



# National Wildlife Refuge Visitor Survey 2010/2011: Individual Refuge Results for Monte Vista National Wildlife Refuge

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*I love this refuge. We visit often—sometimes every day when babies are hatching, cranes are here, or the elk and deer gather. It's one of the best things about our valley.—Survey comment from visitor to Monte Vista National Wildlife Refuge.*



Monte Vista National Wildlife Refuge. Photo credit: Robert Sanders/Ducks Unlimited.

## Contents

Acknowledgments .....	iv
Introduction .....	1
Organization of Results .....	1
Methods .....	2
Selecting Participating Refuges.....	2
Developing the Survey Instrument .....	2
Contacting Visitors .....	2
Interpreting the Results .....	4
Refuge Description.....	5
Sampling at This Refuge .....	7
Selected Survey Results .....	7
Visitor and Trip Characteristics.....	7
Visitor Spending in Local Communities .....	14
Visitor Opinions about This Refuge .....	15
Visitor Opinions about National Wildlife Refuge System Topics.....	20
Conclusion .....	24
References.....	24
Appendix A: Survey Frequencies for This Refuge.....	A-1
Appendix B: Visitor Comments for This Refuge .....	B-1

## Figures

1.	Map of this refuge.....	6
2.	How visitors first learned or heard about this refuge.....	8
3.	Resources used by visitors to find their way to this refuge during this visit.....	9
4.	Number of visitors travelling to this refuge by residence.....	10
5.	Modes of transportation used by visitors to this refuge during this visit. ....	11
6.	Activities in which visitors participated during the past 12 months at this refuge. ....	12
7.	The primary activity in which visitors participated during this visit.....	13
8.	Use of the visitor center at this refuge.. ....	13
9.	Overall satisfaction with this refuge during this visit.....	15
10.	Importance-satisfaction ratings of services and facilities provided at this refuge.....	17
11.	Importance-satisfaction ratings of recreational opportunities provided at this refuge.....	18
12.	Importance-satisfaction ratings of transportation-related features at this refuge.....	19
13.	Visitors' likelihood of using alternative transportation options at national wildlife refuges in the future.....	21
14.	Visitors' personal involvement with climate change related to fish, wildlife and their habitats.....	22
15.	Visitors' beliefs about the effects of climate change on fish, wildlife and their habitats.....	23

## Tables

1.	Participating refuges in the 2010/2011 national wildlife refuge visitor survey. ....	3
2.	Sampling and response rate summary for this refuge. ....	7
3.	Influence of this refuge on visitors' decision to take this trip. ....	9
4.	Type and size of groups visiting this refuge.....	11
5.	Total visitor expenditures for this refuge expressed in dollars per person per day. ....	14

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## Introduction

The National Wildlife Refuge System (Refuge System), established in 1903 and managed by the U.S. Fish and Wildlife Service (Service), is the leading network of protected lands and waters in the world dedicated to the conservation of fish, wildlife and their habitats. There are 556 national wildlife refuges (NWRs) and 38 wetland management districts nationwide, including possessions and territories in the Pacific and Caribbean, encompassing more than 150 million acres. The mission of the Refuge System is to “administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” Part of achieving this mission is the goal “to foster understanding and instill appreciation of fish, wildlife, and plants, and their conservation, by providing the public with safe, high-quality, and compatible wildlife-dependent public use” (Clark, 2001). The Refuge System attracts more than 45 million visitors annually, including 25 million people per year to observe and photograph wildlife, over 9 million to hunt and fish, and more than 10 million to participate in educational and interpretation programs (Uniack, 1999; U.S. Fish and Wildlife Service, 2007). Understanding visitors and characterizing their experiences on national wildlife refuges are critical elements of managing these lands and meeting the goals of the Refuge System.

The Service contracted with the U.S. Geological Survey (USGS) to conduct a national survey of visitors regarding their experiences on national wildlife refuges. The survey was conducted to better understand visitor needs and experiences and to design programs and facilities that respond to those needs. The survey results will inform Service performance planning, budget, and communications goals. Results will also inform Comprehensive Conservation Plan (CCPs), Visitor Services, and Transportation Planning processes.

## Organization of Results

These results are for Monte Vista NWR (this refuge) and are part of USGS Data Series 643 (Sexton and others, 2011). All refuges participating in the 2010/2011 surveying effort will receive individual refuge results specific to the visitors to that refuge. Each set of results is organized by the following categories:

- **Introduction:** An overview of the Refuge System and the goals of the national surveying effort.
- **Methods:** The procedures for the national surveying effort, including selecting refuges, developing the survey instrument, contacting visitors, and guidance for interpreting the results.
- **Refuge Description:** A brief description of the refuge location, acreage, purpose, recreational activities, and visitation statistics, including a map (where available) and refuge website link.
- **Sampling at This Refuge:** The sampling periods, locations, and response rate for this refuge.
- **Selected Survey Results:** Key findings for this refuge, including:
  - Visitor and Trip Characteristics
  - Visitor Spending in the Local Communities
  - Visitors Opinions about This Refuge
  - Visitor Opinions about National Wildlife Refuge System Topics
- **Conclusion**
- **References**
- **Survey Frequencies (Appendix A):** The survey instrument with the frequency results for this refuge.
- **Visitor Comments (Appendix B):** The verbatim responses to the open-ended survey questions for this refuge.

