



Bureau of Land Management Royal Gorge Field Office Recreation Planning Report 2015

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**BUREAU OF LAND MANAGEMENT
ROYAL GORGE FIELD OFFICE
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Executive Summary

The Bureau of Land Management (BLM) manages more land than any other public land agency in the United States. Approximately 668,000 acres of land along the Front Range in Colorado are under the management of the BLM Royal Gorge Field Office (BLM-RGFO). The majority of BLM-RGFO lands are located in Fremont and Chaffee Counties with some lands also located in Lake, Park, and Teller Counties. The private land in Fremont and Chaffee Counties is home to nearly 65,000 people who are found in the towns of Cañon City, Salida, and Buena Vista. There are several smaller communities located throughout the aforementioned counties, including Leadville, Fairplay, Westcliffe, and Cripple Creek.

This is public land held in trust for the people of the United States as a collective whole. The question is how to hear and articulate the “will of the people.” The BLM accomplishes this by mandating that every 20 years all land use planning documents go through a public review process. The result is the revision of the resource management plan (RMP). The revision process offers a number of places for public input including the scoping process (90 days at the beginning of the process), resource advisory committees (with representatives from a variety of interest groups in the area), focus groups, surveys, visits with those using public lands in some way, and a number of other scheduled public comment periods throughout the revision process (scheduled to last about two years or more).

This report is the result of a year’s worth of data collection from public lands users concerning recreation on public lands in the RGFO and the Arkansas Headwaters Recreation Area (AHRA). Because of the complexity of managing lands under the RGFO and AHRA, the report contained herein will refer to the findings on the respective public lands interchangeably unless otherwise noted. The staff at the Natural Resource Center (NRC) at Colorado Mesa University (CMU) was contracted by the BLM-RGFO to gather data from the public on their preferences for recreational management of the public lands in the field office. A mixed methodology was utilized, which included 7 focus groups and a survey administered in the field at select locations as well as online through a nationally represented panel. The focus groups took place over the fall of 2014, and the surveys were collected from May to June 2015. In total, 169 participants took part in the focus groups, and 403 surveys were administered in person on RGFO lands. An additional 722 more comprehensive surveys were also completed.

I. Focus Groups

A. Methodology

In the fall of 2014, the staff at the Royal Gorge Field Office entered into an assistance agreement with the Natural Resources Center at Colorado Mesa University to collect data about the desires and preferences of visitors and local residents recreating on public lands within the management unit in anticipation of an upcoming resource management planning process that would need these data to make informed decisions about recreation and other values in the area. It was determined that the best way to capture these ideas was to employ both recreational focus groups and surveys (intercept and panel).

The focus groups were to be conducted in the fall of 2014 in order to help inform the development of the recreational survey that would be administered in the late spring and summer of 2015. For the focus group, a mixed methodology using audience polling in addition to engaging participants in open dialogue was determined to be the appropriate approach to establish the recreation experience baseline needed for analysis in the resource management planning process. In this case, a focus group is a structured conversation with a limited number of participants regarding recreation in the Royal Gorge Field Office of the BLM. The small nature of the setting and open-ended nature of the questions allow for a good deal of interaction between the participants and the facilitator, and between the participants themselves. This methodology allows participants to express the subtleties and nuances of what really matters to them about recreating in the area. This mixed methodology approach provides a dataset that captures both a complete set of responses from each participant using audience polling technology as well as documenting comments recorded from the group dialogue that give context and depth to the focus group polling data. Dr. Tim Casey, a Professor of Political Science at CMU and director of the NRC, was named as the principal investigator to conduct the focus groups and prepare the analytical reports.

The design of the focus group for data collection entailed a series of discussion questions intended to engage participants in open dialogue about their preferences, interests, and expectations, so responses could be captured in their own words, followed by a list of choices that represented a spectrum of possible responses to the discussion questions that could be responded to via anonymous audience polling. The audience polling was captured by each participant using a handheld clicker linked to Turning Technologies software. The open dialogue comments were documented with audio recording equipment as well as by CMU researchers taking notes.

The focus group script covered all the major elements needed in planning for recreation on public lands: preferences for outcomes and experiences, interests and expectations, setting characteristics, activities, and the services needed to support the recreation experience. The focus group script included 19 questions: six were open-ended, ten had prepared responses for audience polling, and three allowed for both polling and open-ended responses. All questions with prepared responses

included an “other” option, so participants weren’t constrained by the prepared responses. Of the open-ended questions, one included a mapping exercise where participants noted special places on a map of the study area, and another included a series of black and white images that focused dialogue on perceptions of crowding and levels of development. The number of questions included in the script was tailored to allow for a 90-minute focus group. See Appendix 1 for a copy of the focus group handout.

A total of seven focus groups were conducted in the fall of 2014 with 126 people participating in that part of the study. The participants were allowed to remain anonymous, although their responses were tracked and collated by the use of audience polling technology. Some basic demographic information was collected at the beginning of each session. Participants were asked to provide home zip codes in order to identify how representative this study was of the overall population. The data in Table 1 indicate the location dates and number of participants for each focus group.

Table 1. Focus Group Locations and Size

Focus Group Location	Focus Group Code	Date	Time	Number of Participants
Fairplay	1	10/30/2014	7:00 PM	8
Cripple Creek	2	10/31/2014	10:00 AM	2
Canon City	3	10/31/2014	2:00 PM	13
Westcliffe	4	11/1/2014	10:00 AM	9
Leadville	5	11/6/2014	7:00 PM	15
Buena Vista	6	11/7/2014	10:00 AM	49
Salida	7	11/7/2014	2:00 PM	30

Outreach to populate the focus groups included the following:

- Direct outreach to partners and key stakeholders
- Press releases in local newspapers
- Flyers posted at Visitor Centers, local post offices, and in local businesses
- Word of mouth
- Direct email or phone contact with any who expressed interest in participating

The methodology of audience polling allows each participant the opportunity to weigh in on every area of the research. This is important to avoid a wide variety of social setting dynamics that arise in traditional focus group settings, such as only hearing from extroverted participants who dominate a conversation. The polling also minimizes the undue influence of peer settings in small communities. If individuals are worried about the repercussions of their responses mentioned aloud in a focus group within their community, they are not likely to respond, or not as accurately; however, if they can anonymously record their preferences, they may feel more liberated to express their true opinion. The

audience polling using electronic recording devices preserves participants' anonymity while being able to link all of their answers together for the purposes of analysis. In traditional focus groups, one might be able to link comments and preferences back to a particular focus group, but unless the group was small and homogenous, it would be difficult to determine preferences for groups, or how those preferences might interact with other preferences (e.g., if a person is seeking solitude, do they choose particular activities or settings to achieve that outcome?). Traditionally, a survey was needed to link these variables; however, a survey often misses the nuance of the dialogue. The advantage of using audience polling and open-ended questions in a focus group setting is that participants are allowed to clarify what they mean when they select certain responses.

It is important to note the limitations of using these focus group data. Because the sampling of participants was not random, it would be difficult to suggest this analysis is generalizable to the preferences of the entire population that might be interested in the area, and no attempt to do so is done here. However, an effort was made to hear from a broad sample of groups who have a connection to the landscape, including both locals and visitors who were willing to spend 90 minutes participating in the conversation. Participants did self-select to join the study, but given the diversity of participants and the depth of data gathered, this study is certainly defensible as a solid baseline for recreational experiences in the Royal Gorge Field Office of the BLM. These focus group data should be read in the context of the more randomly generated survey data that are part of this report. Together, they offer a generalizable understanding of recreational preferences, activities, and services in the area, and also a nuanced understanding of what those responses might mean in terms of planning.

B. Demographics

Participation in the study was anonymous and voluntary, and no personal information was gathered or retained from the participants other than the two demographic questions of zip code and affiliation. Although participants were allowed to remain anonymous, their responses were tracked and collated by the use of audience polling technology. Participants were asked to provide home zip codes in order to identify how representative this study was of the overall population. There were 126 participants in this phase of the study. Table 2 below shows the distribution of zip codes.

Table 2. Zip Code Distribution in Focus Groups

Zip Code	Number Responding	Location	State
81211	38	Buena Vista	CO
81201	28	Salida	CO
80461	10	Leadville	CO
81252	9	Westcliffe	CO
81212	8	Canon City	CO
80440	4	Fairplay	CO
80456	4	Jefferson	CO
81236	4	Nathrop	CO

Zip Code	Number Responding	Location	State
80228	2	Denver	CO
80478	2	Tabernash	CO
81233	2	Howard	CO
81251	2	Twin Lakes	CO
None given	2	N/A	N/A
80118	1	Larkspur	CO
80449	1	Hartsel	CO
80459	1	Kremmling	CO
80482	1	Winter Park	CO
80863	1	Woodland Park	CO
80903	1	Colorado Springs	CO
80905	1	Colorado Springs	CO
80907	1	Colorado Springs	CO
80929	1	Colorado Springs	CO
81001	1	Pueblo	CO
81230	1	Gunnison	CO

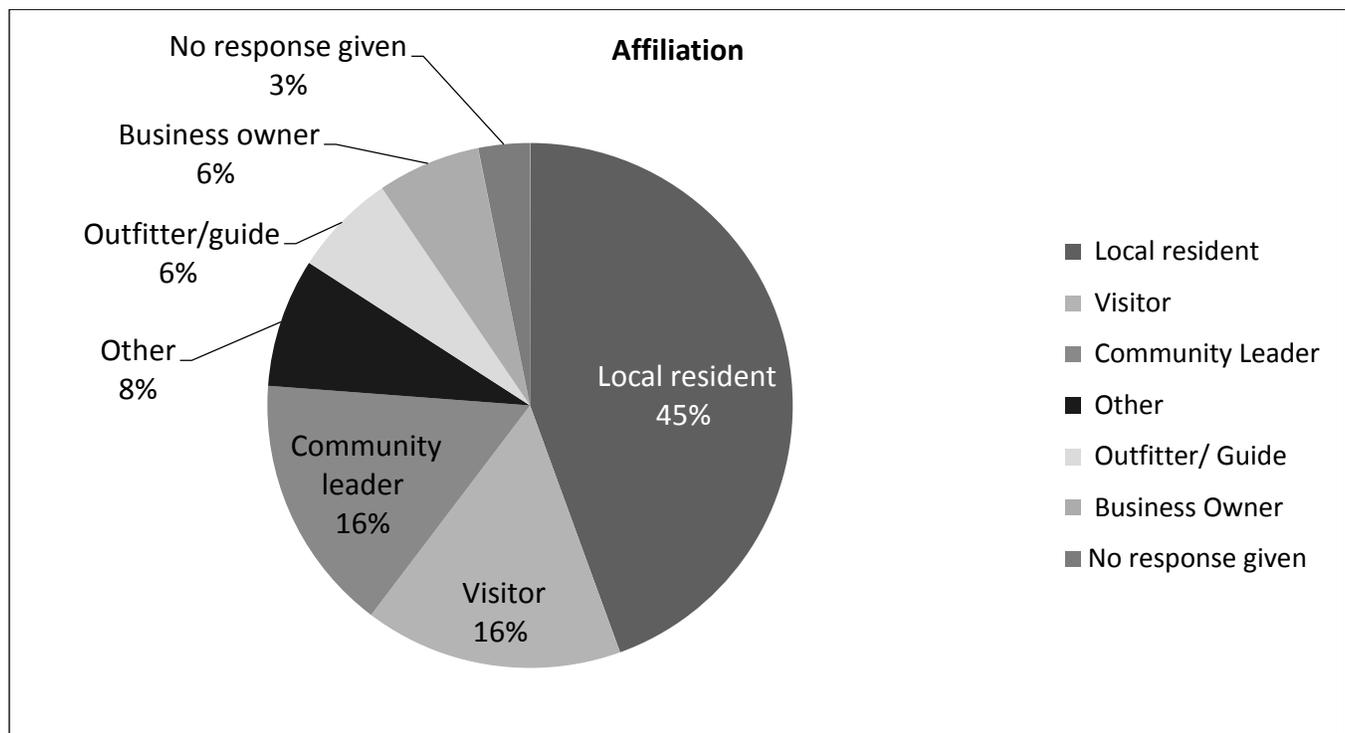
It is most notable that every participant in the focus groups is a resident of Colorado. Although some (16%) identified as a visitor in the question below, these are still Colorado residents visiting the area. There are certainly visitors from beyond Colorado on the BLM public lands in the Royal Gorge Field Office. To understand these visitors' demands, the visitor survey in this report must be consulted. Nevertheless, the results of the focus group discussions will provide excellent insight into the concerns and expectations of local populations when they are recreating and interacting with recreation on nearby BLM public lands. The significant number of participants from Buena Vista and Salida can be explained by the large turnout in both of those community focus groups. These large focus groups offered more of the diversity of ideas about recreation on nearby BLM public lands.

Affiliation

Participants were also were asked to select one affiliation (role) they played in relation to the landscape. Those selections included visitor, local resident, community leader, outfitter/guide, business owner, or other. Often individuals had more than one affiliation (for example a business owner might also be a local resident, or an outfitter might also be a visitor), but they were asked to choose their primary affiliation and respond to all questions while "wearing that hat."

The following graphic (Figure 1) depicts the selection made in terms of affiliation with the landscape:

Figure 1. Affiliation of Focus Group Participants



The majority of the participants selected affiliations associated with the local area: local resident (45%), community leader (16%), and outfitter/guide or business owner (6% each). There were some visitors (16%) in the focus groups, but the survey captures far more of the visitor recreational demand profile. The focus groups offer a rich picture of the local interests that might get washed out in a random survey of visitors and others on public lands. The results of this multi-method approach offer a more complete understanding of the impact of recreation in the lives and expectations of both locals and visitors from beyond the area.

C. Characteristics Important to Community Identity

The first discussion of planning values revolved around the question, “What makes your community special; what are the characteristics that make living here special?” This open-ended question produced a number of responses that were listed at the front of the room on flip charts. When all responses had been offered, a poll was taken on each one to measure the intensity of support for that value in the community. Participants were asked to make a selection on each characteristic as “important to me.” They were given a five-point Likert scale from “strongly agree” to “strongly disagree” with a “neutral” midpoint. Table 3 below shows the number of participants that polled on each of the characteristics mentioned in a particular focus group. The number of participants selecting

“strongly agree” is offered as a measure of intensity of support across the focus group in a particular community. Many characteristics were only mentioned in one or two focus groups, which accounts for the low number of participants toward the bottom of the table. Although only the “strongly agree” selection is shown in the table, it should be noted that none of these characteristics received more than 15% of the participants selecting either “disagree” or “strongly disagree.” Where the percentage of respondents selecting “strongly agree” is less than 50%, it is generally a mixture of “agree” and “neutral” in addition to “strongly agree” that makes up the vast majority of selections (85% or more). Although the characteristics at the bottom of Table 3 were only mentioned in a single focus group, there is a high degree of intensity (100% strongly agree) in support of that characteristic as something that makes living in their community special to them.

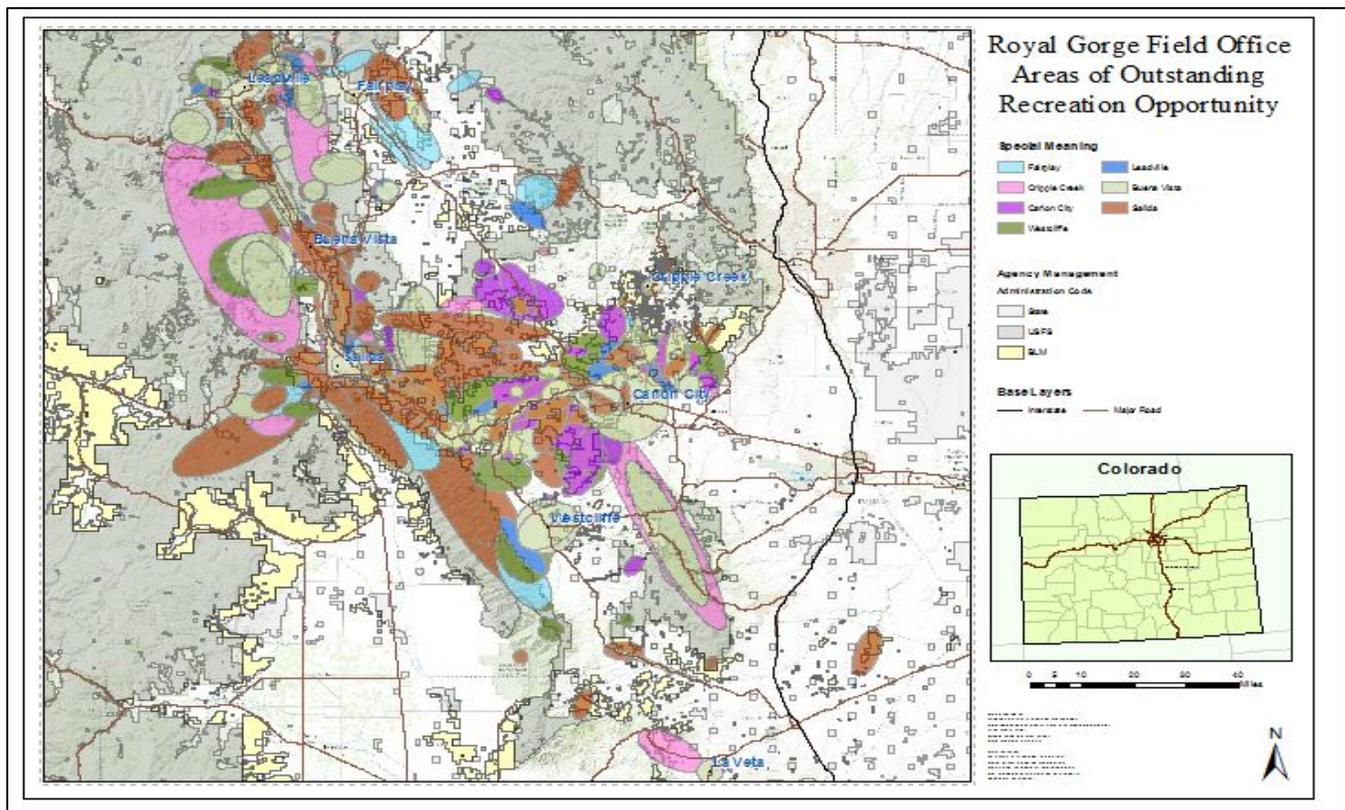
Table 3. Intensity of Support for Community Characteristics

Important Characteristic	Polling Selection	Number of responses	% of responses	Total Participants
Activities	Strongly Agree	95	87.16%	109
Climate	Strongly Agree	51	60.00%	85
Access to Public Land	Strongly Agree	60	85.71%	70
People	Strongly Agree	21	36.21%	58
Scenic Quality	Strongly Agree	46	85.19%	54
Open Space	Strongly Agree	37	69.81%	53
Dark Night Skies	Strongly Agree	18	39.13%	46
Recreational Opportunity/Proximity	Strongly Agree	27	87.10%	31
Variety of Recreation	Strongly Agree	25	86.21%	29
Creative-Artistic	Strongly Agree	25	89.29%	28
Community Character	Strongly Agree	5	17.86%	28
Medical Services	Strongly Agree	4	14.29%	28
Close Access/My Backyard	Strongly Agree	22	81.48%	27
Small Town Character	Strongly Agree	8	53.33%	15
History of Area	Strongly Agree	3	20.00%	15
Public Lands	Strongly Agree	12	85.71%	14
Weather	Strongly Agree	4	28.57%	14
Variety of Ecosystems	Strongly Agree	5	41.67%	12
Partnership/Community Goals	Strongly Agree	4	33.33%	12
Small Affordable Community	Strongly Agree	3	25.00%	12
Friends/Veterans in Community	Strongly Agree	7	87.50%	8
Low Crime	Strongly Agree	6	75.00%	8
Rural	Strongly Agree	7	100.00%	7
Diverse Opportunity/Landscape	Strongly Agree	2	100.00%	2

D. Outstanding Recreation Areas – Mapping Exercise

Participants were asked to identify the special places on BLM lands in the Royal Gorge Field Office by circling those locations on a map and identifying them by name and quality that makes them special. These were recorded on map handouts dividing the field office into 4 different maps to ensure a usable scale when transferring these selections onto a geographical information system (GIS) layer of “special places” (Figure 2). The attribute table of this layer identified the participant, the focus group, the coordinates, the reason the place is special, the name given to it by the participant, and any other data offered by the participant. The complete data files were given to the BLM as part of the administrative record of this focus group study.

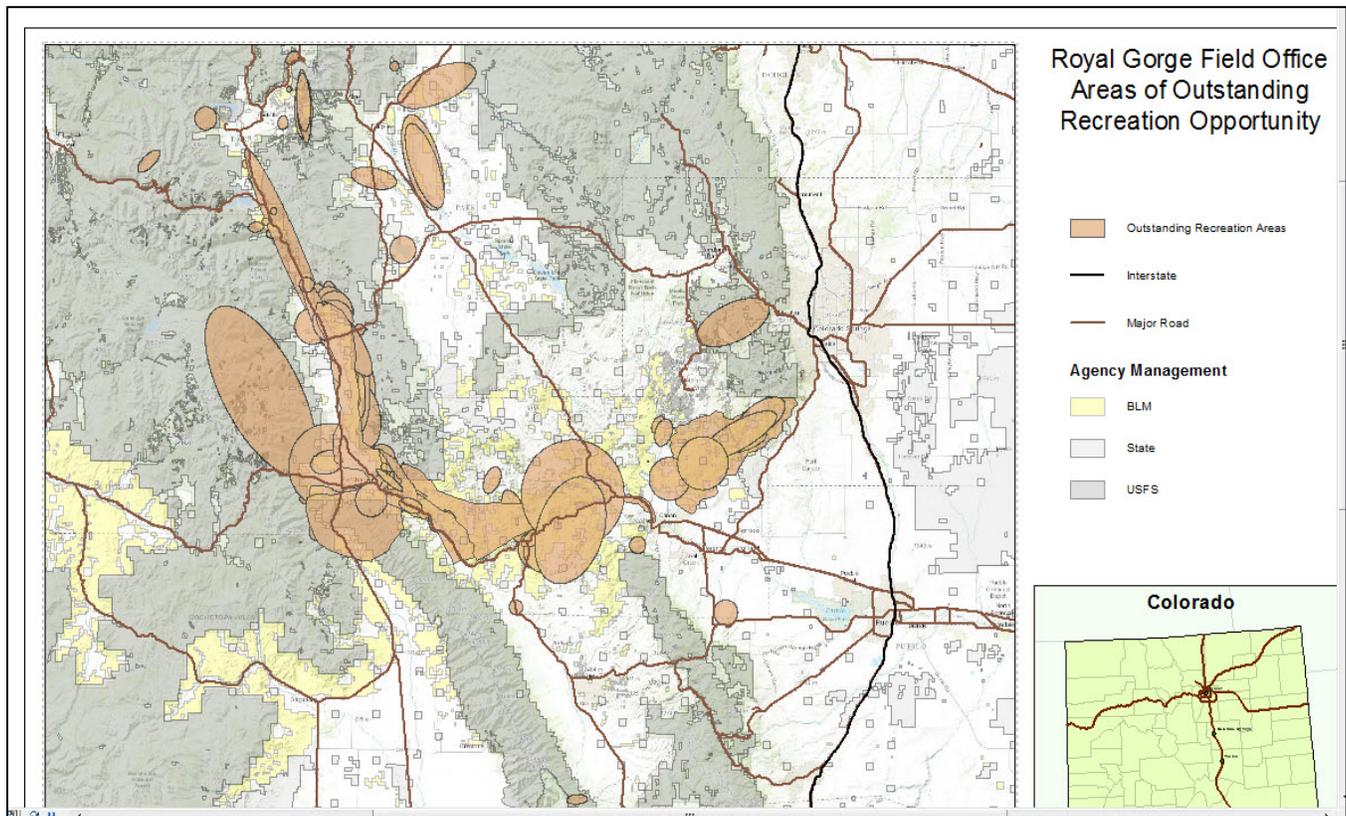
Figure 2. Special Places Identified by Each Focus Group



Next, the participants were asked to identify one area of “outstanding recreational opportunity/experience” by putting their participant number on a sticky note, and the name of the area of outstanding recreation opportunity (ORA). Then, they placed the sticky note on one of several maps of the field office hanging on the wall. They were then asked a number of questions about those recreational settings found at their specific area of outstanding recreation, and their responses were recorded by use of an audience polling device, so those responses could be linked to the specific locations (see Figure 3). This is valuable specific information about particular recreation locations that managers can use to plan recreational outcomes and settings that support the public’s interests and

expectations regarding those places. These ORAs identified on the wall maps were transferred to a GIS layer of ORAs with an attribute table connected to all participant polling information related to that location. A table of each location identified and linked to activities, interests, and expectations (outcome customer segments), and several photo selections representing key setting characteristics, was given to the BLM as part of the administrative record.

Figure 3. Areas of Outstanding Recreational Opportunity Identified in Focus Groups

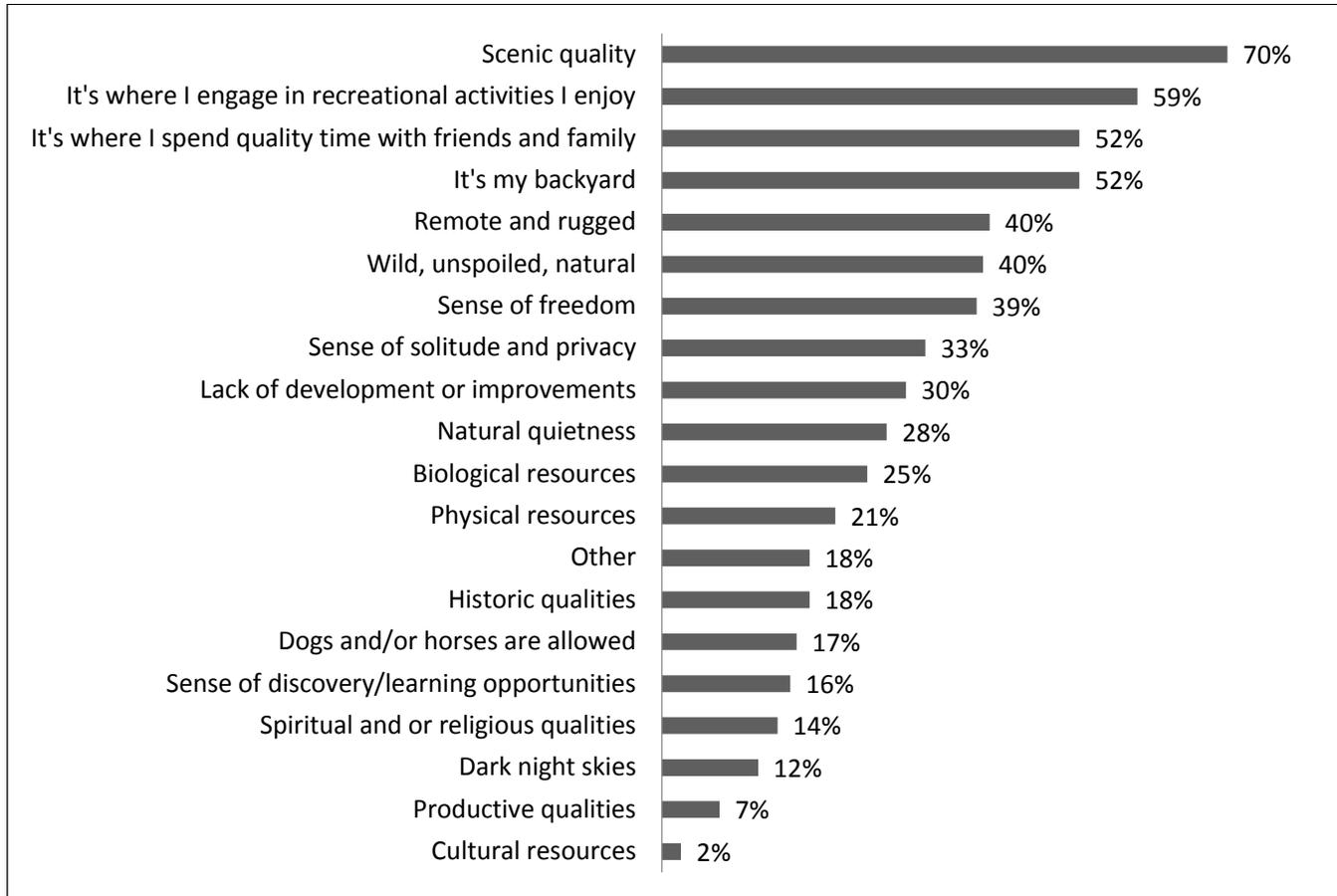


What Makes These Places Special?

