empathy towards the environment. We appreciated Cathy and Fraser's guidance and Joseph, the kind and knowledgeable driver who helped to clarify and distill information for us. They were a good team. Also Sandy J of the Elk Viewing tour was patient, helpful, and very knowledgeable. In sum, we were grateful to participate in the van tours and feel the tours are one of the best introductions to life in the caldera available to all, especially those interested in preserving the life of the caldera. Congratulations.
315. Manage it like the Valle Vidal on the Carson NF. One well maintained road. Harvest some firewood [sic]. Otherwise roadless.
316. The implementation of this preserve, i.e., "Dominici's ranch," has been a disaster from start. My family has lived in the area for at least 100 years. Many of them worked in the logging industry in these mountains and the Valles Caldera was heavily logged and is not a pristine area. It has also been heavily grazed by cows (a species not native to this continent). Motorized users are being squeezed into smaller and smaller areas which will create overcrowding and increased conflict. I have been losing all my favorite places to ride for last 40 years and am sick of it. Opening up the preserve to all non-commercial users would be a great benefit.
317. Information on important contemporary cultural sites should be provided to visitors. Jemez Pueblo guides should be engaged for cultural site tours. Wealthy ranchers should find other lands to graze their livestock. They should have not preferred access to this public land. New tours focusing on birdwatching and on photography and wildflower viewing should be developed. The Department of Agriculture, which has turned most of the wildlands of the west into industrial agricultural environmental wastelands, should be replaced by the Department of the Interior as the management authority at Valles Calderas.
318. The more multi-use/mixed use this Preserve is the better chance [sic] it has of remaining [sic] a Nature Reserve or park or whatever. I am all for limited access, but this may not suit some individuals.
319. The preserve is currently over-managed and over-restricted. Greater access should be allowed for light-impact recreation. Why can't it be set up like a national park, with a fee entrance then facilities, trails etc inside? As your survey indicates, the traffic here is currently very low, yet it is being managed as if some flood of visitors will arrive and ruin the place. Give the public what they deserve: access and amenities (trails, etc) while still smartly managing grazing, cultural sites, etc within the park. Keep out destructive recreation like OHV.
320. Thanks for considering my opinions. I wish you the best with your decision making. I hope to spend more time on the preserve instead of simply driving by it. My one suggestion would be to make it clear what is allowed there and at what times so I can enjoy the land with confidence.
321. I would be happy to pay a reasonable annual fee for access, say \$50. I think a fee structure like this will cut down on the damage caused by visitors – the surrounding National Forest has a lot of litter due to the ease of access.
322. Please don't let this place be turned into just another park. The country has enough parks already [sic] and every time you make something into a park, everyone in the country thinks they need to go there and get a bumper sticker saying they've been there. What we need more of is places like this where an average working man can have a chance at a quality hunt without the high trespass fees, etc. Hunting is quickly becoming a sport of the rich.
323. I've observed the learning curve on this "Preserve" experiment, and although not self-sufficient, many useful [sic] lessons are learned. Staff has had a tremendous job and has done it as well as any and I am most grateful for the work they have undertaken and the successes/restoration that I've observed.
324. Attempts to "balance" all potential uses will simply lead to shortchanging all uses. The previous owners obviously sold the property [sic] to the government because it was not profitable. If private individuals with a profit motive could not make it pay, an effort by the government to generate revenues from the land is unrealistic. Better to recognize beforehand that the property will require public subsidy to maintain.
325. QUESTIONS 27-32 ARE ALL STUPID QUESTIONS THAT SHOULD NOT EVEN BE ASKED!!!!!!!!!!!!!!
326. If you more people use the preserve the more money [sic] you will get. I can't [sic] draw a tag to hunt so I can't [sic] go on the preserve.
327. This was my first visit and I look forward to coming back. I support the concept of maximum _____, minimal access to places like this with outstanding ecological and cultural significance
328. I like access for those that do volunteer work. That way we can both recreate and leave the place better than we found it. Valles Caldera is unique and its [sic] important to preserve what its [sic] pristineness [sic] that it has left.

329. I doubt that all values can be given priority. Recreation and ecological restoration rate highly with me. Other values should be given a lower priority, but not necessarily neglected.
330. I wouldn't mind paying fees for use if fees stay in the Park and are reinvested. higher fees are problematic though because it can easily lead to making the Preserve an exclusive playground for the rich. If access is to be increased, it should be more equally available to people of all means - i.s. [sic] students, as youth don't have a lot of disposable income.
331. I would like to see more access within reasonable, scientifically based limits to protect the ecology and cultural heritage. Some access to camping would be nice. Preservation of opportunities for solitude is essential.
332. Access for restoration initiatives, geologists, class rooms and responsible enthusiasts should be the primary concern of restructuring the access regime.
333. the state of consciousness goes up with the ___ from their automobile. Make them walk, charge to drive and park, if they must
334. Hunting and fishing access is too limited. Fishing is too expensive. Some model similar to Valle Vidal would work.

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