## **Methods**

### **Selecting Participating Refuges**

The national visitor survey was conducted from July 2010 – November 2011 on 53 refuges across the Refuge System (table 1). Based on the Refuge System’s 2008 Refuge Annual Performance Plan (RAPP; U.S. Fish and Wildlife Service, 2011, written comm.), 192 refuges with a minimum visitation of 25,000 were considered. This criterion was the median visitation across the Refuge System and the minimum visitation necessary to ensure that the surveying would be logistically feasible onsite. Visitors were sampled on 35 randomly selected refuges and 18 other refuges that were selected by Service Regional Offices to respond to priority refuge planning processes.

### **Developing the Survey Instrument**

USGS researchers developed the survey in consultation with the Service Headquarters Office, managers, planners, and visitor services professionals. The survey was peer-reviewed by academic and government researchers and was further pre-tested with eight Refuge System Friends Group representatives from each region to ensure readability and overall clarity. The survey and associated methodology were approved by the Office of Management and Budget (OMB control #: 1018-0145; expiration date: 6/30/2013).

### **Contacting Visitors**

Refuge staff identified two separate 15-day sampling periods and one or more locations that best reflected the diversity of use and specific visitation patterns of each participating refuge. Sampling periods and locations were identified by refuge staff and submitted to USGS via an internal website that included a customized mapping tool. A standardized sampling schedule was created for all refuges that included eight randomly selected sampling shifts during each of the two sampling periods. Sampling shifts were three- to five-hour randomly selected time bands that were stratified across AM and PM, as well as weekend and weekdays. Any necessary customizations were made, in coordination with refuge staff, to the standardized schedule to accommodate the identified sampling locations and to address specific spatial and temporal patterns of visitation.

Twenty visitors (18 years or older) per sampling shift were systematically selected, for a total of 320 willing participants per refuge—160 per sampling period—to ensure an adequate sample of completed surveys. When necessary, shifts were moved, added, or extended to alleviate logistical limitations (for example, weather or low visitation at a particular site) in an effort to reach target numbers.

**Table 1.** Participating refuges in the 2010/2011 national wildlife refuge visitor survey.

<b>Pacific Region (R1)</b>	
Kilauea Point National Wildlife Refuge (HI)	William L. Finley National Wildlife Refuge (OR)
Deer Flat National Wildlife Refuge (ID)	McNary National Wildlife Refuge (WA)
Cape Meares National Wildlife Refuge (OR)	Turnbull National Wildlife Refuge (WA)
Malheur National Wildlife Refuge (OR)	
<b>Southwest Region (R2)</b>	
Bitter Lake National Wildlife Refuge (NM)	Aransas National Wildlife Refuge (TX)
Bosque del Apache National Wildlife Refuge (NM)	San Bernard/ Brazoria National Wildlife Refuge (TX)
Wichita Mountains Wildlife Refuge (OK)	
<b>Great Lakes-Big Rivers Region (R3)</b>	
DeSoto National Wildlife Refuge (IA)	McGregor District, Upper Mississippi River National Wildlife and Fish Refuge – (IA/WI)
Neal Smith National Wildlife Refuge (IA)	
Muscatatuck National Wildlife Refuge (IN)	Big Muddy National Fish and Wildlife Refuge (MO)
Rice Lake National Wildlife Refuge (MN)	Horicon National Wildlife Refuge (WI)
Tamarac National Wildlife Refuge (MN)	Necedah National Wildlife Refuge (WI)
<b>Southeast Region (R4)</b>	
Wheeler National Wildlife Refuge (AL)	Banks Lake National Wildlife Refuge (GA)
Big Lake National Wildlife Refuge (AR)	Noxubee National Wildlife Refuge (MS)
Pond Creek National Wildlife Refuge (AR)	Cabo Rojo National Wildlife Refuge (Puerto Rico)
Merritt Island National Wildlife Refuge (FL)	Pea Island National Wildlife Refuge (NC)
St. Marks National Wildlife Refuge (FL)	Cape Romain National Wildlife Refuge (SC)
Ten Thousand Islands National Wildlife Refuge (FL)	Reelfoot National Wildlife Refuge (TN)
<b>Northeast Region (R5)</b>	
Stewart B. McKinney National Wildlife Refuge (CT)	Moosehorn National Wildlife Refuge (ME)
Bombay Hook National Wildlife Refuge (DE)	Great Swamp National Wildlife Refuge (NJ)
Monomoy National Wildlife Refuge (MA)	Montezuma National Wildlife Refuge (NY)
Parker River National Wildlife Refuge (MA)	Wertheim National Wildlife Refuge (NY)
Patuxent Research Refuge (MD)	Occoquan Bay/ Elizabeth Hartwell Mason Neck National Wildlife Refuge (VA)
<b>Mountain-Prairie Region (R6)</b>	
Monte Vista National Wildlife Refuge (CO)	Sand Lake National Wildlife Refuge (SD)
Quivira National Wildlife Refuge (KS)	National Elk Refuge (WY)
Charles M. Russell National Wildlife Refuge (MT)	
<b>Alaska Region (R7)</b>	
Alaska Maritime National Wildlife Refuge (AK)	Kenai National Wildlife Refuge (AK)
<b>California and Nevada Region (R8)</b>	
Lower Klamath/Tule Lake National Wildlife Refuge (CA)	Ruby Lake National Wildlife Refuge (NV)
Sonny Bono Salton Sea National Wildlife Refuge (CA)	