Initially, focus group participants were asked to share the qualities of the BLM Royal Gorge Field Office public lands that make them special. A wide variety of responses were given during the open-ended dialogue prior to a prepared list of responses, which was shared with the participants as the data for polling. To allow for analysis, the dialogue responses were grouped with the choices selected through the polling. Comments were coded in terms of what response(s) they related to in the polling selections. There were several comments in each section that didn't neatly fit into the choices offered in the preset audience polling. These responses were coded and grouped according to their concern. Only a representative sample of all the comments is located in this report, but the total comments as well as the audio recordings for all focus groups were given to the BLM as part of the administrative record of the research. The responses are discussed in the order of their popularity as measured by

the percentage of participants in the entire study (all focus groups) that selected them. Figure 4 (below) shows the overall distribution of responses by all participants.

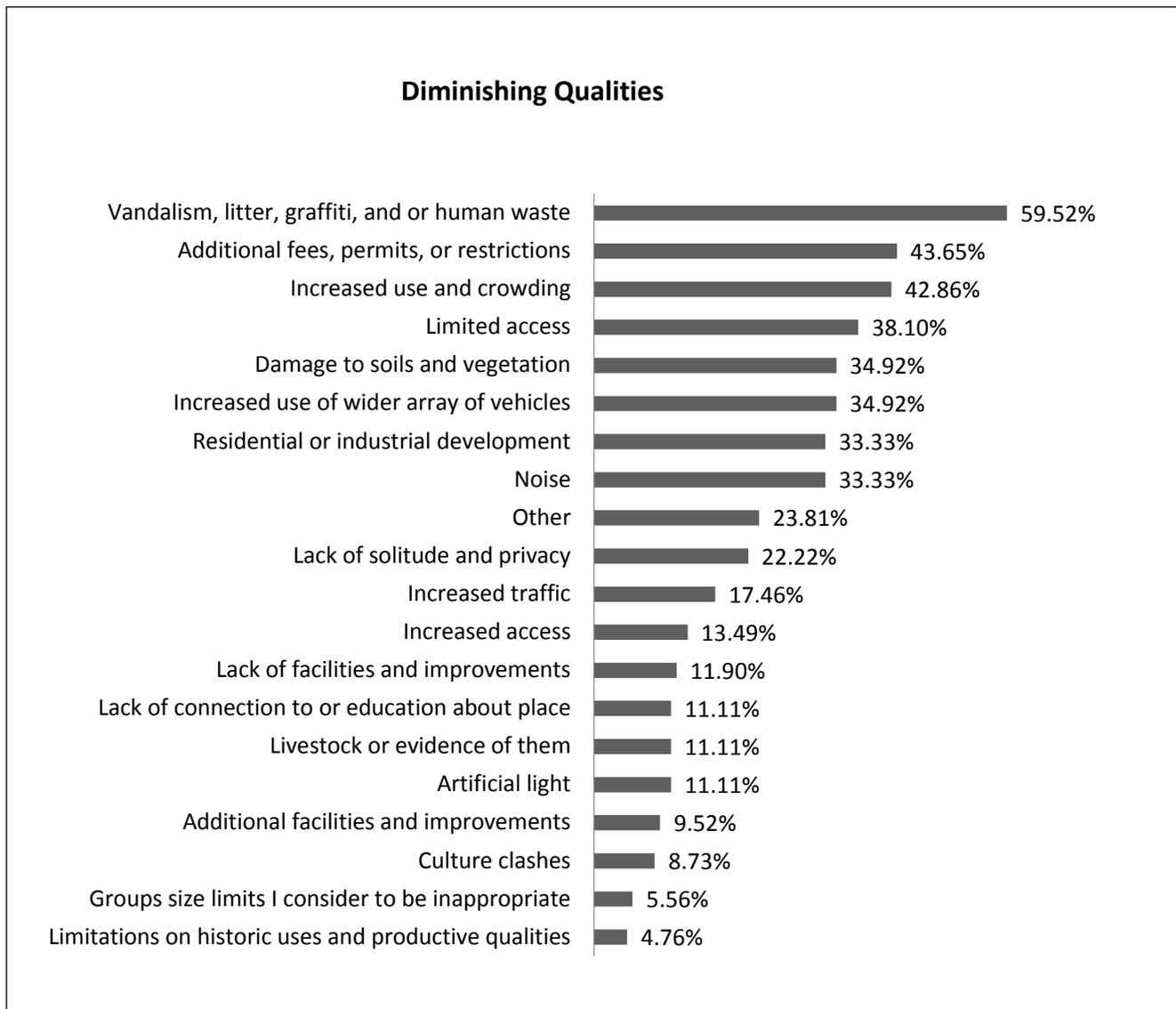
Figure 4. Special Qualities of BLM Lands in RGFO



What Would Diminish the Specialness of the Place?

While it is important to understand why people think a place is special, it is equally important to understand what might diminish that specialness and affect their connection to place. After discussing why the BLM public lands in the RGFO area are special, participants were asked to identify, “*What could or does diminish the specialness of the place?*” After the open-ended dialogue about the threats to specialness, the participants were given a prepared list of qualities from which to choose, using the audience polling clickers. Figure 5 (below) shows the percentage of responses selected by all participants.

Figure 5. Qualities That Diminish Specialness

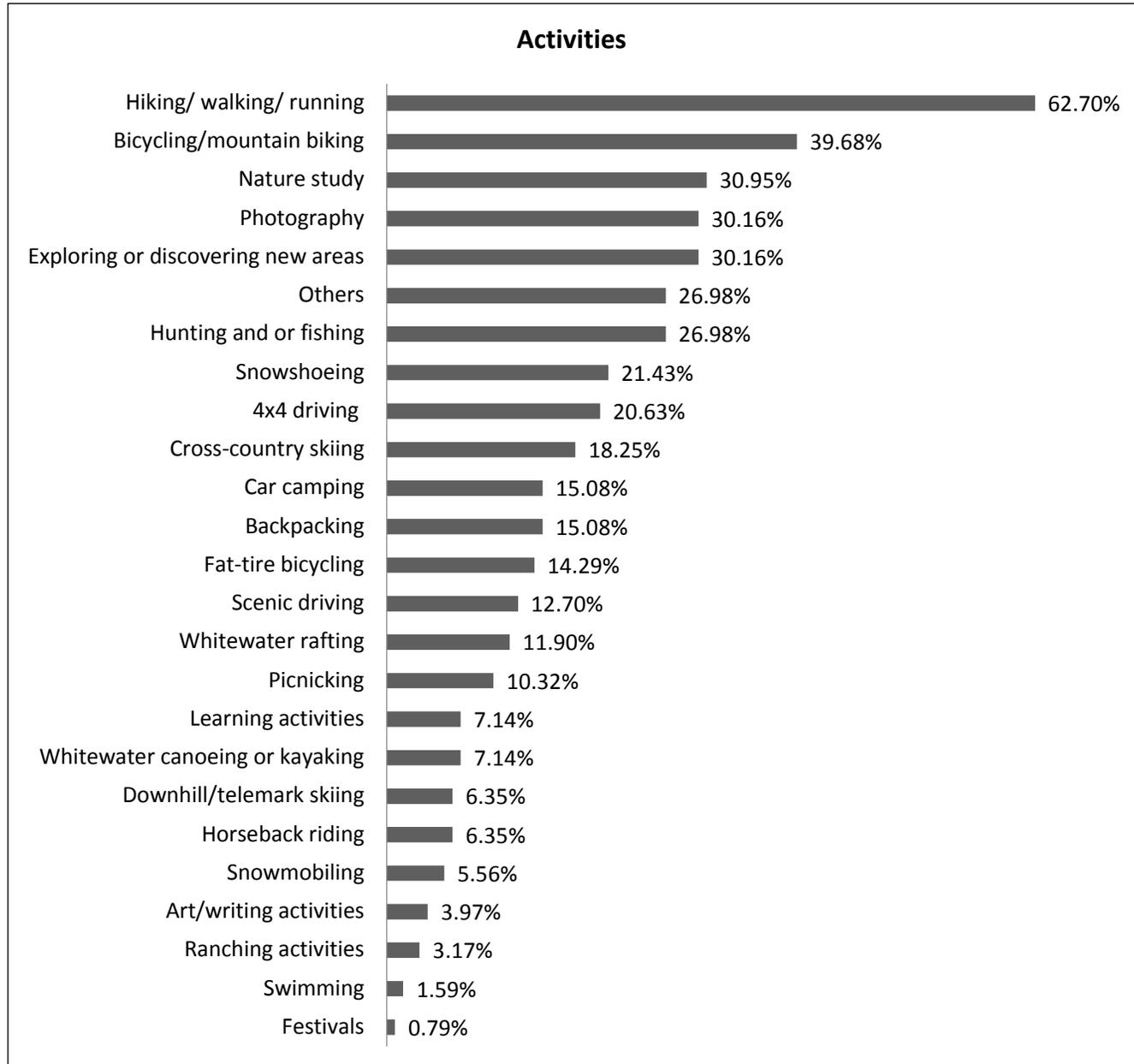


E. Activities

Traditionally, recreation studies on public lands typically began by determining which activities people engage in, then determining how and whether those activities could be supported by the land base. More contemporary recreation studies focus instead on the interests, expectations, and benefits the public receives from recreating on public lands, and the settings necessary to provide them, recognizing that a variety of activities can provide similar benefits and meet expectations if the desired settings remain intact. Also, discussing preferred activities has a tendency to allow people to form “tribes” and allow stereotypes to cloud interactions. For these reasons, activities were not discussed until midway through each focus group during this study. After discussing the specialness of the place,

threats to it, and participants' interests and expectations, participants were asked to select up to three activities they engaged in most often from a prepared list. Participants could select more than one activity and had the option of selecting "other." Participants were then asked to clarify it. Figure 6 (below) also shows the percentage of participants that selected any given activity.

Figure 6. Activities Engaged in Most Often



F. Interest Clusters

Research has indicated that people visit public lands to achieve a variety of beneficial outcomes and experiences for themselves, their communities, and the environment, while at the same time trying to avoid adverse outcomes and experiences. The list of such outcomes and experiences is extensive, but further research has discovered that people tend to bundle these experiences and expectations into a limited number of profiles of interests and expectations¹. Participants were given a list of 12 profiles of interests and expectations they might have when visiting the RGFO area. Each profile included a descriptive sentence of what someone choosing that profile might say. The profiles and descriptions included the following:

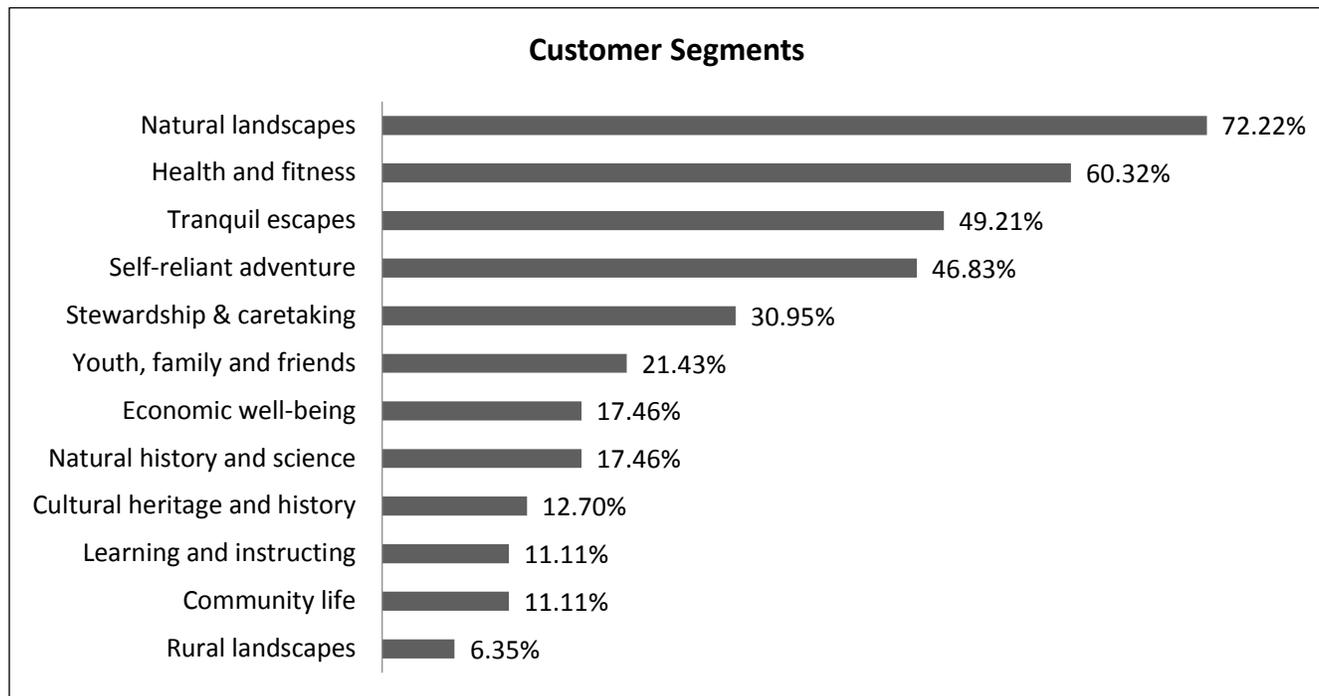
1. **Natural Landscapes** - I like to surround myself with the beauty of open space and the wildness of mountains, forests, rangeland, water and wildlife.
2. **Rural Landscapes** - I want to connect with the visual landscapes, sense of place and pace of rural areas where people make their living from the land.
3. **Cultural Heritage & History** - I am interested in how historic and prehistoric peoples lived in the area, and in exploring the connections I have with those peoples.
4. **Natural History & Science** - I am interested in knowing about natural processes in this area and the study of the scientific value of the landscape for enhancing our understanding of the world around us.
5. **Health & Fitness** - I like being able to regularly access public lands recreation areas that help me get and stay fit or improve my mental well-being.
6. **Self-Reliant Adventure** - I prefer outdoor adventure on my own that challenges my outdoor skills, improves my abilities, and maybe even involves some risk.
7. **Tranquil Escapes** - I look forward to the quiet serenity of getting away from it all for some mental and physical relaxation, reflection, and renewal.
8. **Youth, Family & Friends** - I am enriched by socializing with others: young people, my family and/or friends and enjoying companionship in the outdoors together.
9. **Community Life** - I like seeing what the discovery and enjoyment of nearby open space recreation does for my community and our visiting guests.

¹ For a good discussion of the experiences and outcomes that people seek when recreating in public lands, see the work of Driver, B.L. and Bruns, D.H. 1999. Concepts and uses of the benefits approach to leisure. pp. 349-369 in *Leisure Studies: Prospects for the Twenty-First Century*, E.L. Jackson and T.L. Burton et al. (eds.). Venture Publishing, State College, PA. Venture. To see the research that narrows the list of experiences and outcomes into profiles of interests and expectations, see Parry, B., Gollob, J. and Frans, J. 2014. Benefits of public land usage: an analysis of outdoor recreationists. In *Managing Leisure* 19(4). That study narrowed the profiles down to seven. Those seven are used in this study along with an additional five that were added to more comprehensively capture people's expected experiences and outcomes for recreating in these landscapes.

10. **Economic Well-Being** - I want to see public lands recreation areas contributing in a significant way to our economic livelihood.
11. **Learning & Instructing** - I feel comfortable having others equip and enable me to do recreation and tourism outings—or being part of helping others learn how to do that.
12. **Stewardship & Caretaking** - I like giving back to the outdoors from what I've received by helping care for special sites and facilities so others can also enjoy them.

Participants were allowed to select up to three profiles. Figure 7 (below) indicates the percentage of total selections by all participants for particular interest and expectation profile options.

Figure 7. Customer Segments by Interest and Expectation on RGFO Lands



G. Services

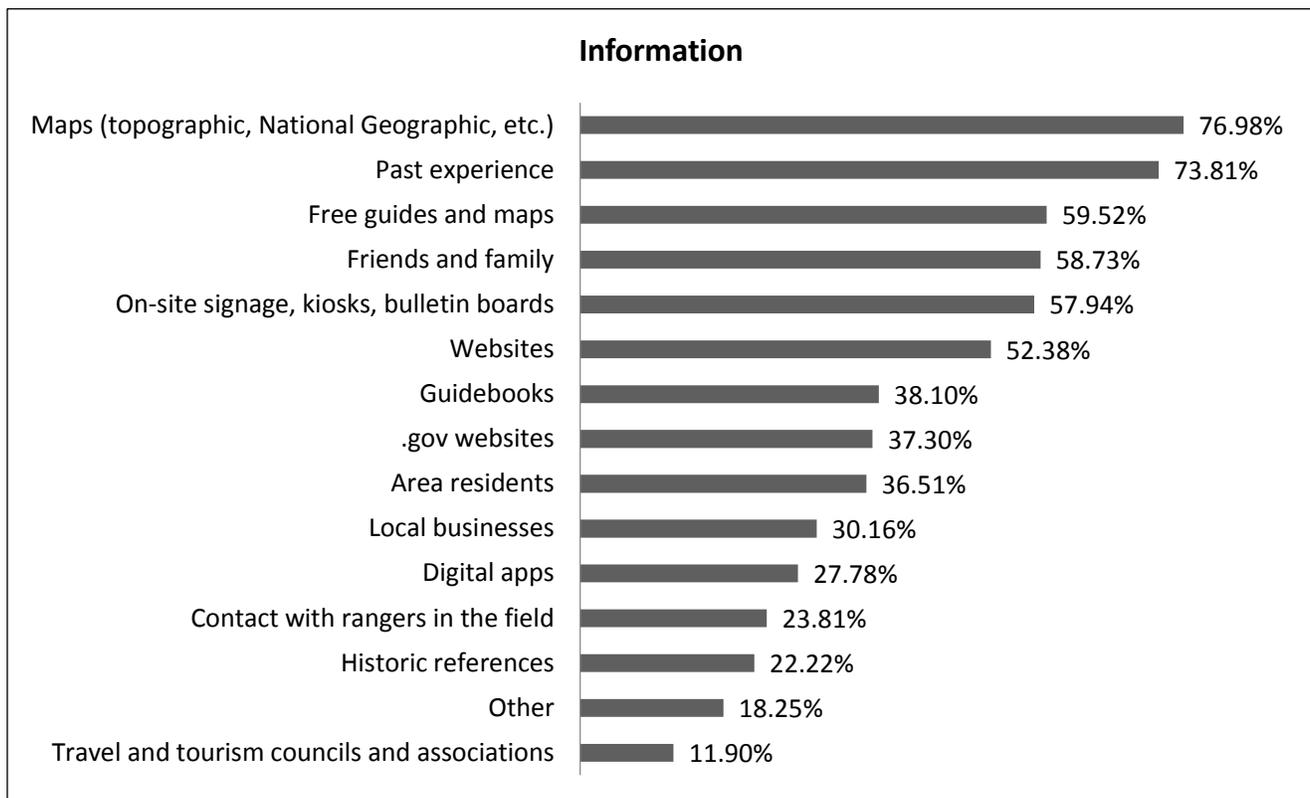
When individuals recreate on public lands, they are concerned about the outcomes and experiences that they desire, the activities they want to participate in, and the setting characteristics that make all of those possible, but they are also reliant on the provision of services—from information to fuel, food to gear, accommodations to communications—that make their experiences possible. While the BLM does not currently provide most of these (nor are they planning to in the future), they need to understand what services are necessary for visitors and local residents to be successful when recreating in the RGFO and beyond. This information is important for them to better understand not only the recreation taking place on BLM-managed lands but also on public lands throughout the region. Perhaps more importantly, the service data allow the BLM staff to engage in a dialogue with the businesses, leaders, and residents of gateway communities and beyond to develop partnerships that

enhance the livelihood and well-being of the local communities and support the visitors to the RGFO area. A series of discussion prompts offered the participants lists from which to choose as many services as they wanted in order to capture the type and location of services they depend on.

Where Do You Get Your Information about Recreating in Royal Gorge Field Office Lands?

The first set of services almost every recreationist relies on to be successful is quality information. The participants were asked where they get their information about the area when planning their trip. Figure 8 contains the number of participants that chose that particular response. Participants could select as many sources of information as they use to be successful recreating in the RGFO.

Figure 8. Information Services

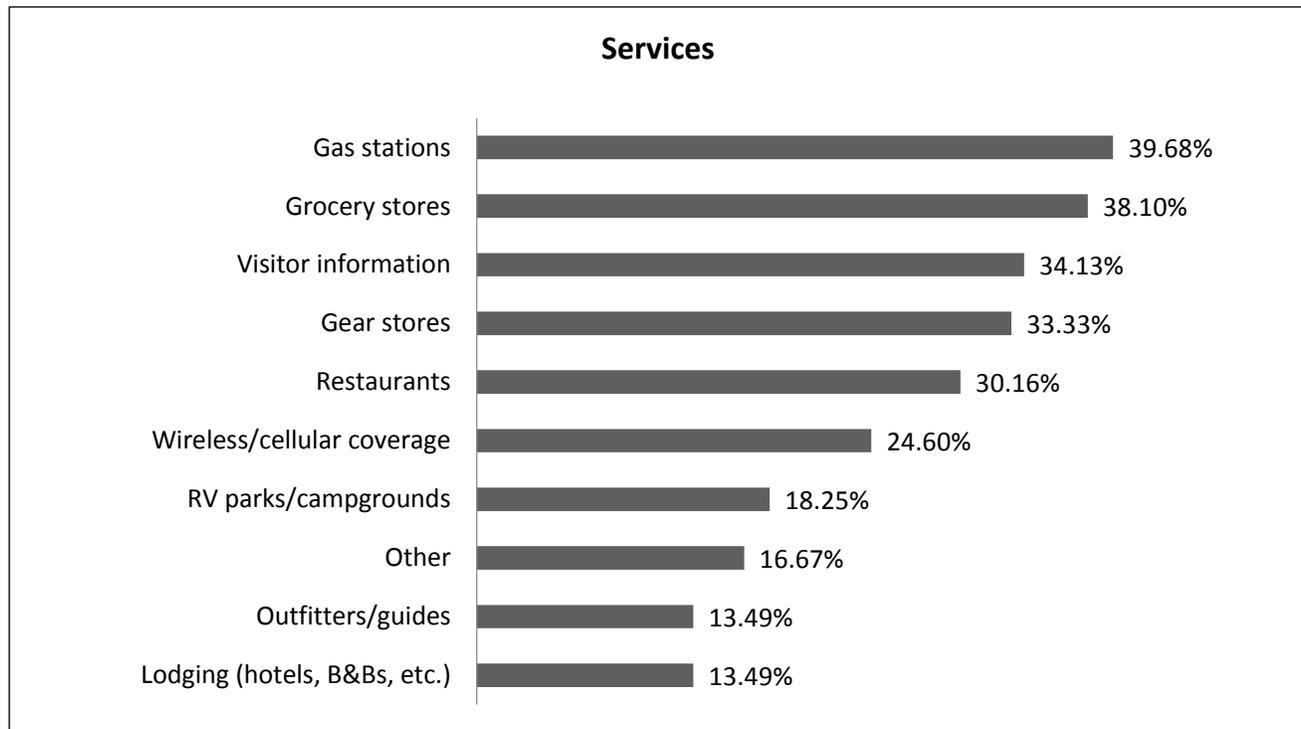


What Services Do You Depend on When Recreating on These BLM Public Lands?

Next, focus group participants were asked to discuss the kinds of services that they needed to be successful when they recreate in the RGFO area. These services can range from gas to groceries, and from gear to accommodations. It is important to note that the BLM is not planning on offering most or any of these services, but if their plan calls for recreation and human interaction with the landscape in the area, and these services are essential for the success of the visit, then the BLM needs to better understand how those services fit into their recreational planning, and what role local communities have in providing those services. The conversations that arise from this "practical partnership" between the BLM and the service providers are one of the best values to this study. Done right,

identifying services will strengthen the ties of local residents, community leaders, business owners, and the landscape surrounding their gateway communities. In order to measure the services that participants depend on, they were asked once again to respond to the discussion prompt then record their preferences to a pre-set list of some of the most common services they rely on. Figure 9 indicates the percentage of total participants selecting each of the services (they were allowed to select as many as they thought were essential to their success as they go out to the RGFO).

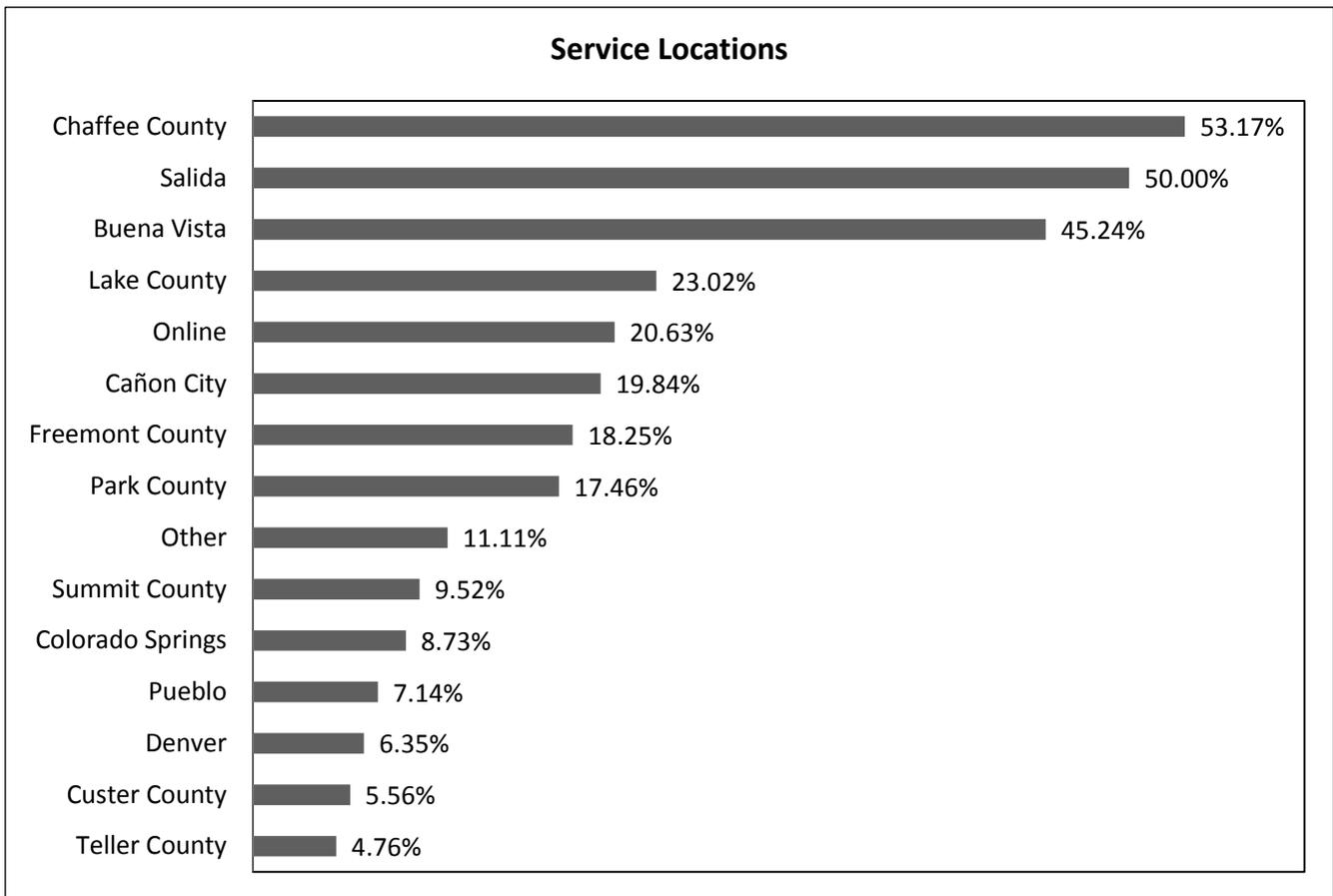
Figure 9. Services for Recreation Support in RGFO



Where Are Those Services Located?

The real power of a discussion of services that participants depend on is to combine it with the location of those services so we can better understand that dimension of the relationship between the gateway communities and the public lands surrounding them. Once again, participants were encouraged to offer comments as well as consider a list of several of the communities from which they might obtain services. Again, they were also allowed to choose as many locations as they thought essential. Figure 10 shows the number of total selections for any particular location to obtain services.

Figure 10. Location of Services



II. Surveys

Between May and June 2015, CMU's NRC administered surveys to recreationists at dozens of identified sites within the RGFO planning area. Data were collected from two surveying efforts: an intercept survey and a panel survey.

(1) Intercept Survey: This survey included a brief on-site survey (herein: on-site survey) and a more comprehensive online and/or take-home survey (herein: comprehensive survey).

(2) Panel Survey: During July 2015, invitations to participate in the comprehensive survey (online version) were sent out to a nationally representative panel of outdoor recreationists who self-identified as having visited the RGFO area.

A. Intercept Survey Methodology

Working with BLM recreational staff, 31 intercept sites in total were identified on RGFO- and AHRA-managed lands as having the greatest potential of contacting public lands users. These areas were selected because of their popularity, diverse terrain, and recreational activities. Most of the sites were gateway locations such as trailheads, parking lots, and camping areas. For a detailed list of the intercept sites and numbers of individuals surveyed at each location, please refer to Table 4.

Table 4. Survey Sites

Recreation Site	Frequency	Percent
Four Mile Camping	14	3.5
Five Points	42	10.4
Bank Climbing	44	10.9
Burmac	4	1
Buena Vista River Park	50	12.4
Cactus Creek Climbing	7	1.7
Collegiate Overlook	20	5
Corral	1	0.2
Ecology Park	6	1.5
Elephant	4	1
Garden Park	2	0.5
Hecla	6	1.5
Methodist	21	5.2
Midland	2	0.5
Miners Camp	6	1.5
Numbers	6	1.5
Oil Well Flats	1	0.2
Parkdale Original	4	1
Penrose Common	2	0.5
Pink House	7	1.7
Pinnacle Rock	1	0.2
Prospector Camp	1	0.2
Railroad Bridge	4	1
Rincon	10	2.5

Recreation Site	Frequency	Percent
Ruby Mountain	10	2.5
Salida East	39	9.7
Salida Whitewater	60	14.9
Salt Lick	8	2
Sand Gulch	7	1.7
Spike Buck	1	0.2
Texas Creek	13	3.2
Total	403	100

Design

Working with BLM recreation staff, a two-stage model of surveying was developed for administering the intercept survey. As mentioned above, the first stage included the administration of a short on-site survey, administered by trained CMU surveyors, to recreationists in the field. The purpose of the on-site survey was to collect information critical to the decision-making processes the BLM is tasked with fulfilling. These questions include visitation characteristics, recreational activities, interest and expectation tendencies, group size, and demographic statistics. The second stage involved extending an invitation to complete a longer, more comprehensive online and/or take-home survey (whichever the respondent preferred), to be completed at the individual's convenience. The invitation to participate in the comprehensive survey was extended to every on-site survey respondent.

Time Frame

Given time and budget restraints, CMU and the BLM had to carefully select the time frame over which the intercept survey would be administered. Considering recreation in the RGFO area is greatly impacted by weather, recreational staff suggested that surveying take place during the Arkansas River peak runoff and more temperate periods of the year. As such, surveying began in May 2015 and continued through late June 2015. During this time frame, teams of one to two surveyors were dispatched to intercept sites to spend anywhere from one to five hours surveying recreationists.

Sampling

To avoid the possibility of selection bias (which could skew the results), surveyors were trained to adhere to a strict sampling technique when administering the on-site survey. Random checks were conducted by team leaders to ensure that the sampling technique was being followed. Surveyors were instructed to approach every group (defined by a collective that arrived, or planned on meeting, at the survey site) upon their arrival. While a 100% intercept rate was the goal, dramatic fluctuations in usage rates during different times of the year made that target unrealistic. If a surveyor missed a group on their arrival, a good-faith effort was made to approach the group during their departure.

Upon approaching a group, surveyors introduced themselves and proceeded to read from the following script:

Colorado Mesa University is conducting this survey to learn more about visitors to Bureau of Land Management public lands in Colorado, so that public land managers and their local

government and business partners can improve service to you. You are one of a small number of people randomly chosen for this survey, so your opinions are important to us. Although we would greatly appreciate your help, you are free to decline this interview. Your responses will be considered your consent to participate. All the information will be used for our statistical purposes and will be kept confidential. Would you be willing to take 3-4 minutes to answer a few short questions about your visit today?

If a group declined to participate, the surveyor thanked the group for their time and noted the rejection in their log. Roughly, 40 rejections were recorded in the surveyors' logs, which equates to about 10 percent of the overall completed on-site surveys.

For those groups that agreed to participate in the on-site survey, a single individual in the group (regardless of group size) was invited to complete the on-site survey. Each on-site survey was administered by a trained CMU surveyor and care was taken to randomly select a single respondent so as not to introduce bias into the results. Random selection was accomplished by asking the group whose birth date was closest to the current date. If the person with the closest birth date declined to participate, the person with the next closest birth date was invited until an individual in the group agreed to complete the on-site survey.

At the completion of the on-site survey, the surveyor extended an invitation to the respondent to participate in the comprehensive survey (which could be completed off-site and at the respondent's convenience). Of the 403 on-site surveys, 281 (or 70.0%) agreed to participate in the comprehensive survey and accepted the materials to complete it. The vast majority of the respondents preferred the online version and received a card with the web address of the survey and contact information for the CMU research team. Those wishing to complete a paper-based version of the comprehensive survey received a survey packet, which included the survey itself, a self-addressed stamped envelope, and a map of the recreation area. Regardless of the format (online or paper-based), every comprehensive-survey included a unique numeric identifier to prevent multiple submissions. For the online version, a respondent had to type the unique numeric identifier into the appropriate box before they were allowed to start the survey. For the paper-based survey, the unique identifier was printed at the bottom of the survey itself. A series of three reminder emails (which included the web link to the survey and their unique numeric identifier for online participants) were sent to respondents who provided their emails, and two reminder cards were mailed to those who provided only their physical mailing address.

A total of 403 on-site surveys were collected in the field, of which 281 agreed to take the comprehensive survey. Of the 403 participants, 111 full-length (comprehensive) surveys (9 paper-based) were completed for a 27.5% response rate.

B. Panel Survey Methodology

A unique aspect of this study is the use of panel research. A panel database is “a sample database of potential respondents who declare that they will cooperate for future data collection if selected”². Panelists are incentivized to participate in online panels using a point system that can be redeemed for goods and services. Panels are used by a number of organizations for their data collection efforts given their affordability and efficiency.

Contracting with Qualtrics, an online panel provider, panelists across the United States were recruited and incentivized to participate in this study. Qualtrics initially assembled approximately one million potential panelists from their panel database, of which 1,234 were deemed eligible to participate in this study. Eligibility required that panelists (1) engage in outdoor recreation on public lands, and (2) affirm that they have recreated on RGFO/AHRA lands. The 1,234 panel participants were then invited to complete the same comprehensive survey (online) discussed earlier. Roughly half of the panel participants resided in Colorado with the other half residing in states other than Colorado. For a full breakdown, see Question 25 in Appendix 4.

Like all data collection methods, panels have their strengths and weaknesses. Generally, the strengths of panels include their affordability, the ability to target specific geographic areas, and the ability to weed out any panelist who does not fit the desired profile. Working with BLM recreational staff, it was determined that panels could add value to this study for several reasons:

- The ability to sample recreationists both inside and outside of Colorado without shouldering the significant costs linked to traditional survey methodologies (such a phone survey).
- The ability to sample recreationists who recreated on RGFO/AHRA lands but were not included in the intercept survey.
- The ability to efficiently increase the sample size of recreationists on RGFO/AHRA lands in an economical way.
- The ability to determine whether significant differences exist between the various user groups (e.g., Colorado residents versus nonresidents).

The primary weakness of panels (as it relates to this project) involves issues pertaining to the validity of the data. Because the researchers do not directly interact with panelists, they cannot verify the validity of their responses. For example, it is easy for a researcher to verify a respondent’s statement that they recreate on RGFO/AHRA lands when the researcher intercepts them hiking and surveys them on RGFO/AHRA lands; it is much more difficult to verify the same response of a panelist who is responding to an online survey question. To guard against insincere answers, the researchers scattered attention filters throughout the survey, and if respondents did not recognize the filters while completing the survey, their responses were excluded from the analysis. Panel data are intended to complement, not replace, intercept survey data.

²Mario Callegaro et al. (eds.). 2014. *Online Panel Research: A Data Quality Perspective*. West Sussex, UK: Wiley, Section 1.3.

C. Data Analysis

The survey results are presented in Appendix 4. Here are two notes about interpreting the results:

- **Segments:** Working with RGFO/AHRA staff, the survey data have been segmented into the following categories:
 - **Outside Colorado vs. Colorado:** Respondents were classified as either living in Colorado or in a state other than Colorado, based on answers to Question 25 in Appendix 4.³
 - **Intercept & Panel:** Respondents participating in the panel are segmented from those participating in the intercept survey.
 - **Salida, Buena Vista, Cañon City & Surrounding Areas:** For this division of groups, polygons were created on heat maps to encompass all the major towns located on the maps (e.g., Salida, Buena Vista, Cañon City). Those who clicked within the town polygons were labeled as “City” recreationists, whereas those who clicked outside of the town polygons were identified as in “Surrounding Areas.”
 - **River Location & Upland Location:** Using heat map technology incorporated in this study, where click frequency is represented on the map, polygons were created that encapsulated the Arkansas River. All those who clicked within the polygon area containing the river were identified as “River” recreationists. Those who clicked outside of the river polygon were identified as “Upland” recreationists.
 - **Denver Metro Area & Royal Gorge Area & Other Area:** Respondents provided their residential zip code in the survey, which was aligned with all zip codes included in the following groupings (as indicated by the U.S. Census Bureau): Denver metro area residents, RGFO local residents (reside in Teller, Fremont, Chaffee, Lake, and Park Counties), and all other residents.
- **Statistical Significance:** Where possible, statistical tests were performed to determine whether statistically significant differences exist in the responses of the segments listed above. The appropriate tests (chi-square, T-test, and ANOVA) were selected based on the type of measurement used in each survey question. The tables report statistically significant results (where $p < .05$) with an asterisk (*). In cases where statistical significance is indicated, it can be concluded that there is at least a 95% confidence level that the different responses between the segments being compared did not occur by error or chance. In cases where there are differences in the responses between segments, but there is no statistical significance indicated, there is uncertainty as to whether those differences are influenced by error or occurred by chance.

Overall, several types of analyses were conducted and are presented in this report. The findings are reported in Appendices 4 and 5 by question, where the number of responses and percentages by sample total as well as by segment, and the corresponding significant differences, are found in tables and figures.

³This question number refers to the paper-based survey, not the online survey. Although there is almost perfect symmetry between the paper-based and online surveys, there are some small differences that can extend to question numbering.

Appendix 1: Focus Group Script

Royal Gorge Field Office
Bureau of Land Management
Community Recreation Assessment Meetings

Participant’s Handout

2014



Natural Resources Center at Colorado Mesa University

Tim Casey, PhD



_____ : Clicker number

The purpose of this handout is to help facilitate your participation in the focus group. To do so, all discussion prompts will be outlined, but there are a few maps that you will need to work on here on the worksheet. Your responses will be kept anonymously and confidential. While all prompts are

contained here, you will be asked to first identify your preferences from lists contained in this handout, and then record them with your audience polling technology, referred to as “clickers,” when asked to do so.

It is important for the purposes of the study that you stay focused on the discussion with the group. You are discouraged from reading ahead on this handout until called to do so by the moderator. In this fashion we hope to collect the most accurate information about your demands and desires for public lands. Please put the handout down for now until called to use it.

1: Zipcode

2: Affiliation with landscape

3: What are the things you like about living in or visiting this community?

4: How do public lands in the area affect the quality of life issues you just described?

5: What makes a place special?

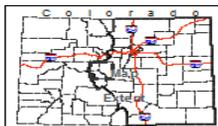
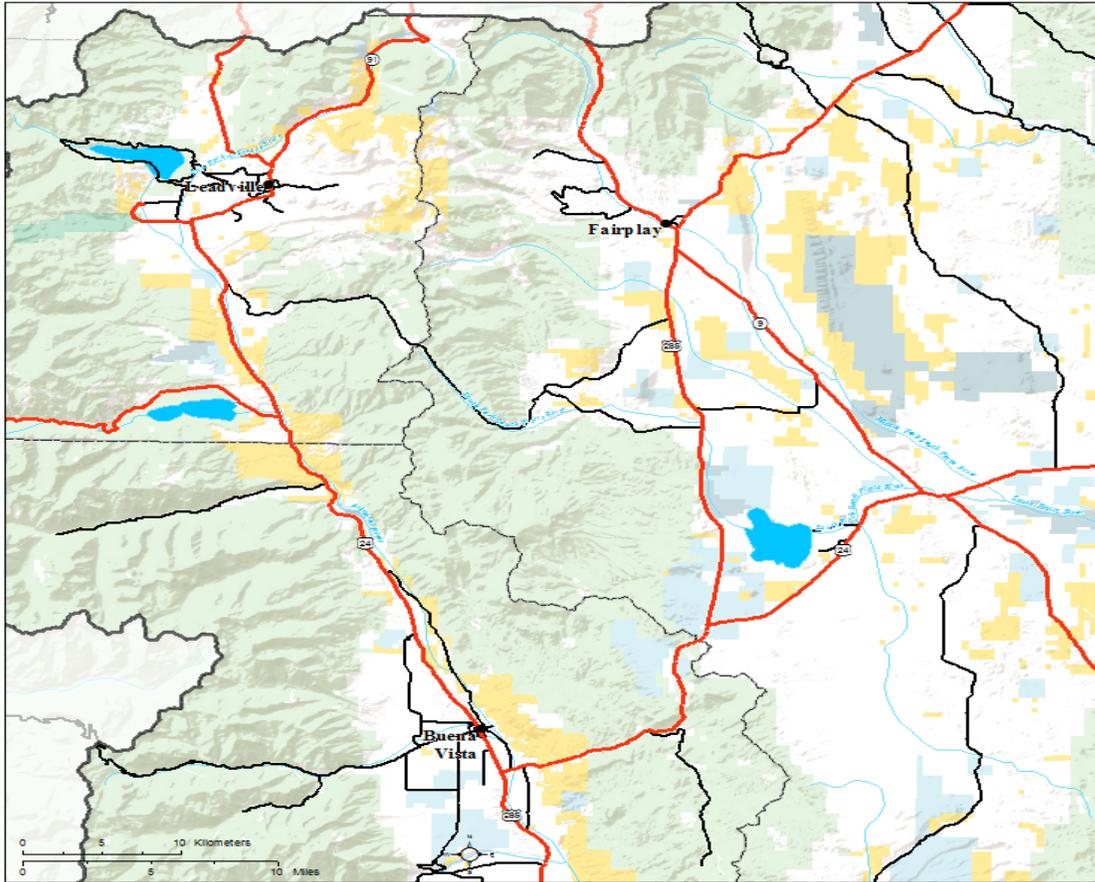
Please take a couple moments to think about a few areas or places on BLM managed public lands in the Royal Gorge Field Office (highlighted on the 4 maps below) that have special personal meaning and importance for you.

For each of these places please do the following:

- 1) **circle it and number it on the four attached maps;**
- 2) **then in writing below name and locate the place;**
- 3) **indicate the things you do when you visit there;**
- 4) **indicate the reason that this place has special meaning for you;**
- 5) **circle the name of the most special place for you**



Leadville/ Fairplay
Royal Gorge Field Office
Map 4 of 4



Map Projection:
 Universal Transverse Mercator
 Zone 13, Units Meters
 GRS 1980 Spheroid
 NAD83 Datum
 Bureau of Land Management
 Royal Gorge Field Office
 Map Last Revised: October, 2014

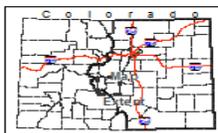
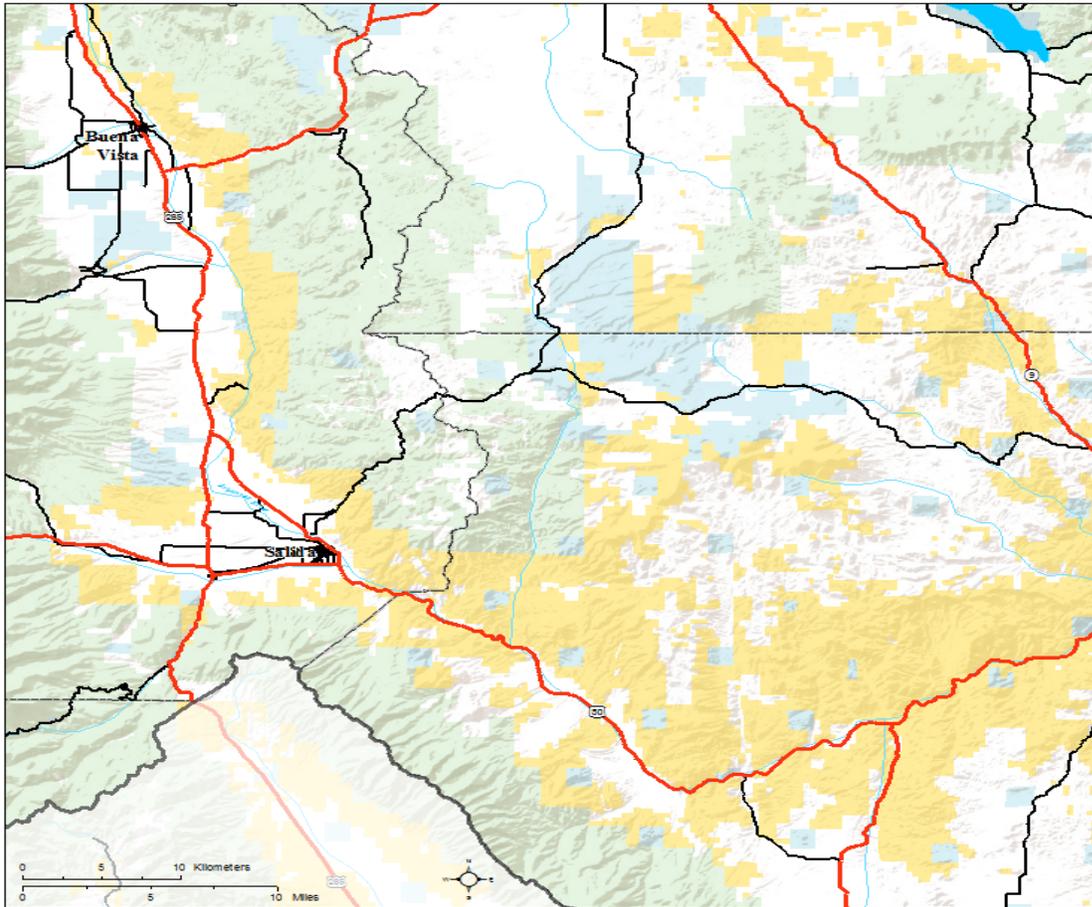
This document is made by the Bureau of Land Management (BLM) for the use of the map for purposes not intended by BLM, or to the accuracy, reliability, or completeness of the information shown. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification.

Administrative Boundaries		Hydrology	
RGFO Boundary	County Boundaries	Rivers	Lakes
Surface Management Agency			
Bureau of Land Management	State	US Forest Service	
Bureau of Reclamation	State, County, City, Areas	US Fish and Wildlife Service	
Private			

Special Places:



Salida/Buena Vista
 Royal Gorge Field Office
 Map 3 of 4



Map Projection:
 Universal Transverse Mercator
 Zone 13, Units Meters
 GRS 1980 Spheroid
 NAD83 Datum
 Bureau of Land Management
 Royal Gorge Field Office
 Map Last Revised: October, 2011

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Administrative Boundaries

- RGFO Boundary
- County Boundaries

Hydrology

- Rivers
- Lakes

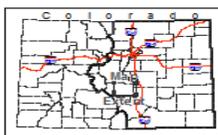
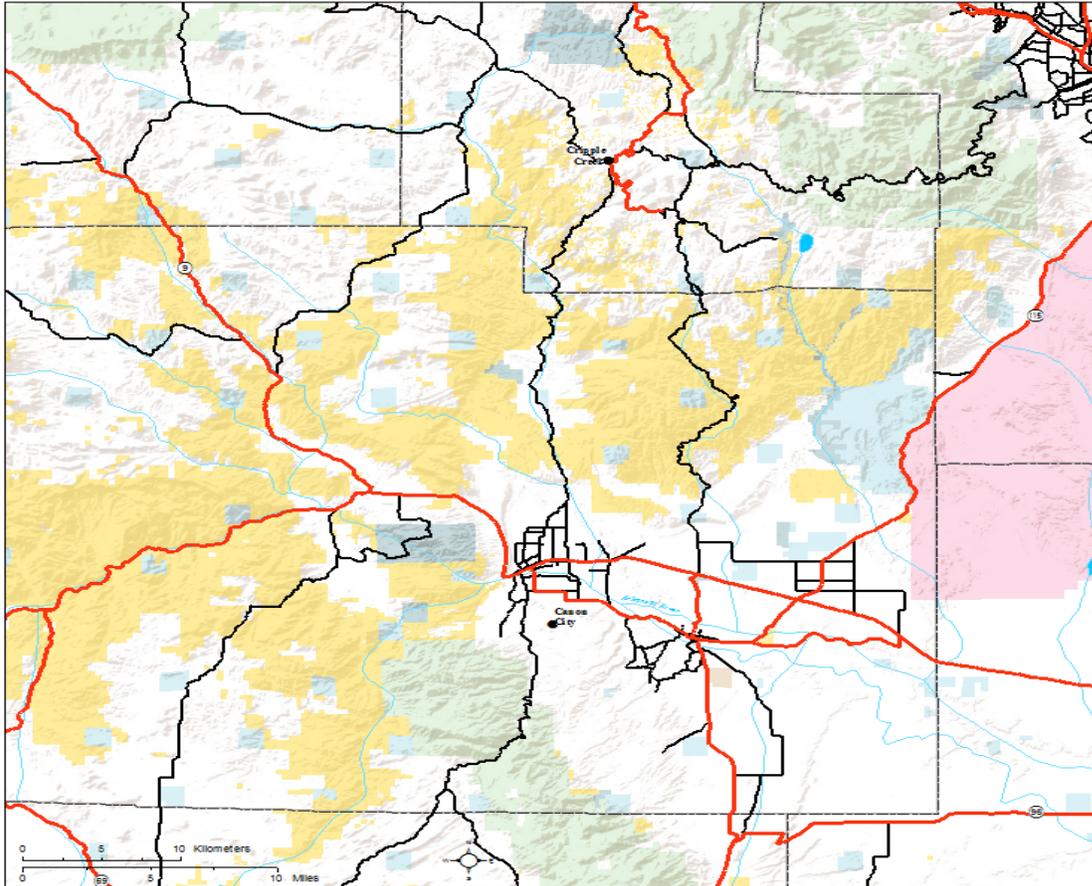
Surface Management Agency

- Bureau of Land Management
- Private
- State, County, City, Areas
- Other Federal
- State
- US Forest Service

Special Places:



Canon City/ Cripple Creek
 Royal Gorge Field Office
 Map 2 of 4



Map Projection:
 Universal Transverse Mercator
 Zone 13, Units Meters
 GRS 1980 Spheroid
 NAD83 Datum

Bureau of Land Management
 Royal Gorge Field Office

Map Last Revised: October, 2014

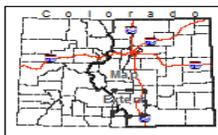
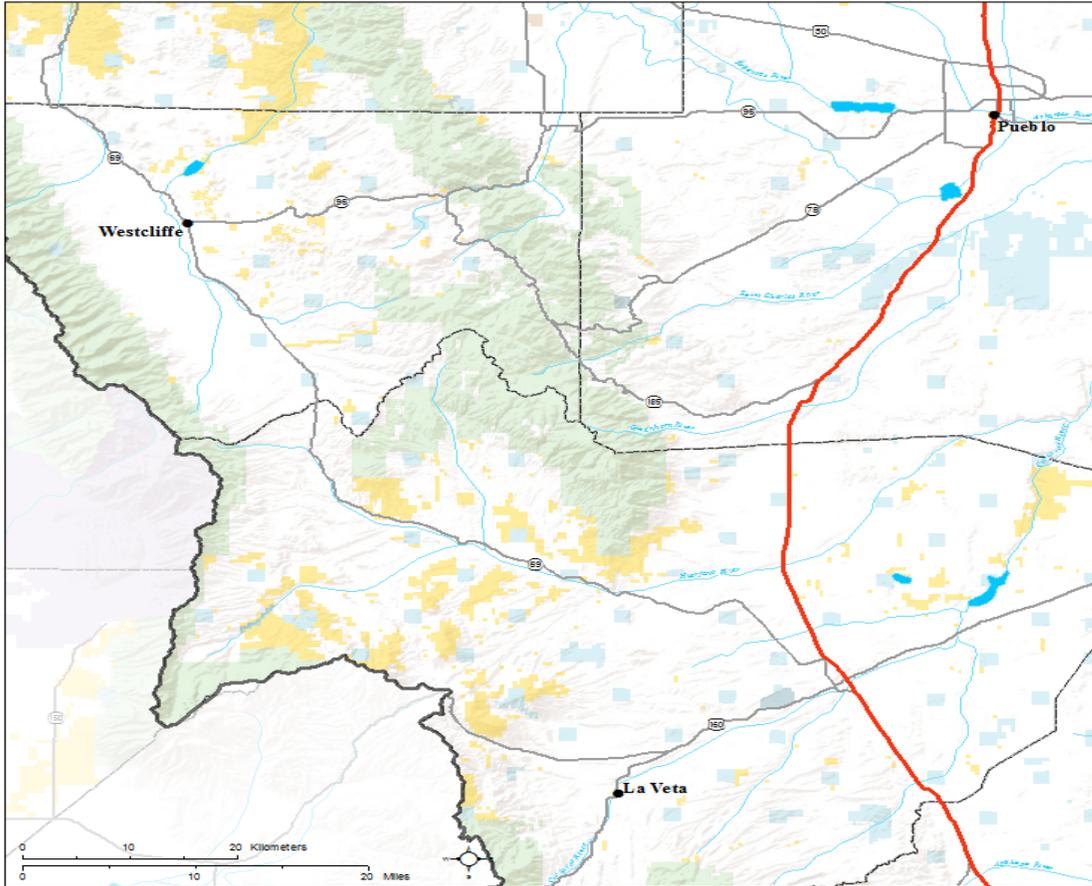
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Administrative Boundaries		Hydrology	
RGFO Boundary	Rivers	Lakes	
County Boundaries			
Surface Management Agency			
Bureau of Land Management	Private	US Forest Service	
Military Reservation	State		
Other Federal	State, County, City, Areas		

Special Places:



Westcliffe
Royal Gorge Field Office
Map 1 of 4



Map Projection:
 Universal Transverse Mercator
 Zone 13, Units Meters
 GRS 1980 Spheroid
 NAD83 Datum
 Bureau of Land Management
 Royal Gorge Field Office
 Map Last Revised: October, 2014

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Administrative Boundaries	Transportation	Hydrology
<ul style="list-style-type: none"> RGFO Boundary County Boundaries 	<ul style="list-style-type: none"> Interstate Highways US & State Highways 	<ul style="list-style-type: none"> Rivers Lakes
Surface Management Agency		
<ul style="list-style-type: none"> Bureau of Land Management National Park Service Other Federal 	<ul style="list-style-type: none"> Private State State, County, City, Areas 	<ul style="list-style-type: none"> US Forest Service

Special Places:

6: Area of Outstanding Recreational Opportunity

Star a special place on your list that has OUTSTANDING RECREATION OPPORTUNITIES they would like to tell us about.