Refuge staff and/or volunteers (survey recruiters) contacted visitors on-site following a protocol provided by USGS to ensure a diverse sample. Instructions included contacting visitors across the entire sampling shift (for example, every  $n^{\text{th}}$  visitor for dense visitation, as often as possible for sparse visitation), and only one person per group. Visitors were informed of the survey effort, given a token incentive (for example, a small magnet, temporary tattoo), and asked to participate. Willing participants provided their name, mailing address, and preference for language (English or Spanish) and survey mode (mail or online). Survey recruiters also were instructed to record any refusals and then proceed with the sampling protocol.

Visitors were mailed a postcard within 10 days of the initial on-site contact thanking them for agreeing to participate in the survey and inviting them to complete the survey online. Those visitors choosing not to complete the survey online were sent a paper copy a week later. Two additional contacts were made by mail during the next seven weeks following a modified Tailored Design Method (Dillman, 2007): 1) a reminder postcard one week after the first survey, and 2) a second paper survey two weeks after the reminder postcard. Each mailing included instructions for completing the survey online and a postage paid envelope for returning the paper version of the survey. Those visitors indicating a preference for Spanish were sent Spanish versions of all correspondence (including the survey). Finally, a short survey of six questions was sent to nonrespondents four weeks after the second survey mailing to determine any differences between respondents and nonrespondents at the national level. Online survey data were exported and paper survey data were entered using a standardized survey codebook and data entry procedure. All survey data were analyzed by using SPSS v.18 statistical analysis software.

## Interpreting the Results

The extent to which these results accurately represent the total population of visitors to this refuge is dependent on 1) an adequate sample size of those visitors and 2) the representativeness of that sample. The adequacy of the sample size for this refuge is quantified as the margin of error. The composition of the sample is dependent on the ability of the standardized sampling protocol for this study to account for the spatial and temporal patterns of visitor use specific to each refuge. Spatially, the geographical layout and public use infrastructure varies widely across refuges. Some refuges only can be accessed through a single entrance, while others have multiple unmonitored access points across large expanses of land and water. As a result, the degree to which sampling locations effectively captured spatial patterns of visitor use will likely vary from refuge to refuge. Temporally, the two 15-day sampling periods may not have effectively captured all of the predominant visitor uses/activities on some refuges during the course of a year. Therefore, certain survey measures such as visitors' self-reported "primary activity during their visit" may reflect a seasonality bias.

Herein, the sample of visitors who responded to the survey are referred to simply as "visitors." However, when interpreting the results for Monte Vista NWR, any potential spatial and temporal sampling limitations specific to this refuge need to be considered when generalizing the results to the total population of visitors. For example, a refuge that sampled during a special event (for example, birding festival) held during the spring may have contacted a higher percentage of visitors who traveled greater than 50 miles to get to the refuge than the actual number of these people who would have visited throughout the calendar year (that is, oversampling of nonlocals). In contrast, another refuge may not have enough nonlocal visitors in the sample to adequately represent the beliefs and opinions of that group type. If the sample for a specific group type (for example, nonlocals, hunters, those visitors who paid a fee) is too low ( $n < 30$ ), a warning is included. Additionally, the term "*this* visit" is used to reference the visit on which people were contacted to participate in the survey, which may or may not have been their most recent refuge visit.

## Refuge Description for Monte Vista National Wildlife Refuge

Monte Vista NWR resides at the heart of the San Luis Valley in southern Colorado. Declining waterfowl wintering habitat and waterfowl crop depredation prompted the Migratory Bird Conservation Commission to create the Monte Vista National Wildlife Refuge in 1952. With only 7 inches of precipitation per year, water is the lifeblood of the San Luis Valley and is intensively managed on Monte Vista NWR. Artesian wells, pumped wells and irrigation canals, some dating to the "ditch boom" of the 1880's, supply water to the Monte Vista NWR. Early European settlers took advantage of this liquid wealth and turned the San Luis Valley into a rich agricultural center. Many other management tools, including mowing, grazing, prescribed burning and farming, are also used to ensure that refuge lands continue to provide food, cover, and nesting habitat for waterfowl and other migratory water birds.

The refuge is a major stopover for migrating sandhill cranes and draws around 10,000 visitors annually (based on 2008 RAPP data; U.S. Fish and Wildlife Service, 2011, written comm.). Up to 20,000 cranes pass through in the spring and again in the fall as they move between their wintering area around Bosque del Apache NWR in New Mexico and their breeding grounds in the northern United States and southern Canada. Monte Vista NWR offers a variety of other activities including waterfowl hunting, hiking, biking, use of the Visitor Center, auto tour routes, wildlife observation, photography, environmental education, and interpretation. Figure 1 displays a map of Monte Vista NWR. For more information, go to: <http://www.fws.gov/alamosa/Monte%20Vista.html>.