Then please share that location by circling it on the large wall map at the front of the room and write your clicker number in the circle.

For the rest of the focus group, please answer about that area of outstanding recreation opportunity with your self-identified association with the area.

7: What makes the area of outstanding recreational opportunity you selected, “special” to you?

7: What are the qualities of the area of outstanding recreational opportunity that make it a special place for you? (Choose up to five.)

SP-1	1	It's my back yard
	2	It's where I spend quality time with friends and family
	3	Historic qualities - how previous generations used the area
	4	Productive qualities - grazing and hunting
	5	Biological resources - plants, animals, etc.
	6	Physical resources - geology, paleontology, etc.
	7	Cultural resources - archeology, etc.
	8	Scenic quality
	9	Spiritual and/or religious qualities
	0	Sense of freedom
SP-2	1	Wild, unspoiled, and natural
	2	Remote and rugged
	3	Sense of solitude and privacy
	4	Natural quietness
	5	Dark night skies
	6	Sense of discovery/learning opportunities
	7	Dogs and/or horses are allowed
	8	Lack of development or improvements
	9	It's where I engage in recreational activities I enjoy
	0	Other

8: What could diminish the specialness of that area for you?

8: What could or does diminish the specialness of the area of outstanding recreational opportunity you identified? (Choose up to five.)

DIM-1		Additional fees, permits, or restrictions
		Increased use and crowding
		Increased traffic
		Increased use of wider array of vehicles
		Group size limits I consider to be inappropriate (too high or too low) – please indicate verbally which
		Limitations on historic uses and productive qualities
		Additional facilities and improvements
		Lack of facilities and improvements
		Increased access
		Limited access
DIM-2		Vandalism, litter, graffiti, and/or human waste
		Damage to soils and vegetation
		Lack of solitude and privacy
		Noise
		Artificial light
		Livestock or evidence of them
		Culture clashes – locals vs. visitors or long time locals vs. move-ins
		Lack of connection to or education about place
		Residential or industrial development (utility lines, pipelines, etc.)
		Other

9: What do you like to do in that area of special recreational opportunity?

9: When visiting that area you have identified as an area of outstanding recreational opportunities, what activities do you engage in most often? (Choose up to 3)

Act-1	<input type="checkbox"/>	Scenic Driving
	<input type="checkbox"/>	Exploring or discovering new areas
	<input type="checkbox"/>	Hiking/Walking/Running
	<input type="checkbox"/>	Backpacking
	<input type="checkbox"/>	Car Camping
	<input type="checkbox"/>	Picnicking
	<input type="checkbox"/>	Swimming
	<input type="checkbox"/>	Nature Study (Wildlife Viewing/ Bird Watching/Geology/Plants)
	<input type="checkbox"/>	Whitewater Rafting
	<input type="checkbox"/>	Whitewater canoeing or Kayaking
Act-2	<input type="checkbox"/>	Bicycling/ Mountain Biking
	<input type="checkbox"/>	Horseback Riding
	<input type="checkbox"/>	4x4 Driving (Jeep, Truck, SUV, ATV/UTV riding)
	<input type="checkbox"/>	Ranching activities
	<input type="checkbox"/>	Hunting and/or fishing
	<input type="checkbox"/>	Photography
	<input type="checkbox"/>	Learning activities (interpretive programs, educational outings, etc.)
	<input type="checkbox"/>	Art/Writing activities
	<input type="checkbox"/>	Festivals
	<input type="checkbox"/>	Other

10: What are your interests and expectations when going to that area of outstanding recreational opportunity?

10. When you go to your area of interest, which of these phrases best captures your interests and expectations for going there? (Choose up to 3)

CS-1	1	Natural Landscapes	I like to surround myself with the beauty of open space and the wildness of mountains, forests, rangeland, water and wildlife
	2	Rural Landscapes	I want to connect with the visual landscapes, sense of place and pace of rural areas where people make their living from the land
	3	Cultural & Heritage History	I am interested in how historic and prehistoric peoples lived in the area, and in exploring the connections I have with those peoples
	4	Natural History & Science	I am interested in knowing about natural processes in this area and the study of the scientific value of the landscape for enhancing our understanding of the world around us.
	5	Health & Fitness	I like being able to regularly access public lands recreation areas that help me get and stay fit or improve my mental well-being
	6	Self-Reliant Adventure	I prefer outdoor adventure on my own that challenges my outdoor skills, improves my abilities, and maybe even involves some risk
CS-2	1	Tranquil Escapes	I look forward to the quiet serenity of getting away from it all for some mental and physical relaxation, reflection, and renewal
	2	Youth, Family & Friends	I am enriched by socializing with others: young people, my family and/or friends and enjoying companionship in the outdoors together
	3	Community Life	I like seeing what the discovery and enjoyment of nearby open space recreation does for my community and our visiting guests
	4	Economic Well-being	I want to see public lands recreation areas contributing in a significant way to our economic livelihood
	5	Learning & instructing	I feel comfortable having others equip and enable me to do recreation and tourism outings—or being part of helping others learn how to do that
	6	Stewardship & Caretaking	I like giving back to the outdoors from what I've received by helping care for special sites and facilities so others can also enjoy them

11: Photo preferences:

The next set of slides show images from the Royal Gorge Field Office of the BLM. We would like you to consider them for the next several opportunities for discussion.

12: Which sources of information do you depend upon to plan your recreation in the Royal Gorge BLM Field Office? (Chose all that apply)

I-1	1	Friends and family
	2	Past experience
	3	Local businesses
	4	Area residents
	5	Historic references
	6	Contact with rangers in the field
	7	Travel and tourism councils and associations
	8	On-Site signage, kiosks, bulletin boards
I-2	1	Maps (topographic, National Geographic, etc.)
	2	Free guides and maps
	3	Guidebooks
	4	Websites
	5	Digital apps
	6	Other

13: What services do you depend on to have a successful recreational experience in the Royal Gorge Field Office? (Choose all that apply.)

Services- 1	<input type="checkbox"/>	Gas stations
	<input type="checkbox"/>	Gear stores
	<input type="checkbox"/>	Grocery stores
	<input type="checkbox"/>	Lodging (hotels, B&B's, etc.)
	<input type="checkbox"/>	Outfitters/guides
	<input type="checkbox"/>	RV parks/campgrounds
	<input type="checkbox"/>	Restaurants
	<input type="checkbox"/>	Visitor information
	<input type="checkbox"/>	Wireless/cellular coverage
	<input type="checkbox"/>	Other

14: Where are those services located? (Choose all that apply.)

L-1	<input type="checkbox"/>	Canon City
	<input type="checkbox"/>	Pueblo
	<input type="checkbox"/>	Colorado Springs
	<input type="checkbox"/>	Buena Vista
	<input type="checkbox"/>	Salida
	<input type="checkbox"/>	Denver
	<input type="checkbox"/>	Online
L-2	<input type="checkbox"/>	Summit County
	<input type="checkbox"/>	Lake County
	<input type="checkbox"/>	Park County
	<input type="checkbox"/>	Freemont County
	<input type="checkbox"/>	Chafee County
	<input type="checkbox"/>	Teller County
	<input type="checkbox"/>	Custer County
	<input type="checkbox"/>	Other

15-19: Finally, what do you believe are the appropriate collaborative roles for each of the BLM's land managing partners in managing and planning for federal public lands?

15: Local Governments

16: Businesses

- 17: Tourism Industry
- 18: Community Residents
- 19: Others

Options for each of these include:

- 1 = Planning
- 2 = Managing
- 3= Both planning and managing
- 4= Neither planning nor managing
- 5 = I don't know

Appendix 2. On-Site Survey

ID#: _____

Dear Public Lands Visitor:

We are conducting this survey to learn more about visitors to Bureau of Land Management and Arkansas Headwaters Recreation Area public lands in (Colorado), so that public land managers can improve their service to you. You are one of a small number of people randomly chosen for this survey, so your opinions are important to us. Although we would greatly appreciate your help, you are free to decline this interview. Your responses will be considered your consent to participate. All the information will be used for our statistical purposes and will be kept anonymous. Would you be willing to take 4-5 minutes to answer a few short questions about your visit today? (read by interviewer)

1. How many people are in your group today, including yourself? _____ (enter number)
2. Which of the following statements best describes your visit to this area? (✓ one)
 - This area is the main destination for this trip.
 - This area is one of multiple other destinations for the trip.
3. On the laminated card are a list of 12 clusters of the interests and expectations people might have regarding the public lands in this study. The terms are the name of the cluster and descriptions below them are the types of experiences and outcomes associated with that cluster. Select the one cluster that most describes your interests and expectations while recreating on this location (select one from the list below).

<input type="checkbox"/> 1- Natural Landscapes	<input type="checkbox"/> 5- Self-Reliant Adventure	<input type="checkbox"/> 9- Economic Well-Being
<input type="checkbox"/> 2- Rural Lifestyles	<input type="checkbox"/> 6- Tranquil Escapes	<input type="checkbox"/> 10- Learning & Instructing
<input type="checkbox"/> 3- Cultural & Natural History	<input type="checkbox"/> 7- Youth, Family, & Friends	<input type="checkbox"/> 11- Gathering & Harvesting
<input type="checkbox"/> 4- Health & Fitness	<input type="checkbox"/> 8- Community Life	<input type="checkbox"/> 12- Learning & Instructing
4. How many times have you visited this resource area in the past 12 months, excluding this visit?

 How about the last five (5) years? _____
5. Please check each activity that you participated in (or plan to participate in) during this trip to the (name) resource area). (check all that apply)
 - 4x4 Driving
 - Art/Writing Activities
 - ATV/UTV Riding
 - Backpacking

Bicycling/ Mountain

Biking

Car Camping

Cross-Country Skiing

Downhill/Telemark Skiing

Exploring or Discovering

New Areas

Float Fishing

Hiking/Walking/Running

Horseback Riding

Hunting

Learning Activities

(interpretive programs,
educational outings, etc.)

Motorcycle Riding

Mountain Biking

Nature Study (Wildlife

Viewing/ Bird Watching/

Geology/Plants)

Organized Events

Photography

Picnicking

Ranching Activities

Rock Climbing

Scenic Driving

Snowmobiling

Snowshoeing

Stand-Up Paddle

Boarding

Swimming

Volunteering

Walk and Wade Fishing

Whitewater Kayaking or

Canoeing

Whitewater Rafting

Other _____

requested. Your name is requested for follow-up mailing purposes only. When analysis of the questionnaire is completed, all name and address files will be destroyed

Office Use Only

Date _____ Time _____ Location (zone) _____ Staff Initials _____

12 Clusters of Interests and Expectations

1. **Natural Landscapes:** I like to surround myself with the beauty of open space and the wildness of mountains, forests, rangeland, water and wildlife.
2. **Rural Lifestyles:** I want to connect with the visual landscapes, sense of place and pace of rural areas where people make their living from the land.
3. **Cultural & Natural History:** I am interested in knowing about natural processes in this area and how historic and prehistoric peoples and animals lived.
4. **Health & Fitness:** I like being able to regularly access public lands recreation areas that help me get and stay fit or improve my mental well-being.
5. **Self-Reliant Adventure:** I prefer outdoor adventure on my own that challenges my outdoor skills, improves my abilities, and maybe even involves some risk.
6. **Tranquil Escapes:** I look forward to the quiet serenity of getting away from it all for some mental and physical relaxation, reflection, and renewal.
7. **Youth, Family, and Friends:** I am enriched by socializing with others: young people, my family and/or friends and enjoying companionship in the outdoors together.
8. **Community Life:** I like seeing what the discovery and enjoyment of nearby open space recreation does for my community and our visiting guests.
9. **Economic Well-Being:** I want to see public lands recreation areas contributing in a significant way to our economic livelihood.
10. **Learning & Instructing:** I feel comfortable having others equip and enable me to do recreation and tourism outings—or being a part of helping others learn how to do that.
11. **Gathering & Harvesting:** I enjoy still being able to do my own gathering and harvesting of fish, game, trees, rocks or other materials from the public lands.
12. **Stewardship Caretaking:** I like giving back to the outdoors from what I've received by helping care for attractions and facilities so others can also enjoy them.

List of Activities (select all that apply)

4x4 Driving
Art/Writing Activities
ATV/UTV Riding
Backpacking
Bicycling/ Mountain Biking
Car Camping
Cross-Country Skiing
Downhill/Telemark Skiing
Exploring or Discovering New Areas
Float Fishing
Hiking/Walking/Running
Horseback Riding
Hunting
Learning Activities (interpretive programs, educational outings, etc.)
Motorcycle Riding
Mountain Biking
Nature Study (Wildlife Viewing/ Bird Watching/ Geology/Plants)
Organized Events
Photography
Picnicking
Ranching Activities
Rock Climbing
Scenic Driving
Snowmobiling
Snowshoeing
Stand-Up Paddle Boarding
Swimming
Volunteering
Walk and Wade Fishing
Whitewater Kayaking or Canoeing
Whitewater Rafting
Other _____

Appendix 3. Comprehensive Survey

Bureau of Land Management Royal Gorge Field Office and Arkansas Headwaters Recreation Area Study



Dear Royal Gorge Field Office/Arkansas Headwaters Recreation Area Visitor:

In conjunction with an assistance agreement between the Bureau of Land Management Royal Gorge Field Office (BLMRGFO), Arkansas Headwaters Recreation Area (AHRA) and the Natural Resource Center at Colorado Mesa University, we are conducting this survey to learn more about area visitors. The BLM and Colorado Parks and Wildlife hope to use the results of this study to collaborate with local community, local governments, and business partners. Results will help these cooperators maintain distinctive public lands recreation setting character and its capacity to enrich the quality of life of visitors and affected residents alike. The survey is confidential and your participation is voluntary. Your participation is of great importance to us. All the information we collect will be used for statistical purposes and at no time will your name be identified with any results. You are free to withdraw from the study at any time without any type of penalty. Completing the survey will be considered as your consent to participate. If you have any questions about the survey, please feel free to contact Dr. Justin Gollob, Dr. Brian Parry, or Dr. Tim Casey at Colorado Mesa University (970) 248-1696. Thanks Again!

**Study conducted by Colorado Mesa University
Natural Resources Center
Colorado Mesa University
1100 North Avenue
Grand Junction, CO 81501-3122
jgollob@coloradomesa.edu**

Code: #

PART 1- First, we would like to begin by asking you some questions about your recent visit to the BLM Royal Gorge and/or Arkansas Headwaters Recreation Area (AHRA) lands.

1. Was visiting these BLM/AHRA public lands the primary reason for taking your trip away from home? *(please ✓ one)*

- Yes No

2. Which of the following areas was your primary destination for your trip? *(please ✓ one)*

- Arkansas Headwaters Recreation Area
 Bureau of Land Management Royal Gorge Area

3. Did you spend more than one day on these BLM/AHRA public lands?

- Yes No **(If “No” is selected, then skip to question 7)**

4. How many nights did you stay (write the number in the box)?

5. How many nights did you spend... *(please write the number in the corresponding box)*

camping on BLM designated campgrounds?	
camping on AHRA designated campgrounds?	
camping on BLM public lands (no campground)?	
camping on AHRA public lands (no campground)?	
camping in a designated campground on non-BLM/AHRA public land?	
camping on non-BLM/AHRA public lands (no campground)?	
staying in commercial lodging?	
staying in private lodging?	
staying at a hotel/motel/resort	
staying at a bed and breakfast?	
other?	

6. Where were the previously listed accommodations located? (Please check all that apply)

- Buena Vista
- Salida
- Fairplay
- Leadville
- Canon City
- Cripple Creek
- Westcliffe
- Walsenburg
- Pueblo
- Colorado Springs
- other (please specify) _____

7. Now we would like to ask you some questions about your favorite part of the of the Royal Gorge BLM and/or Arkansas Headwaters Recreation Area lands, past experience, and favorite recreation activities. Please take a couple moments to think about the most recent area or place on BLM/AHRA managed public lands in the Royal Gorge Field Office and Arkansas River (displayed on the accompanying map) on which you recreated. Please mark with an "X" the location on the accompanying map that added most to your satisfaction during your visit to BLM/AHRA Public Lands.

8. Thinking of the location you indicated on the map, please check each activity in which you participated.

- | | |
|---|---|
| <input type="checkbox"/> 4X4 Driving | <input type="checkbox"/> Learning Activities (Interpretive Programs, Educational Outings, etc.) |
| <input type="checkbox"/> Art/Writing Activities | <input type="checkbox"/> Mountain Biking |
| <input type="checkbox"/> ATV/UTV Riding | <input type="checkbox"/> Motorcycle Riding |
| <input type="checkbox"/> Backpacking | <input type="checkbox"/> Nature Study (Wildlife Viewing/Bird Watching/Geology/Plants) |
| <input type="checkbox"/> Car Camping | <input type="checkbox"/> Organized Events |
| <input type="checkbox"/> Cross-Country Skiing | <input type="checkbox"/> Photography |
| <input type="checkbox"/> Downhill/Telemark Skiing | <input type="checkbox"/> Picnicking |
| <input type="checkbox"/> Exploring or Discovering New Areas | <input type="checkbox"/> Ranching Activities |
| <input type="checkbox"/> Float Fishing | <input type="checkbox"/> Rock Climbing |
| <input type="checkbox"/> Hiking/Walking/Running | <input type="checkbox"/> Scenic Driving |
| <input type="checkbox"/> Horseback Riding | <input type="checkbox"/> Snowmobiling |
| <input type="checkbox"/> Hunting | <input type="checkbox"/> Snowshoeing |

- Stand-Up Paddle Boarding
 - Swimming
 - Volunteering
 - Walk and Wade Fishing
 - Whitewater Rafting
 - Other
-

9. Below are a list of 12 clusters of the interests and expectations people might have regarding the public lands in this study. The terms are the name of the cluster and descriptions below them are the types of experiences and outcomes associated with that cluster. Using the scale provided, indicate the extent to which each cluster describes your interests and expectations while recreating on the location you indicated on the map.

	Not at all like me	Not much like me	Somewhat like me	Quite a lot like me	Just like me
Natural Landscapes: I like to surround myself with the beauty of open space and the wildness of mountains, forests, rangeland, water and wildlife.	<input type="radio"/>				
Rural Lifestyles: I want to connect with the sense of place and pace of rural areas where people make their living from the land.	<input type="radio"/>				
Cultural & Natural History: I am interested in knowing about natural processes in this area and how historic and prehistoric peoples and animals lived.	<input type="radio"/>				
Health & Fitness: I like being able to regularly access public lands recreation areas that help me get and stay fit or improve my mental well-being.	<input type="radio"/>				
Self-Reliant Adventure: I prefer outdoor adventure on my own that challenges my outdoor skills, improves my abilities, and maybe even involves some risk.	<input type="radio"/>				
Tranquil Escapes: I look forward to the quiet serenity of getting away from it all for some mental and physical relaxation, reflection, and renewal.	<input type="radio"/>				
Youth, Family, and Friends: I am enriched by socializing with others: young people, my family and/or friends and enjoying companionship in the outdoors together.	<input type="radio"/>				
Community Life: I like seeing what the discovery and enjoyment of nearby open space recreation does for my community and our visiting guests.	<input type="radio"/>				
Economic Well-Being: I want to see public lands recreation areas contributing in a significant way to our economic livelihood.	<input type="radio"/>				
Learning & Instructing: I feel comfortable having others equip and enable me to do recreation and tourism outings—or being a part of helping others learn how to do that.	<input type="radio"/>				
Gathering & Harvesting: I enjoy still being able to do my own gathering and harvesting of fish, game, trees, rocks or other materials from the public lands.	<input type="radio"/>				
Stewardship Caretaking: I like giving back to the outdoors from what I've received by helping care for attractions and facilities so others can also enjoy them.	<input type="radio"/>				

9a. Now, using the same list of clusters from the previous question, select the one that most describes your interests and expectations while recreating on your location selected on the map from the previous question.

- Natural Landscapes
- Rural Lifestyles
- Cultural & Natural History
- Health & Fitness
- Self-Reliant Adventure
- Tranquil Escapes
- Youth, Family, and Friends
- Community Life
- Economic Well-Being
- Learning & Instructing
- Gathering & Harvesting
- Stewardship Caretaking

10. Now we would like to ask you to provide some evaluations of components of your recreation experience, the resource area and services provided. Overall, how satisfied were you with your visit to this BLM/AHRA public land area?

- Very Dissatisfied
- Dissatisfied
- Somewhat Dissatisfied
- Somewhat Satisfied
- Satisfied

Very Satisfied

11. To what extent did each of the following contribute to your satisfaction or dissatisfaction (as selected in question 10 above) while visiting these BLM/AHRA public lands?

	Contributed...				
	least		some		most
the natural places (e.g. mountains, streams)	<input type="radio"/>				
the cultural places (e.g. mines, historic sites)	<input type="radio"/>				
the challenge of activities (e.g. hiking)	<input type="radio"/>				
the companionship of the people in my group	<input type="radio"/>				
the opportunity to think and reflect	<input type="radio"/>				
the convenient location and ease of access	<input type="radio"/>				
the physical and mental benefits	<input type="radio"/>				

12. For the area on which you recreated, please indicate your preference for how each of the following recreation setting conditions should be managed. Please base your answer on the character of the recreation setting condition that would best enhance the experience and benefits you desire. (Please fill in one answer for each of the 13 setting conditions.)

Remoteness:	<input type="radio"/> Make area more isolated	<input type="radio"/> Leave as is	<input type="radio"/> Improve ease of vehicle access to area
Naturalness:	<input type="radio"/> Make a more natural appearing area	<input type="radio"/> Leave as is	<input type="radio"/> Allow more man-made landscape alterations
Facilities:	<input type="radio"/> Remove some facilities (e.g., roads, trails, restrooms)	<input type="radio"/> Leave as is	<input type="radio"/> Develop more facilities (e.g., roads, trails, restrooms)
Foot Trails:	<input type="radio"/> Reduce/limit foot and horseback trails	<input type="radio"/> Leave as is	<input type="radio"/> Create/allow more foot and horseback trails
Bike Trails:	<input type="radio"/> Reduce/limit mountain bike trails	<input type="radio"/> Leave as is	<input type="radio"/> Create/allow mountain bike trails
Motorized Routes:	<input type="radio"/> Reduce/limit motorized routes	<input type="radio"/> Leave as is	<input type="radio"/> Create/allow motorized routes
Group Size:	<input type="radio"/> Reduce the group size allowed	<input type="radio"/> Leave as is	<input type="radio"/> Encourage larger group size
Contacts:	<input type="radio"/> Lower interaction with others	<input type="radio"/> Leave as is	<input type="radio"/> Allow more use and interaction with others
Evidence of Use:	<input type="radio"/> Rehab and reduce signs of other's use	<input type="radio"/> Leave as is	<input type="radio"/> More evidence of other visitors is OK
Visitor Services:	<input type="radio"/> Reduce services, staff contact and assistance	<input type="radio"/> Leave as is	<input type="radio"/> Provide more services, staff contact and assistance
Management Control:	<input type="radio"/> Use a more "hands-off" management style	<input type="radio"/> Leave as is	<input type="radio"/> Exercise more visitor and land use controls
River Access:	<input type="radio"/> Fewer points of access	<input type="radio"/> Leave as is	<input type="radio"/> More points of access

13. Please rate your overall satisfaction with each of the following items that you used in your identified BLM/AHRA Public Lands. (fill in the most appropriate answer)

	Very Dissatisfied	Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied	Did Not Observe
Developed Campgrounds	<input type="radio"/>						
Visitor Centers	<input type="radio"/>						
Restroom Facilities	<input type="radio"/>						
BLM Staff	<input type="radio"/>						
AHRA Staff	<input type="radio"/>						
Interpretive Panels	<input type="radio"/>						
Organized Tour Opportunities	<input type="radio"/>						
Developed Recreation/Day Use Sites	<input type="radio"/>						

14. Did you pay a fee for use/access to your identified BLM/AHRA public lands?

- Yes
- No

15. Listed below are some phrases that describe possible benefits from recreating on the location you indicated on the map earlier in this survey. Rate each phrase, where a "7" means that you strongly agree that the setting provided this benefit, and a "1" means that you strongly disagree that the setting provided this benefit. *As a result of this recreational experience . . .*

	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
Attained a closer relationship with the natural world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helped others connect with and enjoy rural lifestyles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learned more about this specific area in terms of its cultural and/or natural history	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enjoyed getting some needed physical exercise	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enjoyed risk taking adventure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diminished mental anxiety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enjoyed the closeness of friends and family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved community integration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased local tax revenue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enjoyed having access to hands-on environmental learning or sense of discovery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased outdoor resourcefulness and know-how	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Had greater sense of personal fulfillment in giving something back to the land	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced awareness and understanding of nature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased awareness and protection of rural landscapes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Attained greater respect for the cultural heritage this area offers	<input type="radio"/>						
Improved physical capacity to do my favorite recreation activities	<input type="radio"/>						
Enjoyed going exploring on my own	<input type="radio"/>						
Escaped everyday responsibilities for a while	<input type="radio"/>						
Strengthened ties with my family and friends	<input type="radio"/>						
Increased community sense of place	<input type="radio"/>						
Increased property values	<input type="radio"/>						
Enhanced awareness and understanding of stewardship ethics for nature	<input type="radio"/>						
Increased self-reliance by directly obtaining our food and other resources from the land	<input type="radio"/>						
Had greater community concern for/care of recreation-tourism attractions	<input type="radio"/>						

16. Here are some phrases that might describe the outcomes of recreating on the specified location. Please rate each phrase, where a “7” means that you strongly agree that the setting

provided this outcome, and a “1” means that you strongly disagree that the setting provided this outcome. *As a result of this recreational experience I . . .*

17. Please estimate the amount of money (in whole dollars) you and your group spent on your trip within 100 miles of these BLM/AHRA Public Lands. (Enter the amount for each category)

	Strongly Disagree 1	2	3	4	5	6	Strongly Agree 7
Restored my mind from stress/tension/anxiety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved physical fitness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved/maintained health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved outdoor knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased self-reliance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced my sense of personal freedom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved sense of control over my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved self-confidence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lived a more outdoor-oriented lifestyle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restored my body from fatigue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developed stronger ties with my family or friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gained greater freedom from urban living	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved ability to relate to local residents and their culture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased personal accountability to act responsibly on public lands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased appreciation of the area’s cultural history	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gained greater respect for private property and local lifestyles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improved my relationship with natural world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increased my understanding of the importance of wildlife to my quality of life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced aesthetic appreciation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Lodging (hotels, motels, resorts, campgrounds, etc.)

Shopping and gifts (clothing, gifts, souvenirs, etc.)	
Food, meals and drink (restaurants, groceries, taverns, etc.)	
Tourist services (jeep tours, jeep rentals, museums, outfitters, etc.)	
Gas and transportation costs	
Other (please specify)	

18. Approximately how many miles did you travel from your primary residence to these BLM/AHRA public lands?

19. How likely is it that you will revisit these lands again? Please use the following scale: 1=Very Unlikely, 2=Unlikely, 3=Somewhat Unlikely, 4=Undecided, 5=Somewhat Likely, 6=Likely, 7=Very Likely.

Please indicate your response here: _____

20. Please tell us why you are, or are not, planning to visit the recreation area in the future.

Please provide the following background information about yourself to help us better get to know you.

21. What is your age? _____

22. Do you consider yourself to be Hispanic, Latino?

- Yes
- No

23. What is your ethnicity?

- Black or African-American
- Native Hawaiian or other Pacific Islander
- Asian
- Other _____
- White

24. Are you a U.S. resident?

- Yes
- No

If No, please list country of residence, then skip to question #27:

25. Please tell us the state of your primary residence: _____

26. What is the zip code of your primary residence? _____

27. How many children do you currently have?

- 0
- 1
- 2
- 3
- 4 or
more

28. What is your sex?

- Female
- Male

29. What is your marital status?

- Widowed
- Married
- Single
- Divorced
- Separated

30. What is your highest level of attained education?

- Grade school or less
- Some high school
- High school graduate
- Some College
- College graduate
- Some graduate studies
- Graduate degree recipient

31. Which of the following best describes your primary association with these BLM/AHRA public lands? Please check one.

- Visitor
 - Local Resident
 - Community Leader (elected or non-elected)
 - Outfitter/Guide
 - Business Owner
 - Other
-

32. What was your employment status during the past year? Check all that apply.

- Full-time student
 - Part-time student
 - Employed part-time
 - Employed full-time
 - Unemployed
 - Homemaker or caregiver
 - Retired
 - Other
-

33. Which of the following broad categories best describes your total annual household income for the last calendar year?

- | | | |
|--|--|--|
| <input type="checkbox"/> \$25,000 or less | <input type="checkbox"/> \$75,001 – \$100,000 | <input type="checkbox"/> More than \$150,000 |
| <input type="checkbox"/> \$25,001 – \$50,000 | <input type="checkbox"/> \$100,001 – \$125,000 | |
| <input type="checkbox"/> \$50,001 – \$75,000 | <input type="checkbox"/> \$125,001 – \$150,000 | |

34. If you have any additional comments or suggestions for BLM/AHRA managers about the future planning for these BLM/AHRA Public Lands, please type them in the space below:

THANK YOU FOR YOUR PARTICIPATION!

Appendix 4. Comprehensive Survey Results

Question 1. Was visiting these BLM/AHRA public lands the primary reason for taking your trip away from home?

	Yes	%	No	%	Total	Sig. Diff.
Sample	1008	78%	283	22%	1291	
Outside Colorado	601	79%	159	21%	760	
Colorado	405	77%	123	23%	528	
Intercept	73	71%	30	29%	103	
Panel	934	79%	252	21%	1186	
Salida, Buena Vista, Cañon City	158	76%	50	24%	208	*
Surrounding Areas ⁴	792	80%	196	20%	988	
River Location	207	75%	68	25%	275	*
Upland Location	744	81%	178	19%	922	
Denver Metro Area	171	74%	60	26%	231	
Royal Gorge Area	42	75%	14	25%	56	
Other Area	793	79%	208	21%	1001	

Question 2. Which of the following areas was your primary destination for your trip? (please ck. one)

	Arkansas Headwaters Recreation Area	%	BLM Royal Gorge Area	%	Total	Sig. Diff.
Sample	566	44%	711	56%	1277	
Outside Colorado	387	51%	366	49%	753	*
Colorado	176	34%	345	66%	521	
Intercept	62	65%	34	35%	96	*
Panel	502	43%	677	57%	1179	
Salida, Buena Vista, Cañon City	74	36%	133	64%	207	*
Surrounding Areas	451	46%	531	54%	982	
River Location	127	47%	145	53%	272	
Upland Location	400	44%	518	56%	918	
Denver Metro Area	78	34%	151	66%	229	
Royal Gorge Area	32	60%	21	40%	53	*
Other Area	453	46%	539	54%	992	

⁴ There are statistically significant differences to the following question in the responses of recreationists living in Salida, Buena Vista, and Cañon City when compared to those living in surrounding areas: "Was visiting these BLM/AHRA public lands the primary reason for taking your trip away from home?" Respondents living in surrounding areas were more likely to respond "yes" than respondents living in Salida, Buena Vista, or Cañon City.

Question 3. Did you spend more than one day on these BLM/AHRA public lands?

	Yes	%	No	%	Total	Sig. Diff.
Sample	856	67%	429	33%	1285	
Outside Colorado	590	78%	165	22%	755	
Colorado	264	50%	263	50%	527	
Intercept	63	61%	40	39%	103	*
Panel	792	67%	388	33%	1180	
Salida, Buena Vista, Cañon City	122	59%	86	41%	208	*
Surrounding Areas	677	69%	311	31%	988	
River Location	170	62%	105	38%	275	
Upland Location	629	68%	293	32%	922	
Denver Metro Area	132	57%	99	43%	231	
Royal Gorge Area	22	39%	34	61%	56	*
Other Area	700	70%	295	30%	995	

Question 4. How many nights did you stay? (write the number in the box)

	Average	N	Min	Max	Median	Sig. Diff.
Sample	3.8	851	1	99	3	
Outside Colorado	4.1	588	1	50	3	*
Colorado	3.2	261	1	99	2	
Intercept	5.2	61	1	99	3	
Panel	3.7	789	1	50	3	
Salida, Buena Vista, Cañon City	3.8	120	1	50	3	
Surrounding Areas	3.8	677	1	99	3	
River Location	3.6	169	1	50	3	
Upland Location	3.9	628	1	99	3	
Denver Metro Area	3.2	132	1	50	2	
Royal Gorge Area	7.9	19	1	99	3	
Other Area	3.8	698	1	50	3	

Question 5. How many nights did you spend... (Please write the number in the corresponding box)?

	BLM Designated Campgrounds	AHRA Designated Campgrounds	Camping BLM Public Lands (No Campground)	Camping AHRA Public Lands (No Campground)	Camping in a Designated Campground on non-BLM/AHRA Public Land	Camping on non-BLM/AHRA Public Lands (No Campground)	Staying in Commercial Lodging	Staying in Private Lodging	Staying at hotel/motel/resort	Staying Bed and Breakfast	Other
Sample (Average)	2.2	1.3	1.1	0.9	0.9	1.0	1.0	1.3	1.2	1.0	1.3

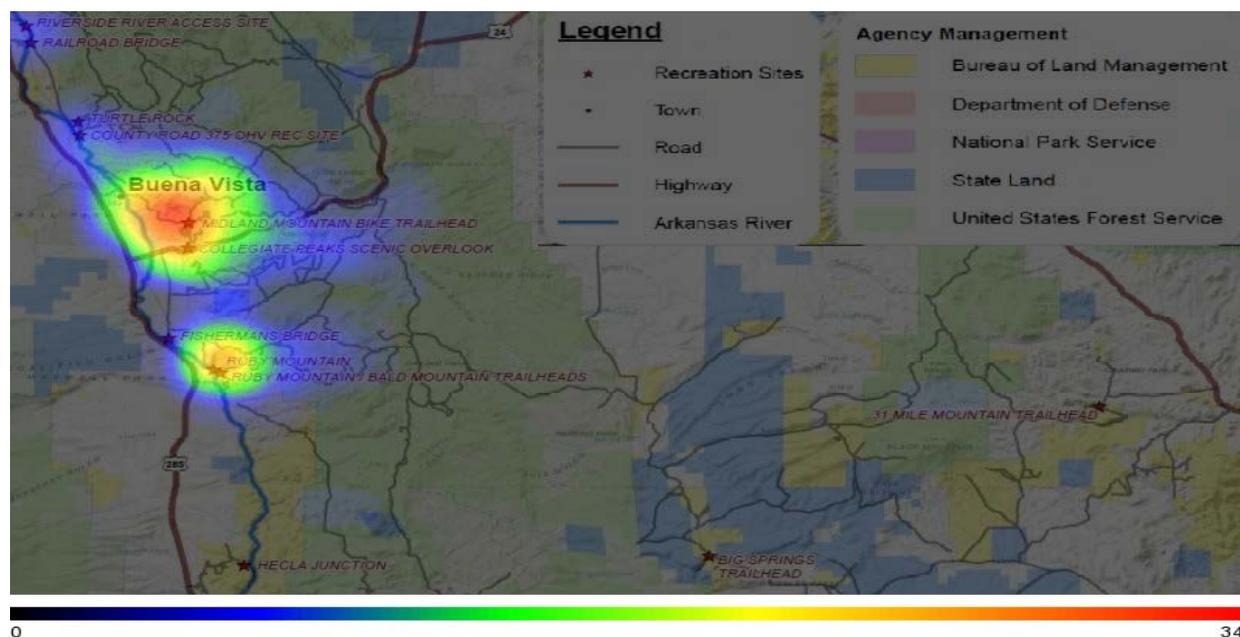
Question 6. Where were the previously listed accommodations located? (Please check all that apply)

	N
Buena Vista	337
Salida	156
Fairplay	121
Leadville	103
Cañon City	194
Cripple Creek	104
Westcliffe	120
Walsenburg	100
Pueblo	149
Colorado Springs	333
Other (See Below)	39
Total	1756

Other Locations	Frequency
Alma	1
arkansaw	1
cotipaxie	1
Crested Bute	1
Crestone	1
don't remember	1
fremont county	1
have property near Royal Gorge	1
hilton	1
I was not on vacation. I live in Canon City	1
kh	1
Manitou Springs	1
Not sure	1
our home	1
pagosa springs	1
Penrose	1
Poncha Springs	1
Royal Gorge	1
Royal Gorge	1
Ruby Mountain Campground	1
salida	1
San Isabel	1
Sand Gulch	1
Shelf road	1
Shelf Road - The Bank	1
Shelf Road Climbing Area	1
South Fork	1
Taylor Lake Reservoir	1
twin lakes, co	1
washington	1
westminster	1
Woodland park	1

Question 7. Please click on the location on the map that added most to your satisfaction during your visit to BLM/AHRA public lands.

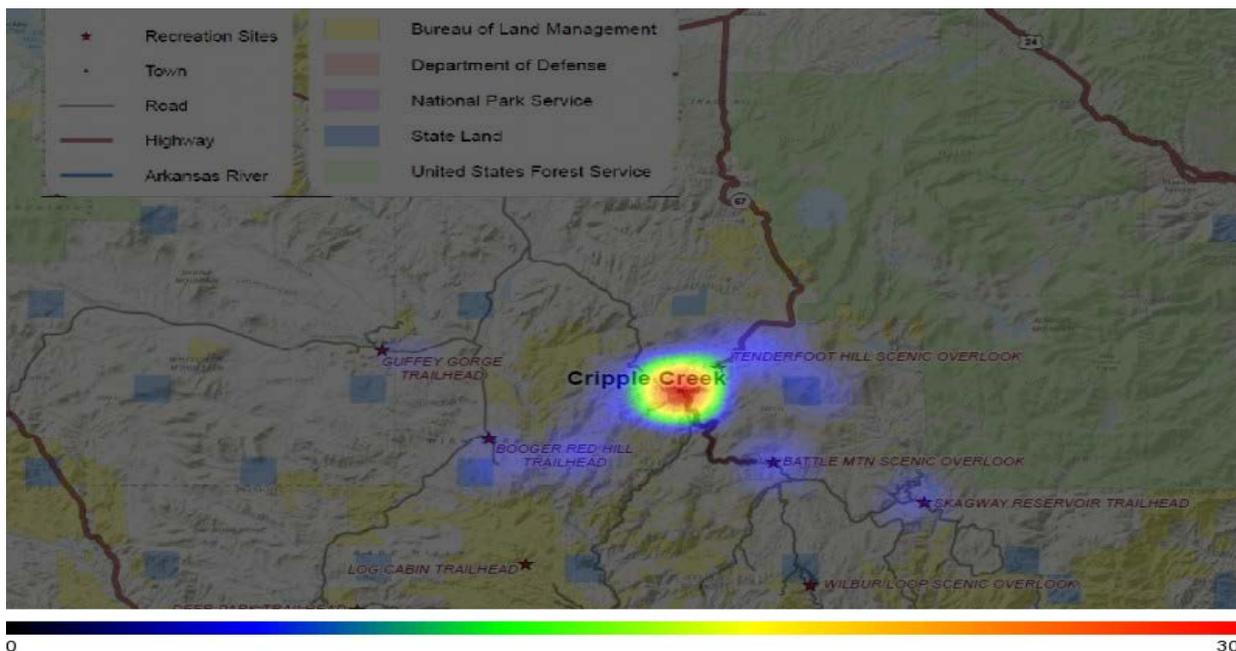
The following six heat maps indicate the degree to which respondents clicked on the respective map, where red indicates the highest frequency of clicks, yellow equates to the middle level, and blue reflects the lowest frequency. In general, the maps demonstrate two overall trends. First, there is a strong validity with the location of clicks on developed BLM/AHRA sites. In other words, respondents did seem to accurately represent their recollected location on the map that contributed most to their satisfaction. Second, there is a trend of clustering clicks on and around the towns shown on the maps. The high frequency of clicks on the towns can indicate that many respondents recreated at sites within the town's boundary such as the Buena Vista and Salida river parks. Moreover, the clustering of clicks on and around the towns can also indicate the difficulty of remembering actual BLM/AHRA sites on which the respondents' recreated. Those who recreated on these lands in the past may only recall the town they used as a hub for recreating at the various sites on these lands. A more detailed map may provide a more accurate representation of the satisfactory areas.



Total Responses

343

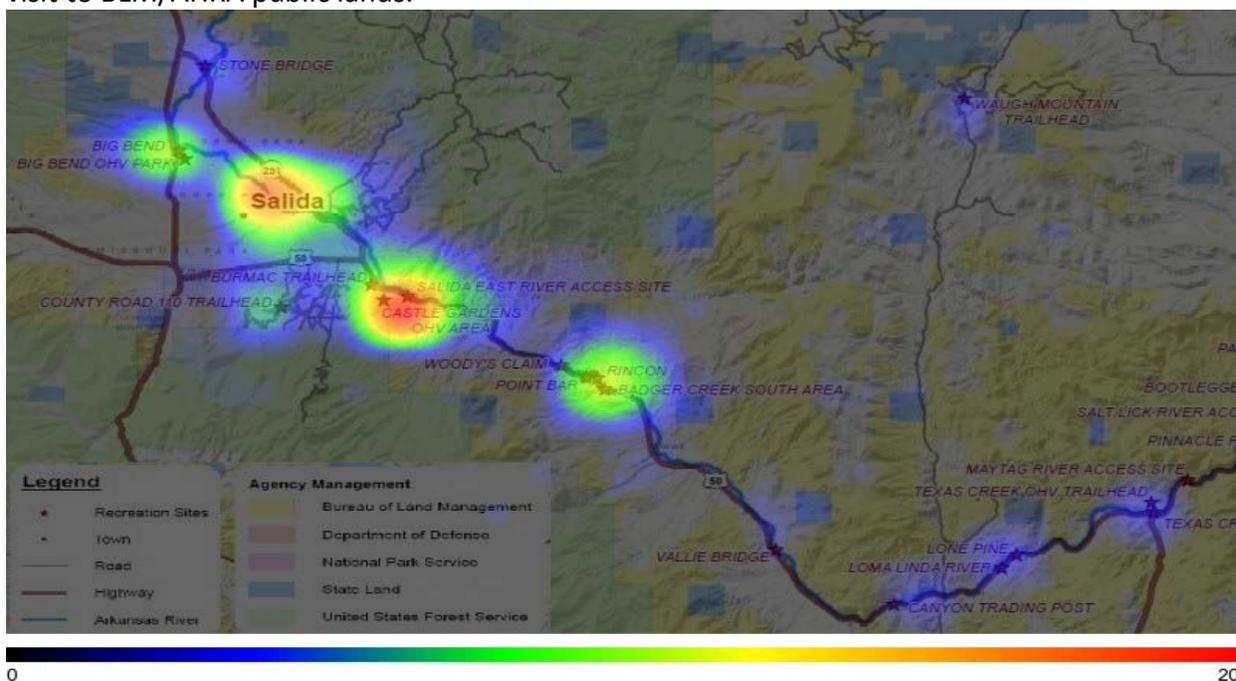
7a. Please click on the location on the map that added most to your satisfaction during your visit to BLM/AHRA public lands.



Total Responses

126

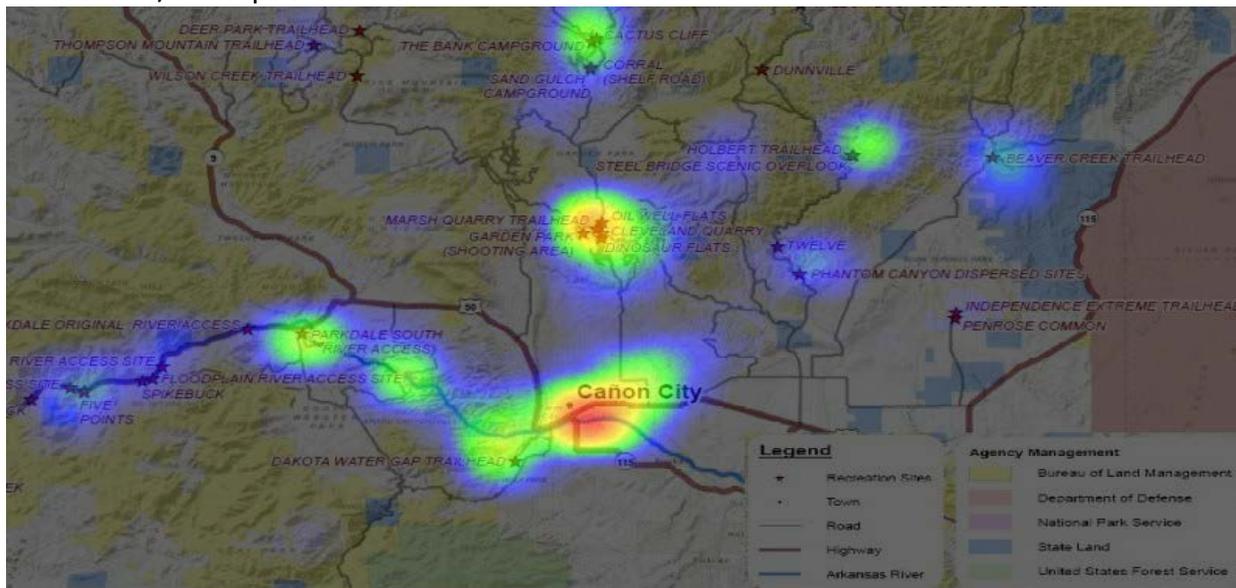
7b. Please click on the location on the map that added most to your satisfaction during your visit to BLM/AHRA public lands.



Total Responses

249

7c. Please click on the location on the map that added most to your satisfaction during your visit to BLM/AHRA public lands.

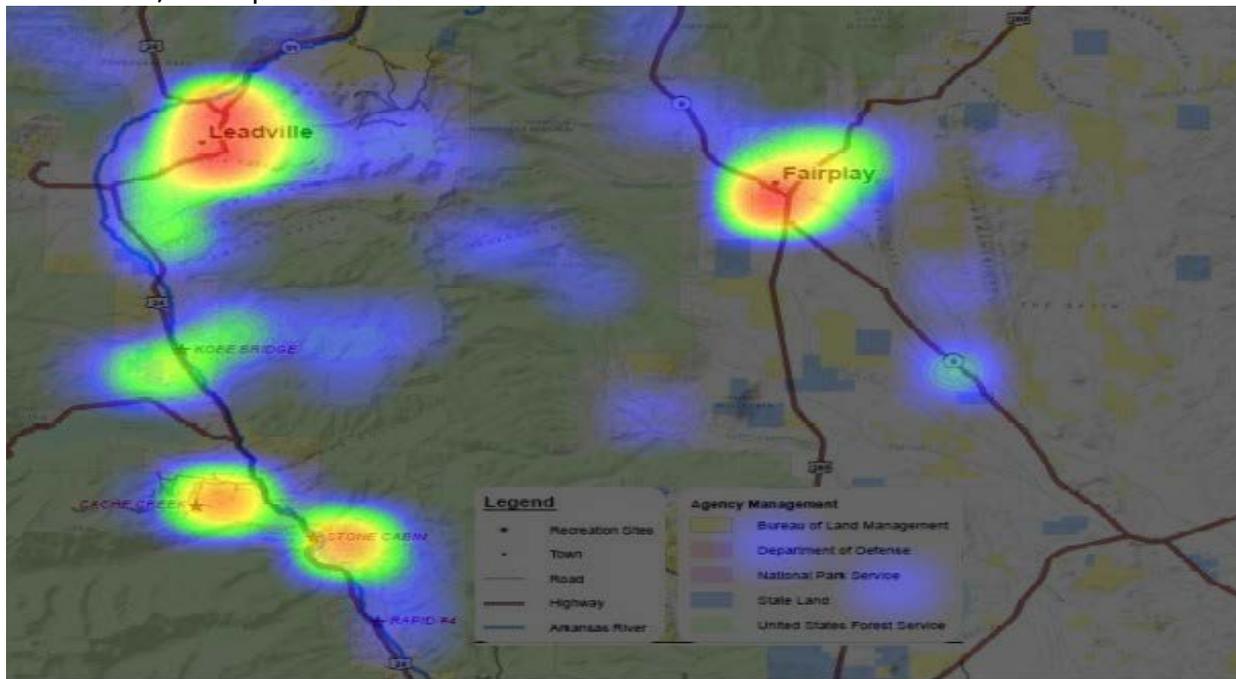


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23

Total Responses 317

7d. Please click on the location on the map that added most to your satisfaction during your visit to BLM/AHRA public lands.

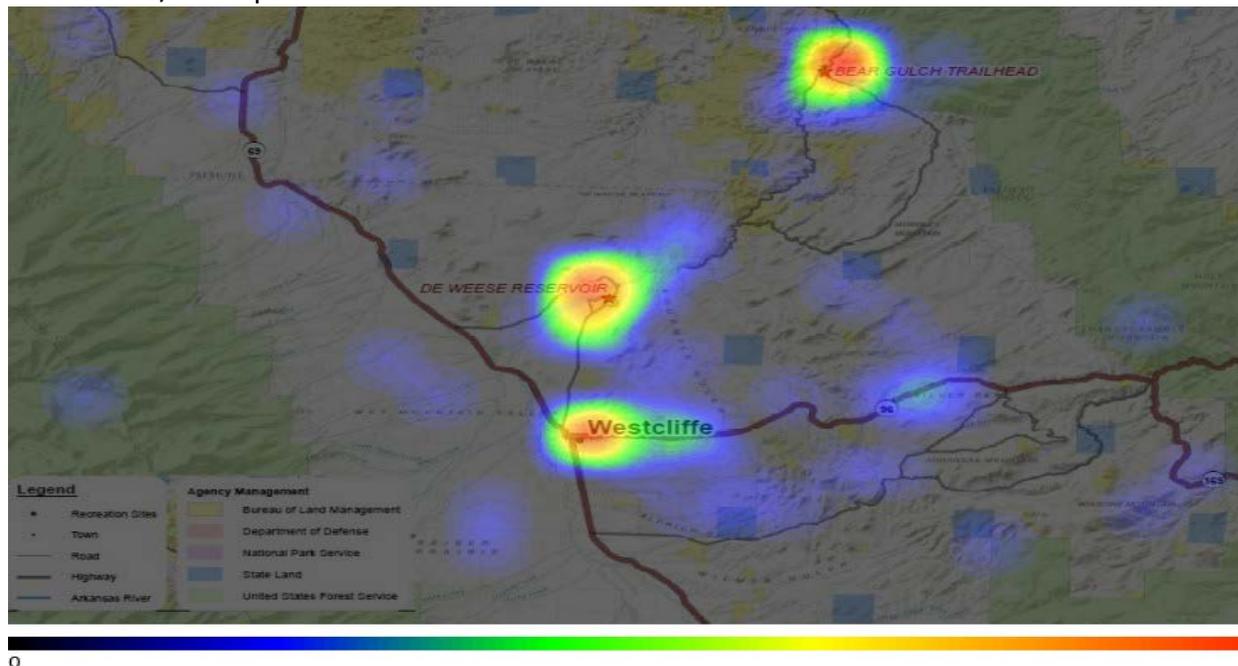


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Total Responses

83

7e. Please click on the location on the map that added most to your satisfaction during your visit to BLM/AHRA public lands.



Total Responses

83

Question 8. Thinking of the location you indicated on the map, please check each activity in which you participated.

Answer	Response	%
4x4 Driving	374	31%
Art/Writing Activities	147	12%
ATV/UTV Riding	163	14%
Backpacking	300	25%
Car Camping	212	18%
Cross-Country Skiing	32	3%
Downhill/Telemark Skiing	42	3%
Exploring or Discovering New Areas	306	25%
Other	37	3%
Hiking/Walking/Running	528	44%
Horseback Riding	79	7%
Hunting	158	13%
Learning Activities (Interpretive Programs, Educational Outings, Etc.)	165	14%
Motorcycle Riding	119	10%
Nature Study (Wildlife Viewing/Bird Watching/Geology/Plants)	240	20%
Organized Events	84	7%
Mountain Biking	309	26%
Stand-Up Paddle Boarding	39	3%
Photography	457	38%
Picnicking	399	33%

Answer	Response	%
Ranching Activities	56	5%
Scenic Driving	518	43%
Snowmobiling	67	6%
Snowshoeing	49	4%
Swimming	178	15%
Volunteering	46	4%
Walk and Wade Fishing	110	9%
Whitewater Kayaking or Canoeing	64	5%
Whitewater Rafting	107	9%
Rock Climbing	175	15%
Float Fishing	85	7%
Total Responses		1,204

Question 9. Below are a list of 12 clusters of the interests and expectations people might have regarding the public lands in this study. The terms are the name of the cluster and descriptions below them are the types of experiences and outcomes associated with that cluster. Using the scale provided, indicate the extent to which each cluster describes your interests and expectations while recreating on the location(s) you indicated on the map(s).