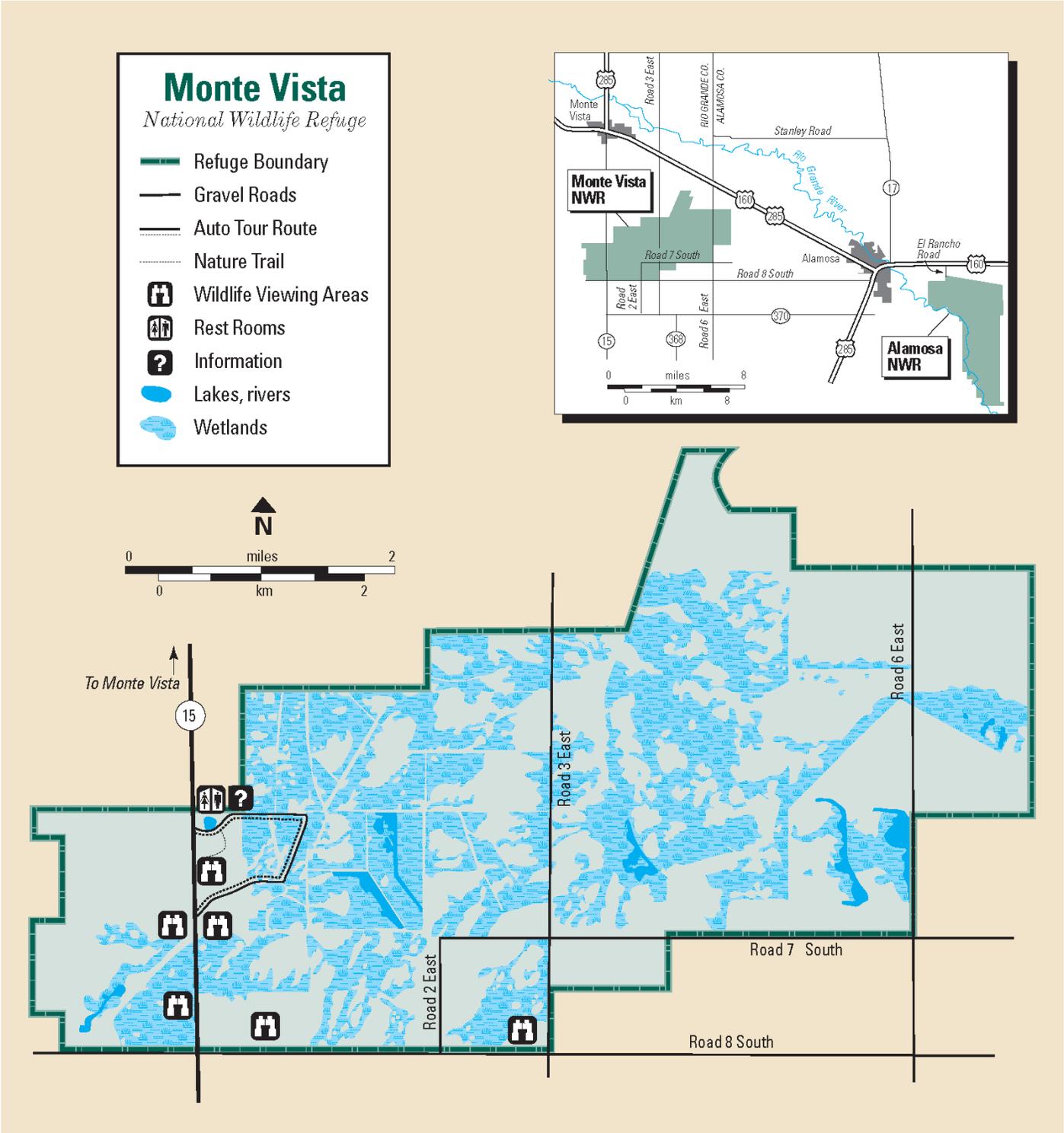


Figure 1. Map of Monte Vista NWR, courtesy of U.S. Fish and Wildlife Service.

## Sampling at Monte Vista National Wildlife Refuge

A total of 227 visitors agreed to participate in the survey during the two sampling periods at the identified locations at Monte Vista NWR (table 2). In all, 175 visitors completed the survey for a 79% response rate and  $\pm 6\%$  margin of error at the 95% confidence level.<sup>1</sup> Sampling Period 2 for Monte Vista NWR encompassed their annual crane festival.

**Table 2.** Sampling and response rate summary for Monte Vista NWR.

Sampling period	Dates	Locations	Total contacts	Undeliverable addresses	Completed surveys	Response rate
1	10/02/10 to	Monte Vista Auto Tour Route	94	3	64	70%
	10/16/10	Highway 8 South Auto Pullout				
2	03/05/11 to 03/19/11	Monte Vista Auto Tour Route	133	1	111	84%
		Highway 8 South Auto Pullout				
		Highway 3 East				
<b>Total</b>			<b>227</b>	<b>4</b>	<b>175</b>	<b>79%</b>

## Selected Survey Results

### Visitor and Trip Characteristics

*A solid understanding of refuge visitors and details about their trips to refuges can inform communication outreach efforts, inform visitor services and transportation planning, forecast use, and gauge demand for services and facilities.*

### Familiarity with the Refuge System

While we did not ask visitors to identify the mission of the National Wildlife Refuge System or the U.S. Fish and Wildlife Service, visitors to Monte Vista NWR reported that before participating in the survey, they were aware of the role of the U.S. Fish and Wildlife Service in managing national wildlife refuges (88%) and that the Refuge System has the mission of conserving, managing, and restoring fish, wildlife, plants and their habitat (91%). Positive responses to these questions concerning the management and mission

<sup>1</sup> The margin of error (or confidence interval) is the error associated with the results related to the sample and population size. A margin of error of  $\pm 5\%$ , for example, means if 55% of the sample answered a survey question in a certain way, then 50–60% of the entire population would have answered that way. The margin of error is calculated with an 80/20 response distribution, assuming that for any given dichotomous choice question, approximately 80% of respondents selected one choice and 20% selected the other (Salant and Dillman, 1994).

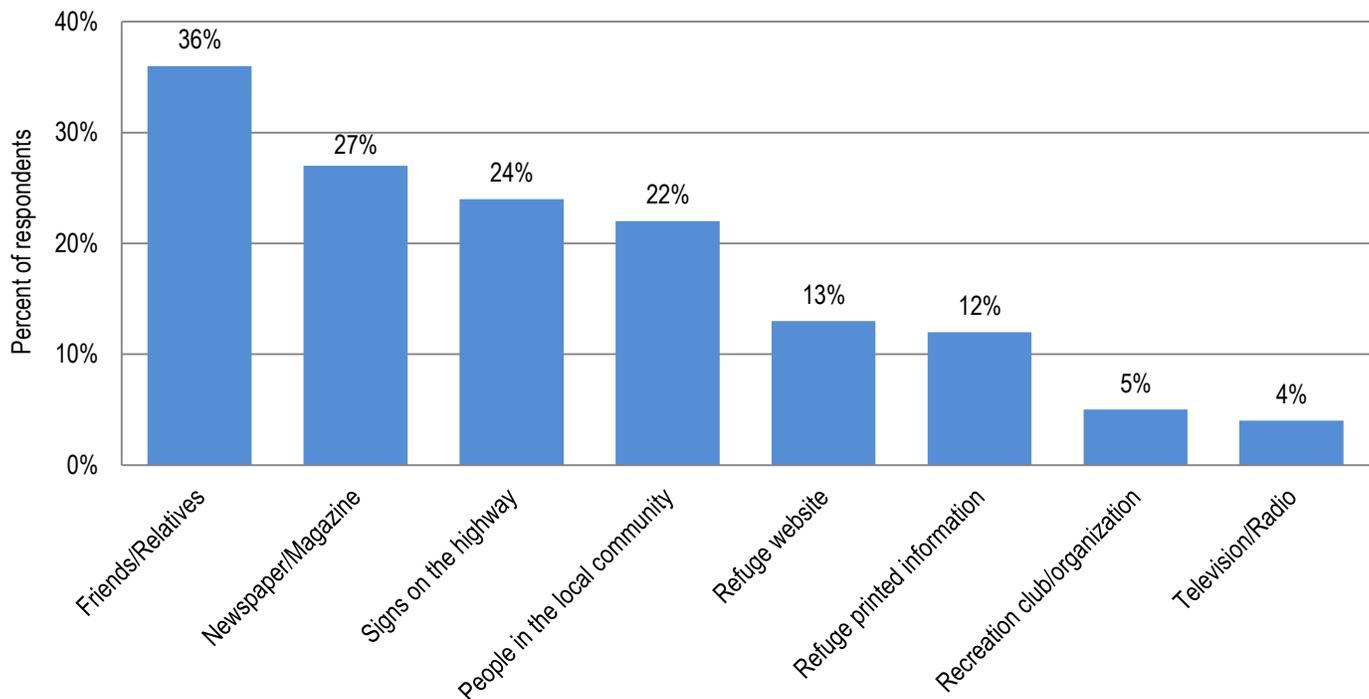
of the Refuge System do not indicate the degree to which these visitors understand the day-to-day management practices of individual refuges, only that visitors feel they have a basic knowledge of who manages refuges and why. Compared to other public lands, many visitors feel that refuges provide a unique recreation experience (88%; see Appendix B for visitor comments on “What Makes National Wildlife Refuges Unique?”); however, reasons for why visitors find refuges unique are varied and may not directly correspond to their understanding of the mission of the Refuge System. More than half of visitors to Monte Vista NWR had been to at least one other National Wildlife Refuge in the past year (68%), with an average of 4 visits to other refuges during the past 12 months.