	Sample Average (N = 1,189)	Outside Colorado & Colorado	Intercept & Panel	Salida, Buena Vista, Cañon City & Surrounding Areas	River Location & Upland Location	Denver Metro Area & Royal Gorge Area & Other Area
Natural Landscapes ⁵	4.32	*	*			*
Health & Fitness	4.15	*	*			*
Tranquil Escapes	3.96	*	*			*
Youth, Family, and Friends	3.9					
Cultural & Natural History	3.86		*			
Self-Reliant Adventure	3.69	*	*	*		
Rural Lifestyles	3.68	*				
Gathering & Harvesting	3.67	*	*			*
Stewardship Caretaking	3.64	*				*
Community Life	3.56	*				
Economic Well-Being	3.54	*				

⁵ As it relates to the “Natural Landscapes” cluster, there are significant differences between respondents living outside of Colorado versus respondents living in Colorado; between intercept respondents versus panel respondents; and between respondents living in the Denver metropolitan area versus respondents living in the Royal Gorge area versus respondents living elsewhere. Although the sample average is provided, space limitations prevent providing segment means. Such data will be provided upon request.

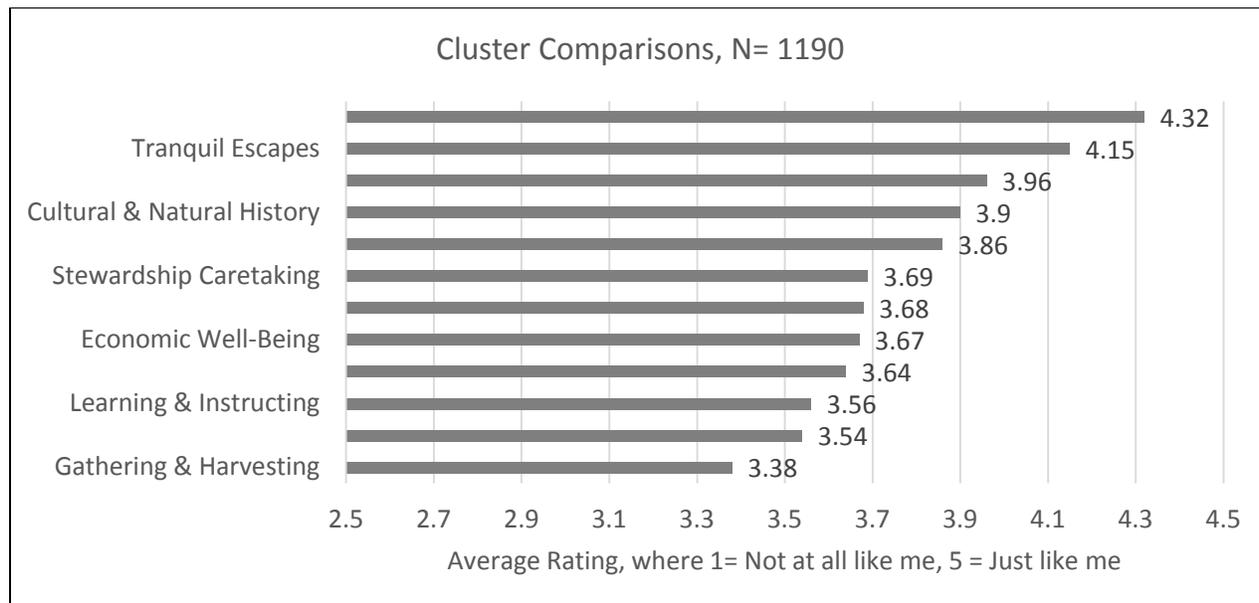
Learning & Instructing

3.38

*

*

*



9a. Now, using the same list of clusters from the previous question, select the one that most describes your interests and expectations while recreating on your location selected on the map from the previous question.

	Sample #	%	Cum. %
Natural Landscapes	551	46.60%	46.60%
Health & Fitness	122	10.30%	56.90%
Tranquil Escapes	111	9.40%	66.30%
Youth, Family and Friends	88	7.40%	73.70%
Cultural & Natural History	83	7.00%	80.70%
Self-Reliant Adventure	72	6.10%	86.80%
Rural Lifestyles	64	5.40%	92.20%
Gathering and Harvesting	33	2.80%	95.00%
Community Life	17	1.40%	96.40%
Learning & Instructing	17	1.40%	97.80%
Economic Well-Being	15	1.30%	99.10%
Stewardship Caretaking	10	0.80%	100.00%
Total	1183	100.0%	

9a. Now, using the same list of clusters from the previous question, select the one that most describes your interests and expectations while recreating on your location selected on the map from the previous question.

	Colorado	%	Outside Colorado	%	Total
Natural Landscapes	317	45%	234	49%	551
Rural Lifestyles	49	7%	15	3%	64
Cultural & Natural History	70	10%	13	3%	83
Health & Fitness	60	9%	61	13%	121
Self-Reliant Adventure	40	6%	31	7%	71
Tranquil Escapes	52	7%	59	12%	111
Youth, Family and Friends	56	8%	32	7%	88
Community Life	13	2%	4	1%	17
Economic Well-Being	10	1%	5	1%	15
Learning & Instructing	13	2%	4	1%	17
Gathering and Harvesting	20	3%	13	3%	33
Stewardship Caretaking	5	1%	5	1%	10
Total	705		476		1181

* Statistically Significant $p < .05$

9a. Now, using the same list of clusters from the previous question, select the one that most describes your interests and expectations while recreating on your location selected on the map from the previous question.

	Intercept	%	Panel	%	Total
Natural Landscapes	30	34%	521	48%	551
Rural Lifestyles	0	0%	64	6%	64
Cultural & Natural History	2	2%	81	7%	83
Health & Fitness	26	29%	95	9%	121
Self-Reliant Adventure	17	19%	55	5%	72
Tranquil Escapes	4	4%	107	10%	111
Youth, Family and Friends	6	7%	82	8%	88
Community Life	1	1%	16	1%	17
Economic Well-Being	1	1%	14	1%	15
Learning & Instructing	0	0%	17	2%	17
Gathering and Harvesting	0	0%	33	3%	33
Stewardship Caretaking	2	2%	8	1%	10
Total	89		1093		1182

* Statistically Significant $p < .05$

9a. Now, using the same list of clusters from the previous question, select the one that most describes your interests and expectations while recreating on your location selected on the map from the previous question.

	Salida, Buena Vista, Cañon City	%	Surrounding Areas	%	Total
Natural Landscapes	99	50%	446	51%	545
Rural Lifestyles	11	6%	53	95%	64
Cultural & Natural History	13	7%	69	94%	82
Health & Fitness	21	11%	99	90%	120
Self-Reliant Adventure	8	4%	60	96%	68
Tranquil Escapes	19	10%	91	91%	110
Youth, Family and Friends	16	8%	72	92%	88
Community Life	0	0%	17	100%	17
Economic Well-Being	2	1%	13	99%	15
Learning & Instructing	2	1%	15	99%	17
Gathering and Harvesting	7	4%	26	97%	33
Stewardship Caretaking	2	1%	8	99%	10
Other	200		969		1169

9a. Now, using the same list of clusters from the previous question, select the one that most describes your interests and expectations while recreating on your location selected on the map from the previous question.

	River Location	%	Upland Location	%	Total
Natural Landscapes	120	45%	426	47%	546
Rural Lifestyles	5	2%	59	7%	64
Cultural & Natural History	17	6%	65	7%	82
Health & Fitness	26	10%	94	10%	120
Self-Reliant Adventure	19	7%	48	5%	67
Tranquil Escapes	30	11%	81	9%	111
Youth, Family and Friends	23	9%	65	7%	88
Community Life	1	0%	16	2%	17
Economic Well-Being	2	1%	13	1%	15
Learning & Instructing	6	2%	11	1%	17
Gathering and Harvesting	13	5%	20	2%	33
Stewardship Caretaking	4	2%	6	1%	10
Total	266		904		1170

* Statistically Significant $p < .05$

9a. Now, using the same list of clusters from the previous question, select the one that most describes your interests and expectations while recreating on your location selected on the map from the previous question.

	Denver Metro Area	%	Royal Gorge Area	%	Other Area	%	Total
Natural Landscapes	96	46%	26	52%	429	46%	551
Rural Lifestyles	7	3%	0	0%	57	6%	64
Cultural & Natural History	9	4%	2	4%	72	8%	83
Health & Fitness	25	12%	14	28%	82	9%	121
Self-Reliant Adventure	11	5%	3	6%	57	6%	71
Tranquil Escapes	32	15%	2	4%	77	8%	111
Youth, Family and Friends	15	7%	2	4%	71	8%	88
Community Life	1	0%	0	0%	16	2%	17
Economic Well-Being	2	1%	0	0%	13	1%	15
Learning & Instructing	3	1%	0	0%	14	2%	17
Gathering and Harvesting	4	2%	1	2%	28	3%	33
Stewardship Caretaking	2	1%	0	0%	8	1%	10
Total	207		50		924		1181

* Statistically Significant $p < .05$

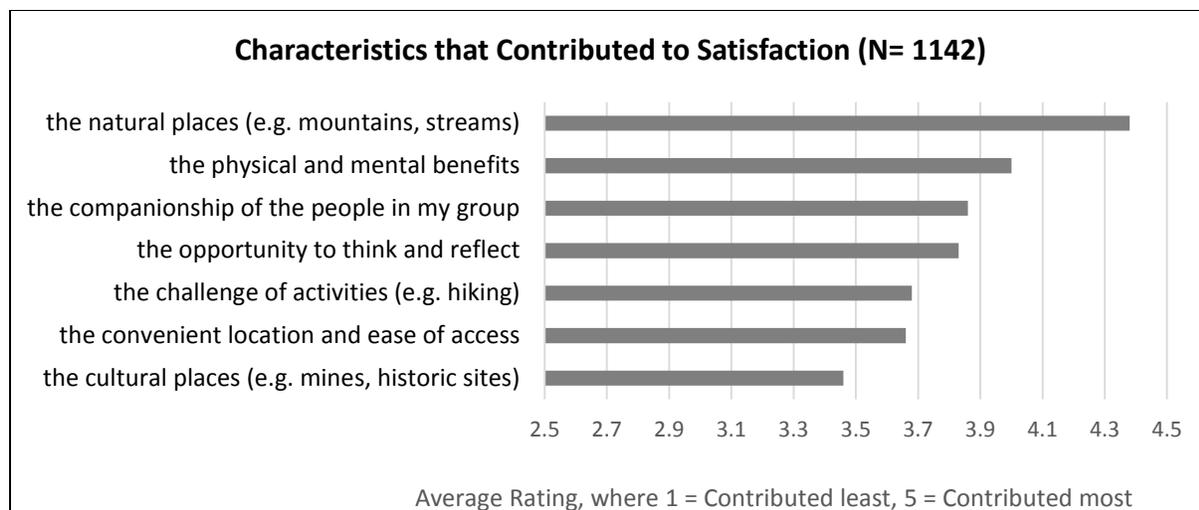
Question 10. Overall, how satisfied were you with your visit to this BLM/AHRA public land area? (1 = Very Dissatisfied, 7 = Very Satisfied)

	Average	N	Min	Max	Sig. Diff.
Sample	6.24	1189	1	7	
Outside Colorado	5.22	708	1	7	*
Colorado	5.35	481	1	7	
Intercept	5.41	97	1	7	
Panel	5.26	1093	1	7	
Salida, Buena Vista, Cañon City	5.37	203	1	7	
Surrounding Areas	5.25	974	1	7	
River Location	5.28	271	1	7	
Upland Location	5.27	907	1	7	
Denver Metro Area	5.3	207	1	7	
Royal Gorge Area	5.58	53	1	7	*
Other Area	5.25	929	1	7	

Question 11 . To what extent did each of the following contribute to your *satisfaction* while visiting these BLM/AHRA public lands?

	Sample Average (N = 1142)	Outside Colorado & Colorado	Intercept & Panel	Salida, Buena Vista, Cañon City & Surrounding Areas	River Location & Upland Location	Denver Metro Area & Royal Gorge Area & Other Area
The natural places (e.g., mountains, streams)	4.38	*	*			*
The cultural places (e.g., mines, historic sites)	3.46	*	*		*	*
The challenge of activities (e.g., hiking)	3.68		*	*		
The companionship of the people in my group	3.86					
The opportunity to think and reflect	3.83					
The convenient location and ease of access	3.66		*			*
The physical and mental benefits	4		*			*

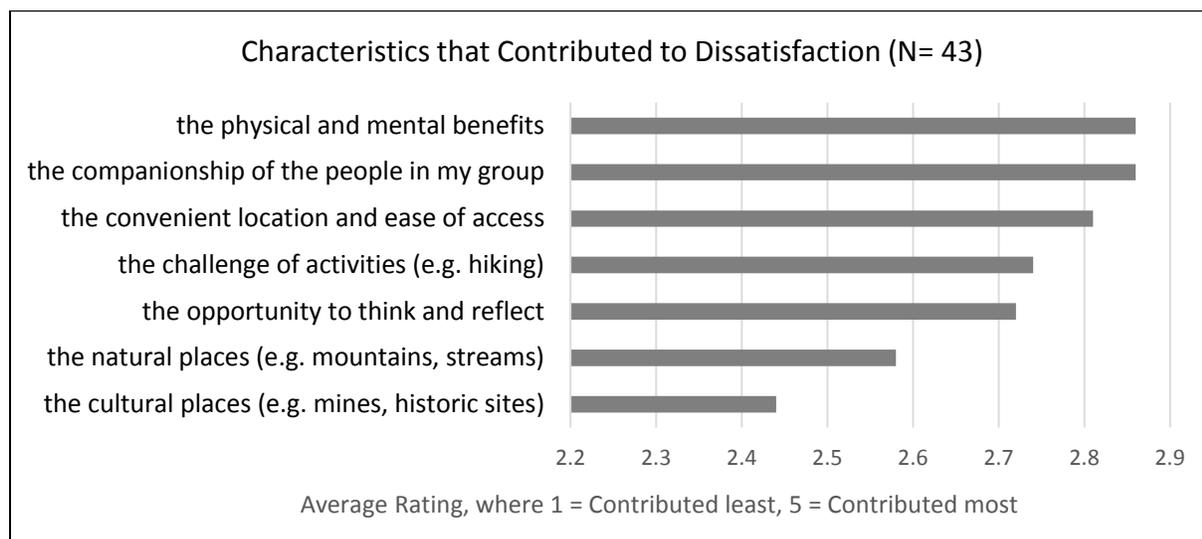
* Statistically Significant $p < .05$



Question 11. To what extent did each of the following contribute to your *dissatisfaction* while visiting these BLM/AHRA public lands?

	Sample Average (N = 43)	Outside Colorado & in Colorado	Intercept & Panel	Salida, Buena Vista, Cañon City & Surrounding Areas	River Location & Upland Location	Denver Metro Area & Royal Gorge Area & Other Area
The natural places (e.g., mountains, streams)	2.58					*
The cultural places (e.g., mines, historic sites)	2.44					*
The challenge of activities (e.g., hiking)	2.74					
The companionship of the people in my group	2.86					*
The opportunity to think and reflect	2.72					
The convenient location and ease of access	2.81					
The physical and mental benefits	2.86					*

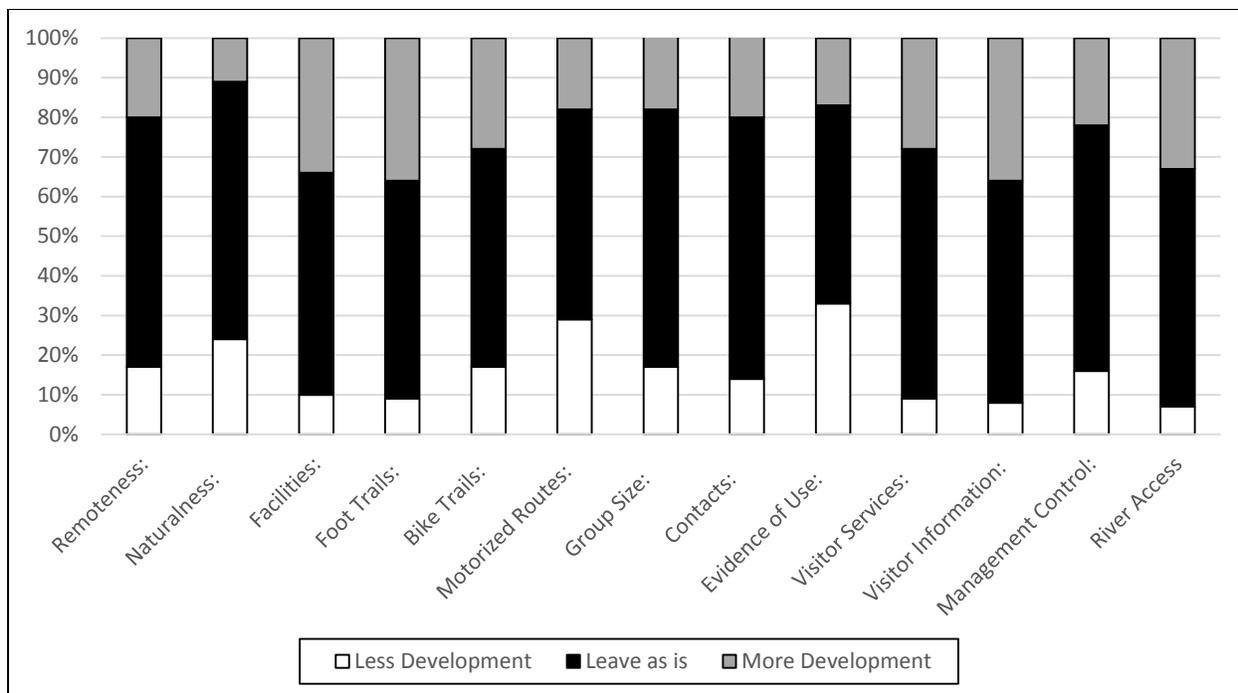
* Statistically Significant $p < .05$



Question 12. For the area on which you recreated, please indicate your preference for how each of the following recreation setting conditions should be managed. Please base your answer on the character of the recreation setting condition that would best enhance the experience and benefits you desire. (Please check one answer for each of the 13 setting conditions)

Conditions	Answer 1	Answer 2	Answer 3
Remoteness: ⁶	Make area more isolated 17%	Leave as is 63%	Improve ease of vehicle access to area 20%
Naturalness:	Make a more natural appearing area 24%	Leave as is 65%	Allow more man-made landscape alterations 11%
Facilities:	Remove some facilities (e.g., roads, trails, restrooms) 10%	Leave as is 56%	Develop more facilities (e.g., roads, trails, restrooms) 34%
Foot Trails:	Reduce/limit foot & horseback trails 9%	Leave as is 55%	Create/allow more foot & horseback trails 36%
Bike Trails:	Reduce/limit mountain bike trails 17%	Leave as is 55%	Create/allow mountain bike trails 28%
Motorized Routes:	Reduce/limit motorized routes 29%	Leave as is 53%	Create/allow motorized routes 18%
Group Size:	Reduce the group size allowed 17%	Leave as is 65%	Encourage larger group size 19%
Contacts:	Lower interaction with others 14%	Leave as is 66%	Allow more use & interaction with others 21%
Evidence of Use:	Rehab & reduce signs of other's use 33%	Leave as is 50%	More evidence of other visitors is OK 17%
Visitor Services:	Reduce services, staff contact and assistance 9%	Leave as is 63%	Provide more services, staff contact and assistance 28%
Visitor Information:	Less maps and brochures 8%	Leave as is 56%	Provide more maps and brochures 36%
Management Control:	Use a more "hands-off" management style 16%	Leave as is 62%	Exercise more visitor and land use controls 22%
River Access	Fewer points of access 7%	Leave as is 60%	More points of access 33%

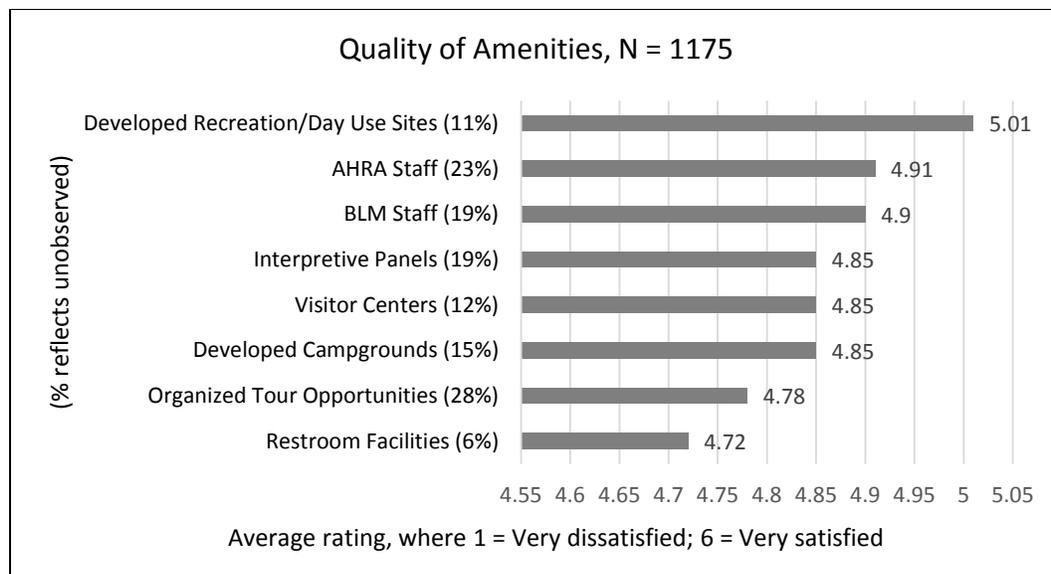
⁶ For "remoteness," 17% of respondents would like to "make area more isolated," 63% would prefer to "leave as is," while 20% would like to "improve ease of vehicle access to area."



Question 13. Please rate your overall satisfaction with each of the following items that you used in your identified BLM/AHRA Public Lands. (fill in the most appropriate answer)

	Sample Average (N = 1175)	Outside Colorado & Colorado	Intercept & Panel	Salida, Buena Vista, Cañon City & Surrounding Areas	River Location & Upland Location	Denver Metro Area & Royal Gorge Area & Other Area
Developed Campgrounds	4.85	*	*		*	*
Visitor Centers	4.85	*	*		*	*
Restroom Facilities	4.72			*		*
BLM Staff	4.9	*	*		*	*
AHRA Staff	4.91	*	*		*	*
Interpretive Panels	4.85	*	*			*
Organized Tour Opportunities	4.78	*	*		*	*
Developed Recreation/Day Use Sites	5.01	*	*			*

* Statistically Significant
p<.05



Question 14. Did you pay a fee for use/access to your identified BLM/AHRA public lands?

Sample	Yes	%	No	%	Total	Sig. Diff.
Sample	665	56%	517	44%	1182	
Outside Colorado	455	65%	248	35%	703	*
Colorado	209	44%	268	56%	477	
Intercept	28	30%	66	70%	94	*
Panel	637	59%	450	41%	1087	
Salida, Buena Vista, Cañon City	101	50%	101	50%	202	
Surrounding Areas	557	58%	409	42%	966	
River Location	143	54%	124	46%	267	
Upland Location	516	57%	386	43%	902	
Denver Metro Area	100	49%	105	51%	205	
Royal Gorge Area	10	19%	43	81%	53	*
Other Area	554	60%	368	40%	922	

Question 15. Listed below are some phrases that describe possible benefits from recreating on the location you indicated on the map earlier in this survey. Rate each phrase, where a "7" means that you strongly agree that the setting provided this benefit, and a "1" means that you strongly disagree that the setting provided this benefit. As a result of this recreational experience . . .

	Average (N = 1161)	Outside Colorado & Colorado	Intercept & Panel	Salida, Buena Vista, Cañon City & Surrounding Areas	River Location & Upland Location	Denver Metro Area & Royal Gorge Area & Other Area
Attained a closer relationship with the natural world	5.62	*				*
Helped others connect with and enjoy rural lifestyles	5.09	*			*	
Learned more about this specific area in terms of its cultural and/or natural history	5.28	*	*		*	*
Enjoyed getting some needed physical exercise	5.68	*	*			*
Enjoyed risk taking adventure	5.13	*	*		*	
Diminished mental anxiety	5.49		*			
Enjoyed the closeness of friends and family	5.65	*	*			
Improved community integration	4.84	*	*		*	*
Increased local tax revenue	4.91	*	*			*
Enjoyed having access to hands-on environmental learning or sense of discovery	5.23	*	*			
Increased outdoor resourcefulness and know-how	5.16	*				
Had greater sense of personal fulfillment in giving something back to the land	5.11	*	*		*	*
Enhanced awareness and understanding of nature	5.40	*	*			
Increased awareness and protection of rural landscapes	5.27	*	*			
Attained greater respect for the cultural heritage this area offers	5.13	*	*		*	*
Improved physical capacity to do my favorite recreation activities	5.33		*		*	*
Enjoyed going exploring on my own	5.52		*		*	
Escaped everyday responsibilities for a while	5.79	*	*			*
Strengthened ties with my family and friends	5.51		*			
Increased community sense of place	5.10	*			*	*
Increased property values	4.62	*	*		*	*

	Average (N = 1161)	Outside Colorado & Colorado	Intercept & Panel	Salida, Buena Vista, Cañon City & Surrounding Areas	River Location & Upland Location	Denver Metro Area & Royal Gorge Area & Other Area
Enhanced awareness and understanding of stewardship ethics for nature	5.04	*	*		*	*
Increased self-reliance by directly obtaining our food and other resources from the land	4.58	*	*		*	*
Had greater community concern for/care of recreation-tourism attractions	5.06	*				*

15a. Factor structure of the benefit items.

The chart below depicts the factor structure of the benefit items. Factor analysis is a way to take a mass of data (in this case the 24 benefit items) and shrinking it to a smaller dataset that is more manageable and more understandable. It's a way to find hidden patterns, show how those patterns overlap and show what characteristics are seen in multiple patterns. A "factor" in factor analysis is a set of observed variables that have similar response patterns because they are associated with a variable that isn't directly measured. Based on the theme of the items grouped under the first factor (listed in first column), the factor was named "Community Cohesion." Similarly, the items listed under the second factor seemed to group around the theme of "Mental Serenity." Factors are listed according to factor loadings, or how much variation in the data they can explain. The factor loadings are listed in descending order and can be interpreted as the closer to 1.00, the stronger the relationship with the factor.

Benefits	Community Cohesion	Mental Serenity
Improved community integration	0.841	
Enhanced awareness and understanding of stewardship ethics for nature	0.781	
Had greater sense of personal fulfillment in giving something back to the land	0.774	
Had greater community concern for/care of recreation-tourism attractions	0.774	
Increased local tax revenue	0.749	
Increased awareness and protection of rural landscapes	0.748	
Attained greater respect for the cultural heritage this area offers	0.735	
Enjoyed having access to hands-on environmental learning or sense of discovery	0.709	0.416

Benefits	Community Cohesion	Mental Serenity
Enhanced awareness and understanding of nature	0.688	0.48
Learned more about this specific area in terms of its cultural and/or natural history	0.67	
Helped others connect with and enjoy rural lifestyles	0.663	
Escaped everyday responsibilities for awhile		0.806
Enjoyed getting some needed physical exercise		0.787
Diminished mental anxiety		0.715
Enjoyed going exploring on my own		0.705
Enjoyed the closeness of friends and family		0.689

15b. Correlation chart relating the 12 clusters of interest or niche bundles with the two benefit factors above.