### Visiting This Refuge

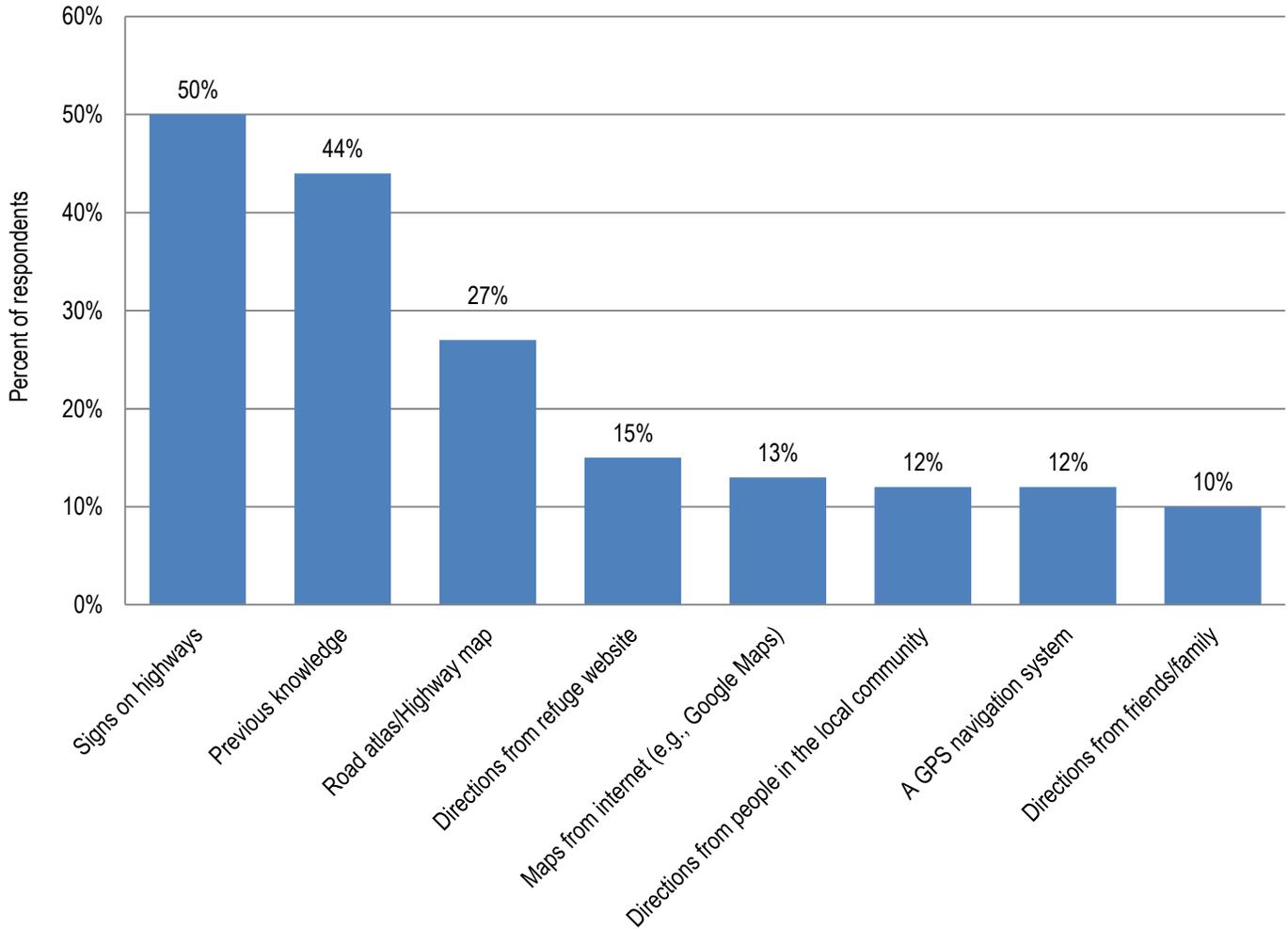
A little over half of surveyed visitors (56%) had only been to Monte Vista NWR once in the past 12 months, while others had been multiple times (44%). These repeat visitors went to the refuge an average of 9 times during that same 12-month period. Visitors used the refuge during only one season (63%), during multiple seasons (19%), and year-round (18%).

Most visitors first learned about the refuge from friends/relatives (36%), newspapers/magazines (27%), or signs on the highway (24%; fig. 2). Key information sources used by visitors to find their way to this refuge include signs on highways (50%), previous knowledge (44%), or a road atlas/highway map (27%; fig. 3).

Some visitors (35%) lived in the local area (within 50 miles of the refuge), whereas 65% were nonlocal visitors. For most local visitors, Monte Vista NWR was the primary purpose or sole destination of trip (86%; table 3). For most nonlocal visitors also, the refuge was the primary purpose or sole destination of trip (66%). Local visitors reported that they traveled an average of 16 miles to get to the refuge, while nonlocal visitors traveled an average of 253 miles. Figure 4 shows the residence of visitors travelling to the refuge. About 90% of visitors travelling to Monte Vista NWR were from Colorado.



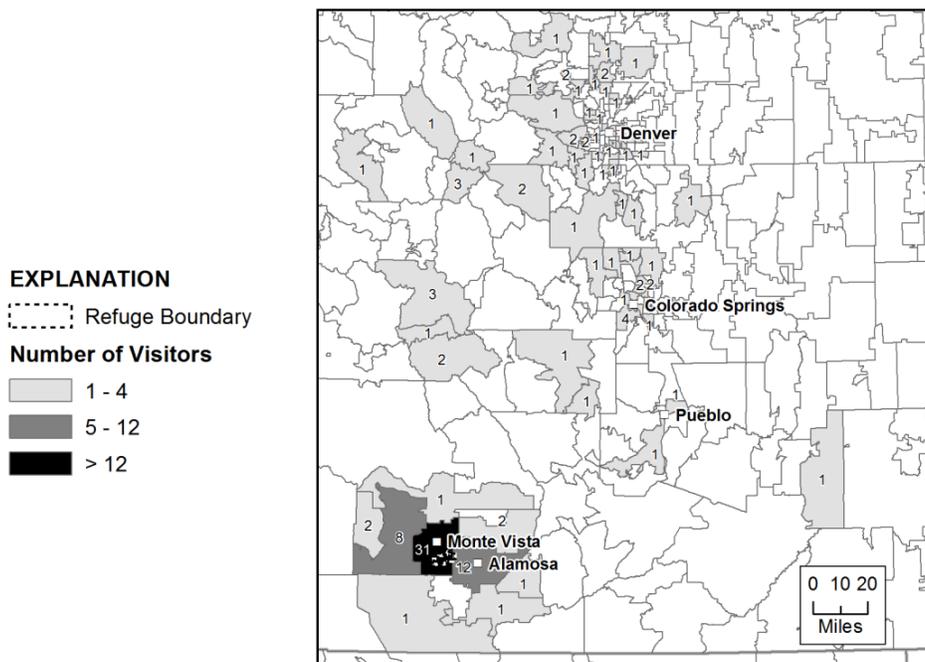
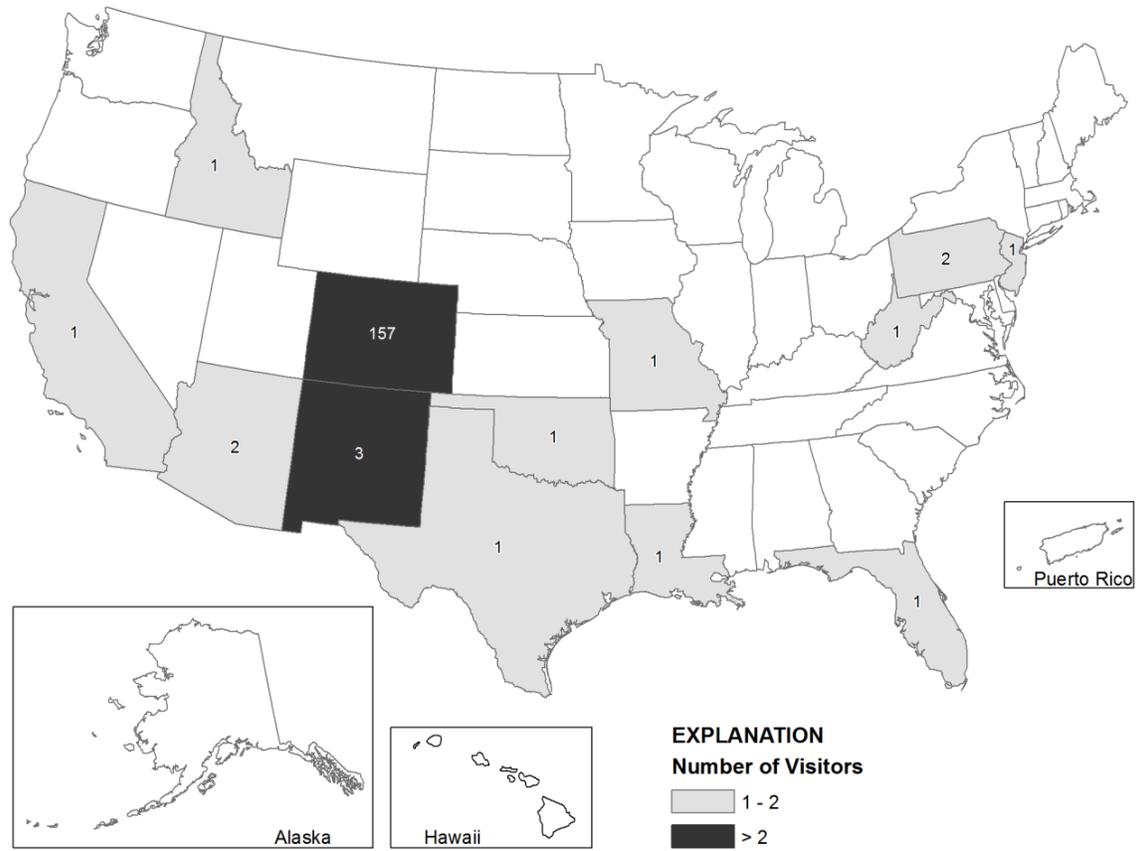
**Figure 2.** How visitors first learned or heard about Monte Vista NWR (n = 168).