The chart below shows the correlations between the 12 clusters of interest or niche bundles and the two benefit factors listed above. As indicated by the asterisks, all correlations are significant, meaning that the relationship is most likely not due to chance (95% confidence). Further inspection of the respective correlation indices (the closer to 1.00, the stronger the relationship) reveals that the Community Cohesion factor most strongly relates to the Community Life, Learning & Instructing, and Gathering & Harvesting interest clusters. Conversely, the Mental Serenity factor is most closely associated with the Natural Landscapes and Tranquil Landscapes interest clusters.

Clusters of Interest	Community Cohesion Factor	Mental Serenity Factor
Self-Reliant Adventure	.338*	.213*
Health & Fitness	.229*	.354*
Cultural & Natural History	.402*	.234*
Natural Landscapes	.174*	.495*
Rural Lifestyles	.449*	.196*
Tranquil Escapes	.167*	.461*
Youth, Family, and Friends	.365*	.274*
Community Life	.519*	.196*
Economic Well-Being	.481*	.223*
Learning & Instructing	.500*	.183*
Gathering & Harvesting	.497*	.091*
Stewardship Caretaking	.422*	.199*
Self-Reliant Adventure	.338*	.213*

* Statistically Significant $p < .05$

Question 16. Here are some phrases that might describe the outcomes of recreating on the specified location. Please rate each phrase, where a “7” means that you strongly agree that the setting provided this outcome, and a “1” means that you strongly disagree that the setting provided this outcome. As a result of this recreational experience I . . .

	Average (N = 731)	Outside Colorado & Colorado	Intercept & Panel	Salida, Buena Vista, Cañon City & Surrounding Areas	River Location & Upland Location	Denver Metro Area & Royal Gorge Area & Other Area
Restored my mind from stress/tension/anxiety	5.88	*	*	*		*
Improved physical fitness	5.57	*	*	*		*
Improved/maintained health	5.68	*	*	*		*
Improved outdoor knowledge	5.46	*	*			
Increased self-reliance	5.21		*	*		*
Enhanced my sense of personal freedom	5.62		*	*		*
Improved sense of control over my life	5.39		*	*		
Improved self-confidence	5.22		*	*		
Lived a more outdoor-oriented lifestyle	5.36		*	*		
Restored my body from fatigue	5.26		*			
Developed stronger ties with my family or friends	5.45		*	*		
Gained greater freedom from urban living	5.49		*			
Improved ability to relate to local residents and their culture	4.90	*	*		*	*
Increased personal accountability to act responsibly on public lands	5.23		*			
Increased appreciation of the area’s cultural history	5.18	*	*	*		
Gained greater respect for private property and local lifestyles	4.98	*	*			
Improved my relationship with natural world	5.60		*			
Increased my understanding of the importance of wildlife to my quality of life	5.44		*			
Enhanced aesthetic appreciation	5.61		*			

* Statistically Significant $p < .05$

16a. Factor structure of the outcome items.

In a similar procedure to number 15b above, the 19 outcome items were run through a factor analysis. The resulting two factors were named “Physical/Psychological Enhancement” and “Cultural Connection” due to the relational themes of the items that loaded on each.

Outcomes	Physical/Psychological Enhancement	Cultural Connection
Improved/maintained health	0.844	
Improved physical fitness	0.817	
Enhanced my sense of personal freedom	0.769	
Restored my mind from stress/tension/anxiety	0.738	
Improved sense of control over my life	0.735	0.412
Lived a more outdoor-oriented lifestyle	0.73	
Improved self confidence	0.714	0.428
increased self-reliance	0.675	0.467
Restored my body from fatigue	0.661	
Increased appreciation of the area's cultural history		0.846
Gained greater respect for private property and local lifestyles		0.836
Improved ability to relate to local residents and their culture		0.821
Increased personal accountability to act responsibly on public lands	0.427	0.743
Increased my understanding of the importance of wildlife to my quality of life	0.468	0.687
Improved my relationship with natural world	0.525	0.64

16b. Correlation chart relating the 12 clusters of interest or niche bundles with the two outcome factors above.

The chart below shows the correlations between the 12 clusters of interest and the two benefit outcomes factors listed above. As indicated by the asterisks, all correlations but one (Cultural Connection with Health & Fitness) are significant. Further inspection of the respective correlation indices reveals that the Physical/Psychological factor most strongly relates to the Health & Fitness, Natural Landscapes, and Tranquil Escapes interest clusters. Conversely, the Cultural Connection factor is most closely associated with the Cultural & Natural History, Economic Well-Being, and Learning & Instructing interest clusters.

	Physical/ Psychological Enhancement	Cultural Connection
Self-Reliant Adventure	.316**	.164**
Health & Fitness	.459**	0.087
Cultural & Natural History	.221**	.437**
Natural Landscapes	.450**	.188**

	Physical/ Psychological Enhancement	Cultural Connection
Rural Lifestyles	.240**	.333**
Tranquil Escapes	.466**	.148**
Youth, Family, and Friends	.286**	.254**
Community Life	.251**	.404**
Economic Well-Being	.257**	.420**
Learning & Instructing	.253**	.409**
Gathering & a Harvesting	.190**	.365**
Stewardship Caretaking	.313**	.328**

* Statistically Significant $p < .05$

Question 17. Please estimate the amount of money (in whole dollars) you and your group spent on your trip within 100 miles of these BLM/AHRA Public Lands. (Enter the \$ amount for each category)

	Average	N	Min	Max	Median
Lodging (hotels, motels, resorts, campgrounds, etc.)	\$232.70	497	\$1.00	\$3,000.00	\$160.00
Gasoline	\$109.74	693	\$1.00	\$6,500.00	\$50.00
Other Transportation	\$87.84	165	\$1.00	\$1,000.00	\$50.00
Shopping and gifts (clothing, sporting goods, souvenirs, etc.)	\$118.45	487	\$1.00	\$3,000.00	\$60.00
Entertainment	\$114.31	341	\$1.00	\$2,000.00	\$60.00
Food, meals and drink (purchased at restaurants, taverns, etc.)	\$128.89	641	\$1.00	\$2,488.00	\$75.00
Groceries (purchased at supermarket/convenience store)	\$88.98	498	\$1.00	\$1,000.00	\$50.00
Tourist Services (Jeep tours, boat rentals, outfitters, etc.)	\$188.07	257	\$1.00	\$3,729.00	\$100.00
Other (please specify)	\$116.80	96	\$1.00	\$2,000.00	\$60.00

Question 18. Approximately how many miles did you travel from your primary residence to these BLM/AHRA public lands?

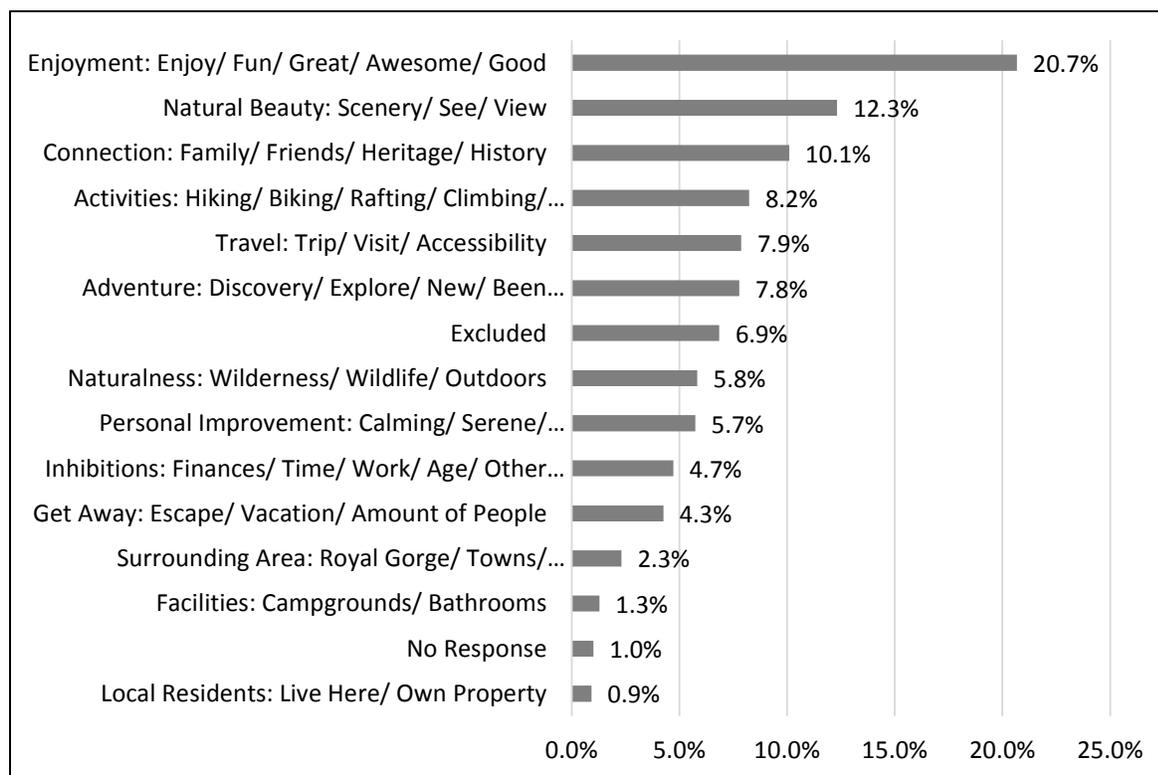
Average	N	Min	Max	Median
528.9	735	1	10,000	150

Question 19. How likely is it that you will revisit these lands again?

	N	%
Very Unlikely	10	1%
Unlikely	6	1%
Somewhat Unlikely	14	2%
Undecided	66	9%
Somewhat Likely	127	17%
Likely	181	25%
Very Likely	331	45%
Total	735	100%

Question 20 . Please tell us why you are, or are not, planning to visit the recreation area in the future.

Over 700 comments were offered from the participants for this question. To summarize these comments, a content analysis was performed in which similar comments were categorized into discrete groupings. In some cases, recreationists provided comments that could be divided into two or more categories. Therefore, of the 719 comments, there were 1,079 extracted to form the categories shown in the graph below.



Question 21. What is your age?

Average	N	Median
41.0	726	38

Question 22. Do you consider yourself to be Hispanic, Latino?

	Yes	%	No	%	Total
Sample	85	12%	640	88%	725

Question 23. What is your ethnicity?

	N	%
Black or African-American	24	3.3%
Asian	34	4.6%
White	639	88.0%
American Indian or Alaskan Native	4	.55%
Native Hawaiian or other Pacific Islander	3	.41%
Other (see below)	22	3.0%
Total	726	100%

American	3
Ashkenazi	1
Caucasian	1
Chinese/ White	1
hispanic	1
Hispanic	2
latin	1
mix	1
Mixed	2
mixed racial	1
native American human	1
Prefer not to answer	1
refused	1
We are all the same	1

Question 24. Are you a U.S. resident?

	Yes	%	No	%	Total
Sample	1285	98%	21	2%	1306

Question 25. Please tell us the state of your primary residence.

	N	%
Alabama	11	0.9%
Arizona	17	1.3%
Arkansas	9	0.7%
California	116	9.1%
Colorado	530	41.7%
Connecticut	7	0.6%
Delaware	4	0.3%
Florida	75	5.9%
Georgia	15	1.2%
Hawaii	2	0.2%
Idaho	3	0.2%
Illinois	35	2.8%
Indiana	14	1.1%
Iowa	3	0.2%
Kansas	11	0.9%
Kentucky	6	0.5%
Louisiana	8	0.6%
Maine	2	0.2%
Maryland	12	0.9%
Massachusetts	18	1.4%
Michigan	19	1.5%
Minnesota	12	0.9%
Mississippi	6	0.5%
Missouri	20	1.6%
Montana	2	0.2%
Nebraska	5	0.4%
Nevada	9	0.7%
New Jersey	17	1.3%
New Mexico	3	0.2%
New York	58	4.6%
North Carolina	7	0.6%
North Dakota	2	0.2%
Ohio	34	2.7%
Oklahoma	2	0.2%
Oregon	10	0.8%
Pennsylvania	25	2.0%
Rhode Island	2	0.2%
South Carolina	5	0.4%
Tennessee	9	0.7%
Texas	57	4.5%

	N	%
Utah	14	1.1%
Vermont	1	0.1%
Virginia	24	1.9%
Washington	16	1.3%
West Virginia	6	0.5%
Wisconsin	6	0.5%
Wyoming	3	0.2%
Total	1272	100.0%

Question 26. Zip code list available upon request.

Question 27. How many children do you currently have?

	N	%
0	311	43%
1	140	19%
2	177	24%
3	68	9%
4 or more	30	4%
Total	726	100%

Question 28. What is your sex?

	Female	%	Male	%	Total
Sample	411	57%	315	43%	726

Question 29. What is your marital status?

	N	%
Widowed	16	2%
Married	455	63%
Single	202	28%
Divorced	46	6%
Separated	7	1%
Total	726	100%

Question 30. What is your highest level of attained education?

	N	%
Grade school or less	0	0.0%
Some high school	10	1.4%
High school graduate	69	9.5%
Some college	171	23.6%
College graduate	287	39.6%
Some graduate studies	58	8.0%
Graduate degree recipient	130	17.9%
Total	725	100.0%

Question 31. Which of the following best describes your primary association with these BLM/AHRA public lands?

	N	%
Visitor	605	83.4%
Local resident	81	11.2%
Community leader (elected or non-elected)	13	1.8%
Outfitter/guide	4	0.6%
Business owner	16	2.2%
Other (see below)	6	0.8%
Total	725	100.0%

colorado native 1
 maintenance 1
 nba 1
 Outdoorsman 1
 temp stay while relocating to this area 1

Question 32. What was your employment status during the past year? Check all that apply.

	N	%
Full-time student	82	10.3%
Part-time student	9	1.1%
Employed part-time	105	13.2%
Employed full-time	398	49.9%
Unemployed	26	3.3%
Homemaker or caregiver	64	8.0%
Retired	98	12.3%
Other (see below)	15	1.9%
Total	797	100.0%

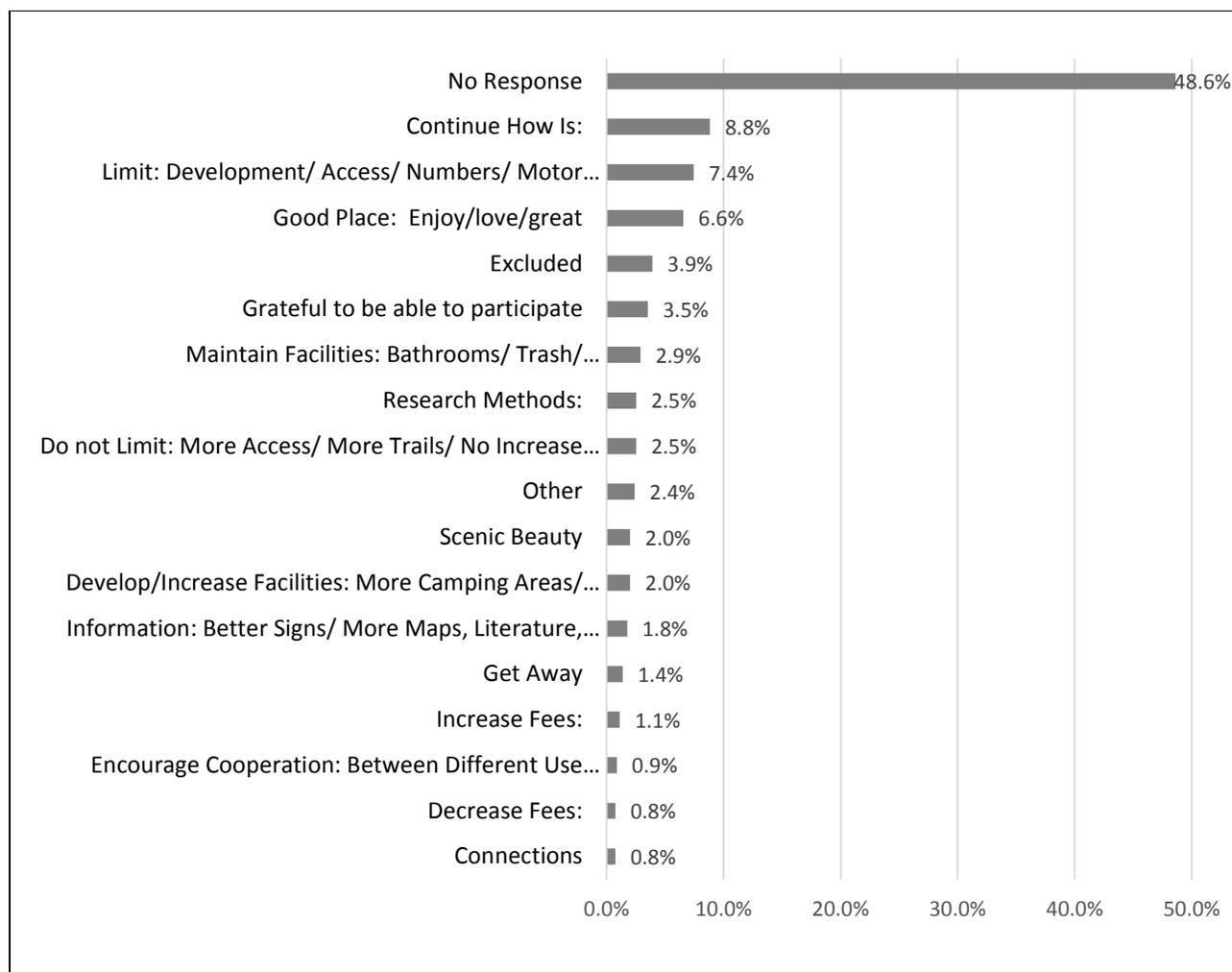
Active duty military 1
 Disabled 1
 Farmer 1
 nba 1
 Self-employed 4

Question 33. Which of the following broad categories best describes your total annual household income for the last calendar year?

	N	%
\$25,000 or less	90	12.4%
\$25,001 – \$50,000	147	20.3%
\$50,001 – \$75,000	155	21.4%
\$75,001 – \$100,000	150	20.7%
\$100,001 – \$125,000	92	12.7%
\$125,001 – \$150,000	45	6.2%
More than \$150,000	45	6.2%
Total	724	100.0%

Question 34. If you have any additional comments or suggestions for BLM/AHRA managers about the future planning for these BLM/AHRA Public Lands, please type them in the space below.

In total, 719 comments were offered from the participants for this question. The responses were content analyzed by placing similar comments into discrete groupings. As shown by the graph below, nearly half of participants had nothing further to add. Some of the comments contained more than one piece of information, so out of the out of the 719 comments, there were 792 pieces of commentary extracted to form the categories shown in the graph below.



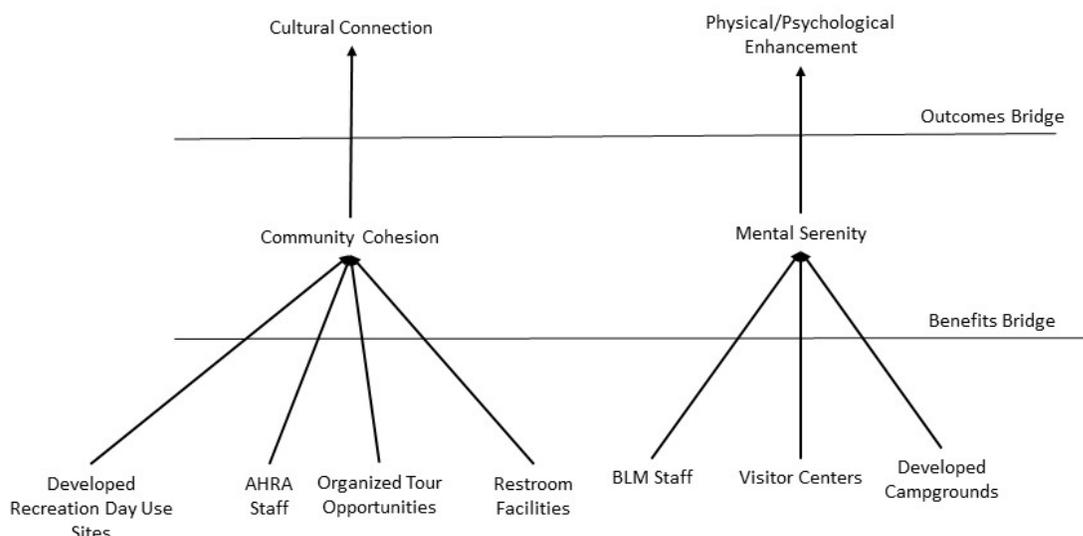
Appendix 5: Supplemental Analyses

Means-End Analysis

Pertinent to BLM recreation specialists are the setting characteristics of the lands they manage. However, setting characteristics alone rarely drive recreationists' choice. Managers also need to know what moves recreationists at an emotional level. To identify these emotional triggers, means-end analysis can provide the information they need to connect with recreationists and best meet their outdoor needs and desires. As a result, a link between setting attributes and the associated consequences, or benefits, and even the personal values the recreation setting can help recreationists fulfill, is established.

Based on responses to questions on satisfaction with setting characteristics, agreement with possible experiences from recreating, and outcomes from recreating, the following two maps resulted. The implication from the diagram on the left (below) is that the more satisfied recreationists are with the developed day use sites, AHRA staff, organized tour opportunities, and restroom facilities, the more likely they will experience community cohesion. Essentially, when recreationists feel satisfied with their ability to spend time at developed sites and engage in activities that are facilitated through tours, AHRA staff, and restroom facilities, they will have the means by which they can attain a sense of community cohesion, which is defined by integrating with, learning more about, and improving concern with the surrounding community. In a sense, by having their functional needs regarding the outdoor recreation experience met, the respondents are able to more effectively connect with the community at large. Then, attainment of a sense of community cohesion enables recreationists to realize a connection with the area's cultural significance. By relating to the community, recreationists can acquire a more profound understanding of the culture offered by the area.

The diagram to the right indicates that satisfaction with BLM staff, visitor centers, and developed campgrounds predicts the mental serenity benefit, which can lead to the realization of the physical/psychological enhancement outcome. When recreationists are satisfied with the features that can enhance their outdoor experience, they are more likely to feel relaxed and bonded with those with whom they are sharing this experience. Their responsibilities are diminished when the recreation sites are developed for a camping and visiting outcome. Then, as their minds are put to ease, they can focus on the physical and psychological outcomes that are often associated with outdoor recreation, including getting exercise and improving self-confidence.



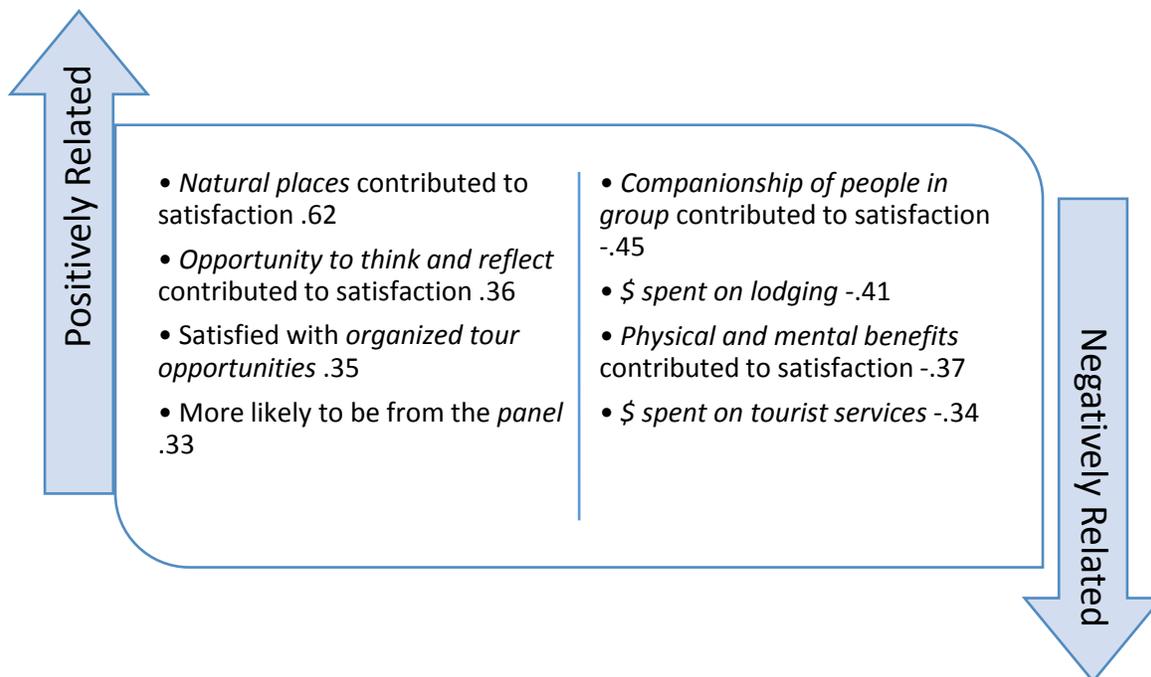
Discriminant Analysis

As revealed from charts 9a, 15b, and 16b above, the interest clusters have important implications for the management of the RGFO-BLM/AHRA lands. In order to further reveal how to manage for those who recreate on these lands, as represented by the top seven interest clusters (chart 9a indicates that over 92% of all respondents selected 1 of these 7 clusters, so the remaining 5 were not included), a discriminant analysis was run. One of the main purposes of a discriminant analysis is to develop an understanding of the dataset, as a careful examination of the prediction model that results from the procedure can give insight into the relationship between group membership and the variables used to predict group membership. Thus, by knowing the variables that predict the interest cluster groups, managers can better meet the needs of those who recreate on the RGFO-BLM/AHRA lands.

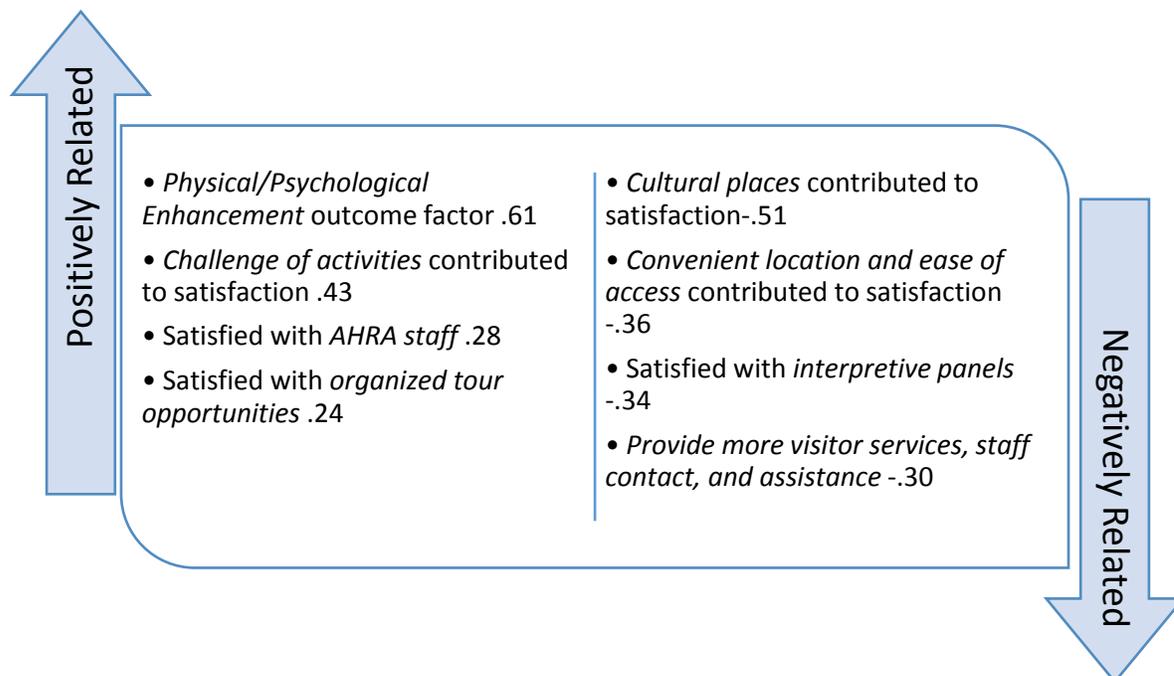
The analysis accounted for 24% of the variance, meaning that nearly one-fourth of the total prediction of interest cluster membership is explained by the variables included in the analysis. The seven figures listed below indicate the variables that are positively related to the prediction of the respective interest cluster (shown in descending order in left column) as well as those variables that are negatively related (shown in descending order in right column). For example, for the first variable listed in the positively related column under the Natural Landscapes interest cluster, one interpretation is the more that natural places contribute to satisfaction, the more likely the Natural Landscapes interest cluster is predicted. Conversely, the more that the companionship of people in the group contributes to satisfaction, the less likely the Natural Landscapes interest cluster is predicted. Moreover, the standardized function coefficients are listed next to each variable, which can be interpreted as the higher the number, the greater (or lesser in the case of negatively related variables) the variable predicts interest cluster

membership. Classification results reveal that the interest clusters were classified with 61.4% overall accuracy.

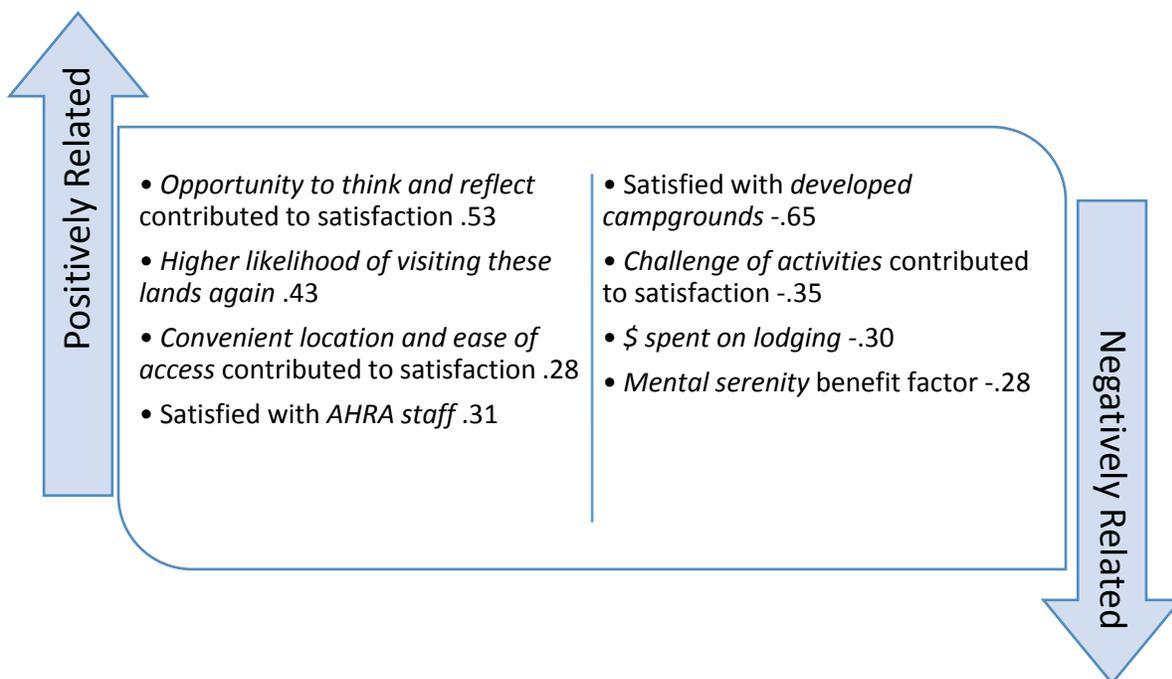
1) Natural Landscapes (47%):



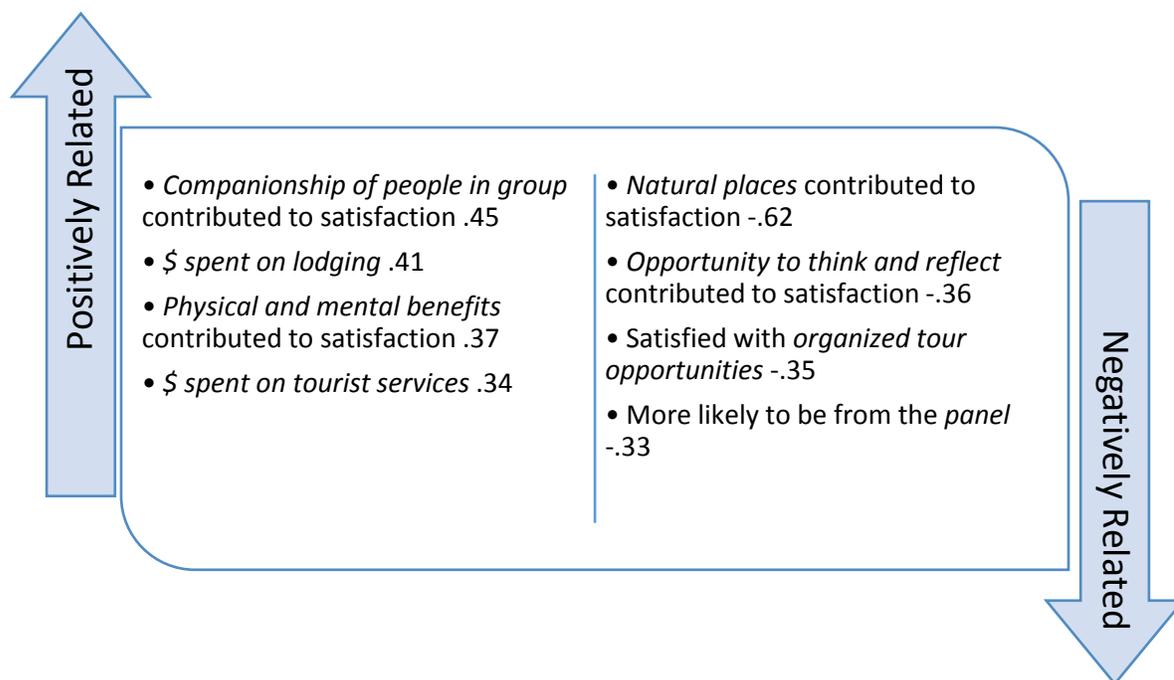
2) Health & Fitness (10%):



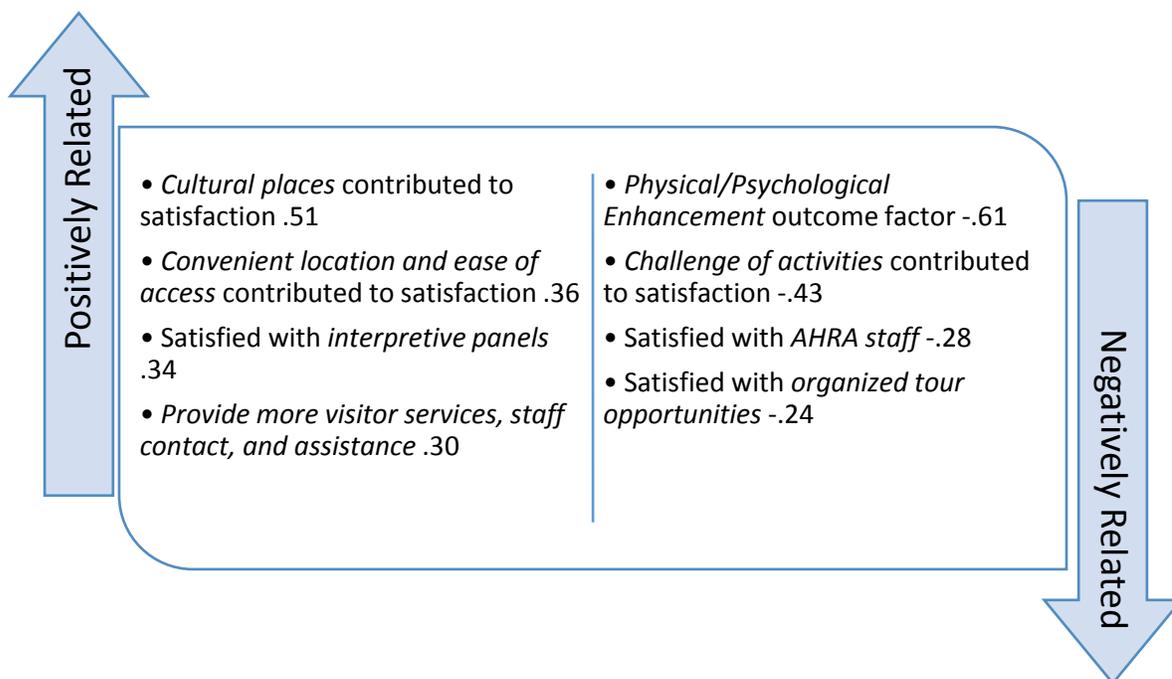
3) Tranquil Escapes (9%):



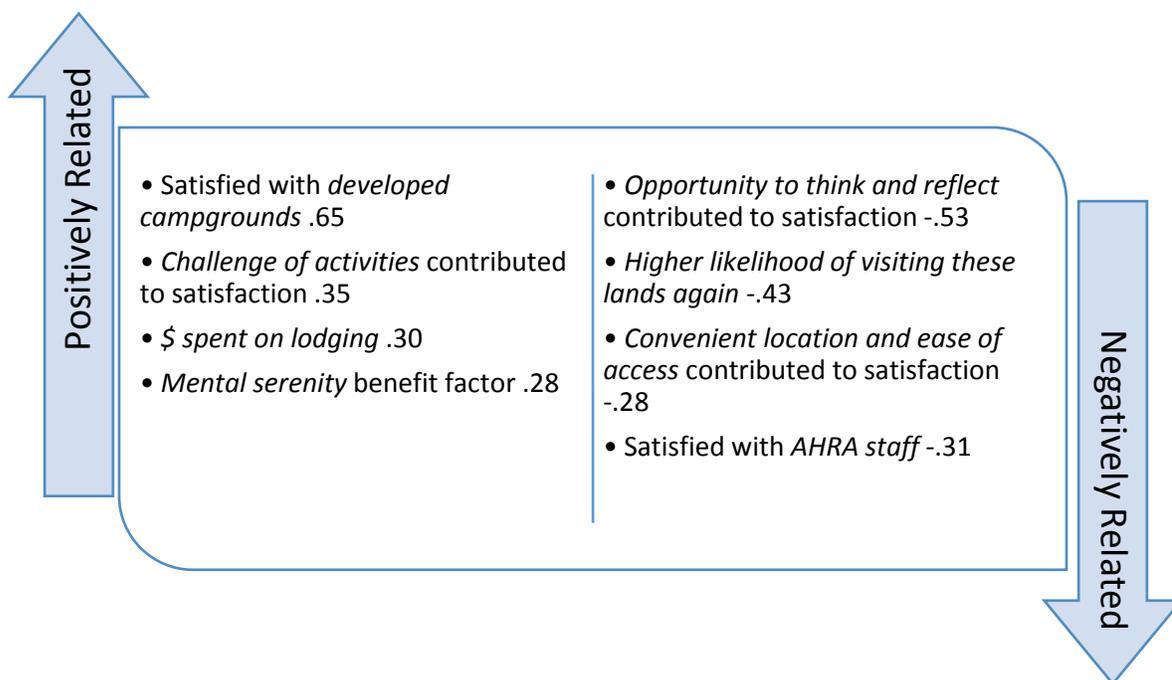
4) Youth, Family, and Friends (7%):



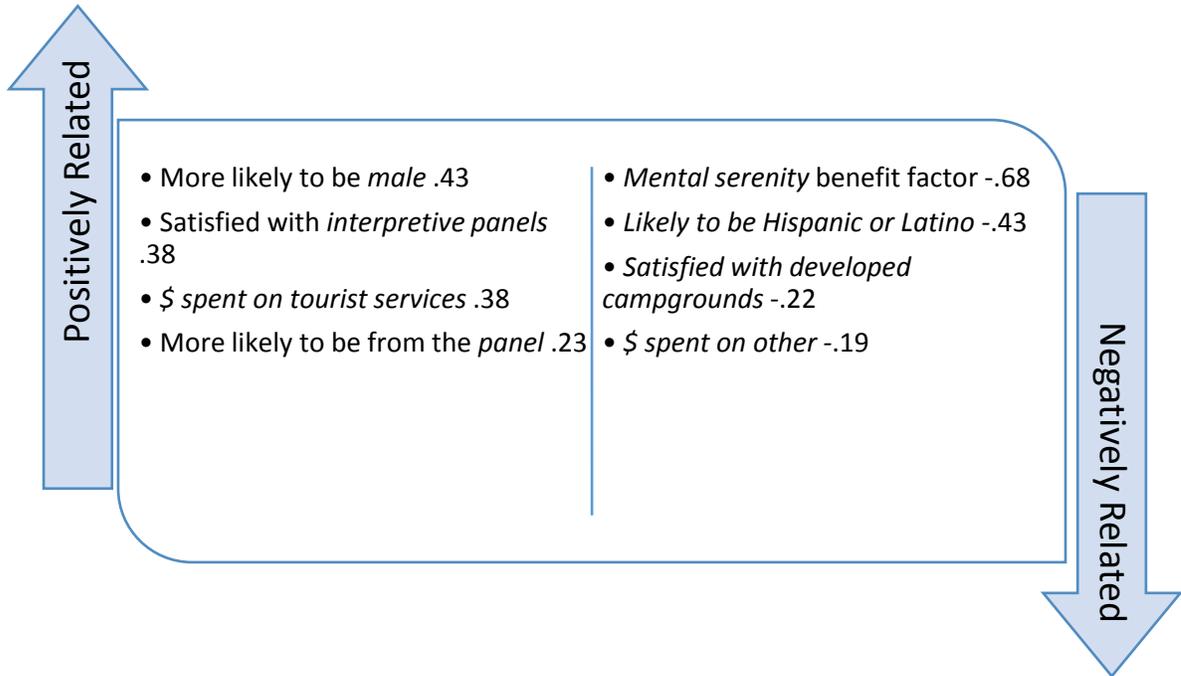
5) Cultural and Natural History (7%):



6) Self-Reliant Adventure (6%):



7) Rural Lifestyles (5%):



Appendix 6: On-Site Survey Results

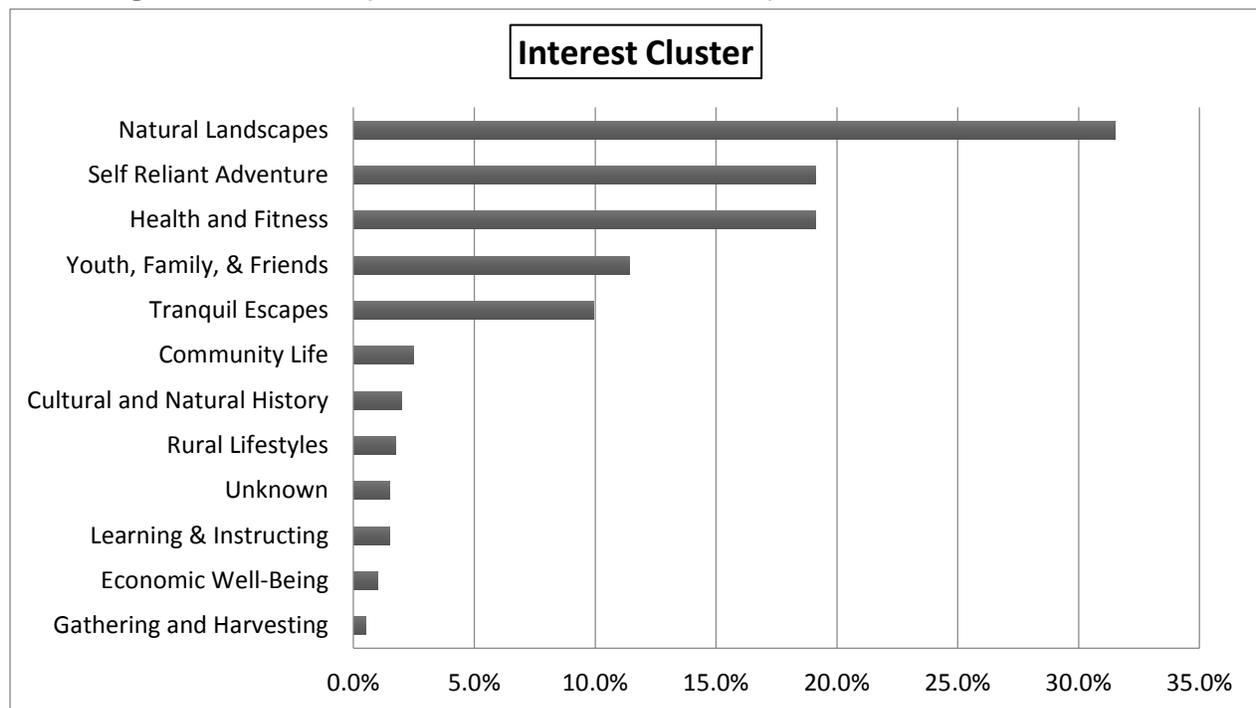
Question 1. How many people are in your group today, including yourself?

Average: 3.8

Question 2. Which of the following statements best describes your visit to this area?

This area is the main destination for this trip.	246	61%
This area is one of multiple other destinations for the trip.	151	37.5%
Total	403	100%

Question 3. Select the one cluster that most describes your interests and expectations while recreating on this location (select one from the list below).



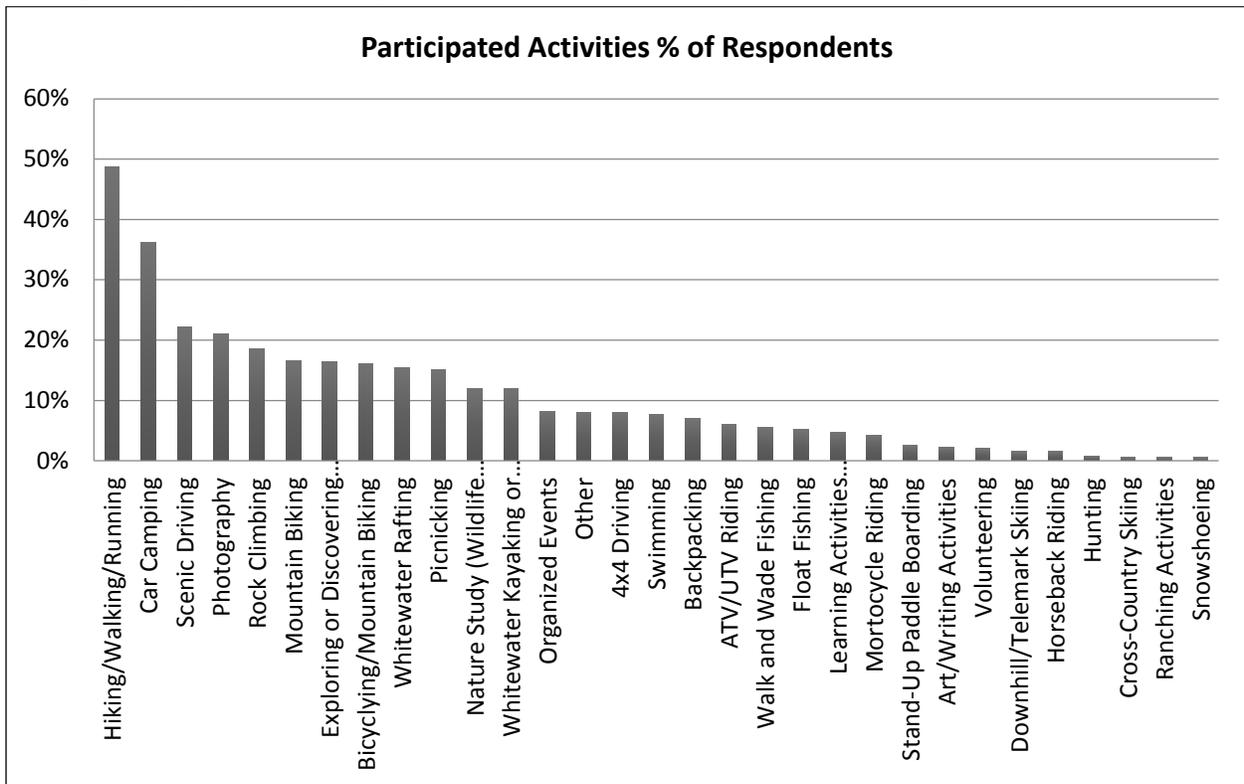
Question 4. How many times have you visited this resource area in the past 12 months, (excluding this visit)?

Average: 17.3

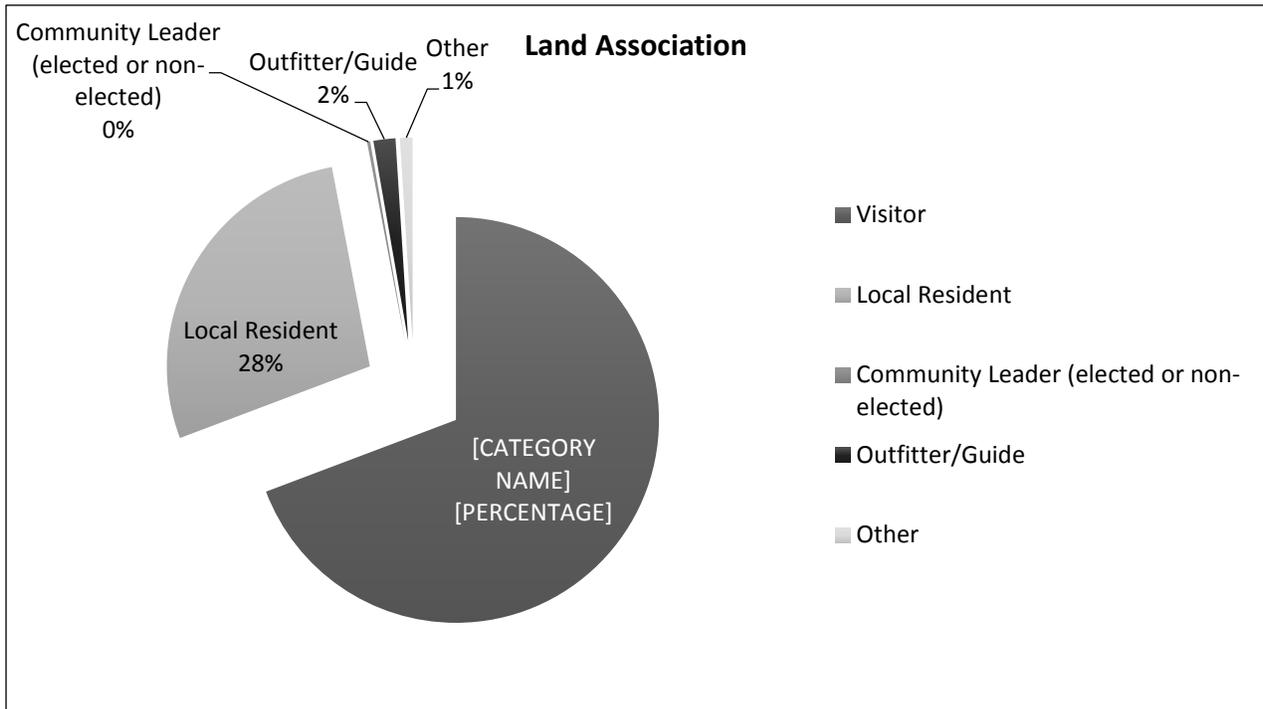
Question 5. How about the last five years?

Average: 74.64

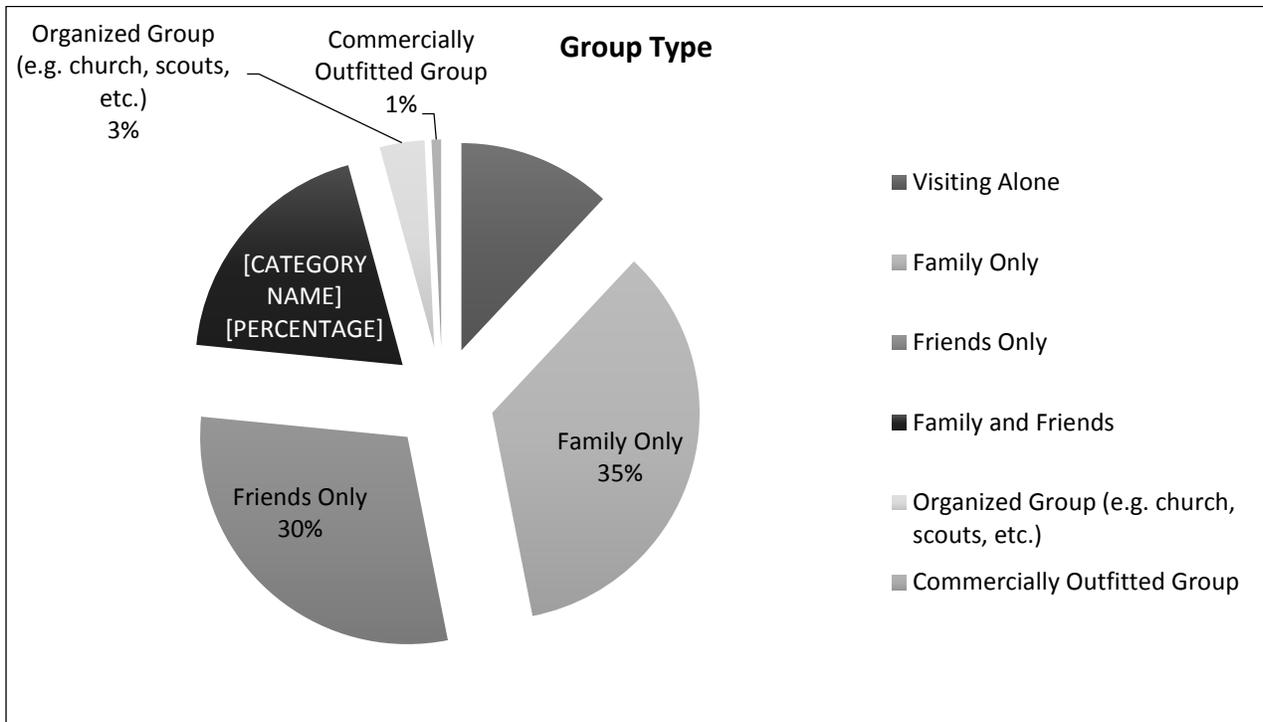
Question 6. Please check each activity that you participated in (or plan to participate in) during this trip to the (name) resource area.



Question 7. Which of the following best describes your primary association with these BLM/AHRA public lands? Please check one.



Question 8. What type of group are you with during this visit? (check one)



Question 9. Sex

Female	146	37%
Male	254	63%
Total	403	100%

Question 10. What year were you born?

Average age: 42.8



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