**Figure 3.** Resources used by visitors to find their way to Monte Vista NWR during *this* visit (n = 173).

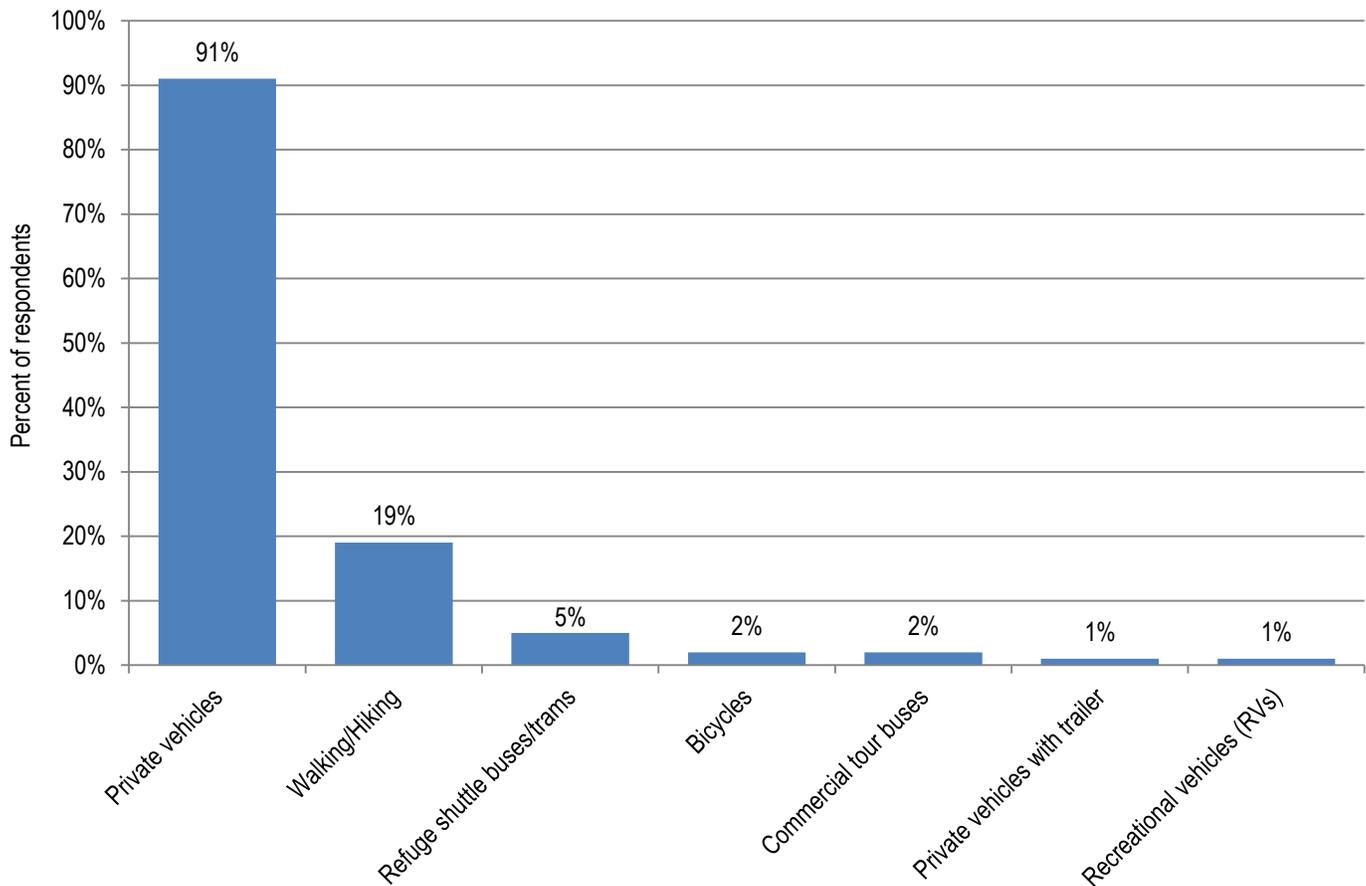
**Table 3.** Influence of Monte Vista NWR on visitors' decision to take *this* trip.

Visitors	Visiting this refuge was...		
	the primary reason for trip	one of many equally important reasons for trip	an incidental stop
Nonlocal	66%	16%	18%
Local	86%	5%	9%
Total	73%	12%	15%



**Figure 4.** Number of visitors travelling to Monte Vista NWR by residence. Top map shows residence by state and bottom map shows residence by zip codes near the refuge (n = 173).

Surveyed visitors reported that they spent an average of 4 hours at Monte Vista NWR during one day there (a day visit is assumed to be 8 hours). However, the most frequently reported length of visit during one day was actually 8 hours (33%). The key modes of transportation used by visitors to travel around the refuge were private vehicle (91%) and walking/hiking (19%; fig. 5). Most visitors indicated they were part of a group on their visit to this refuge (67%), travelling primarily with family and friends (table 4).

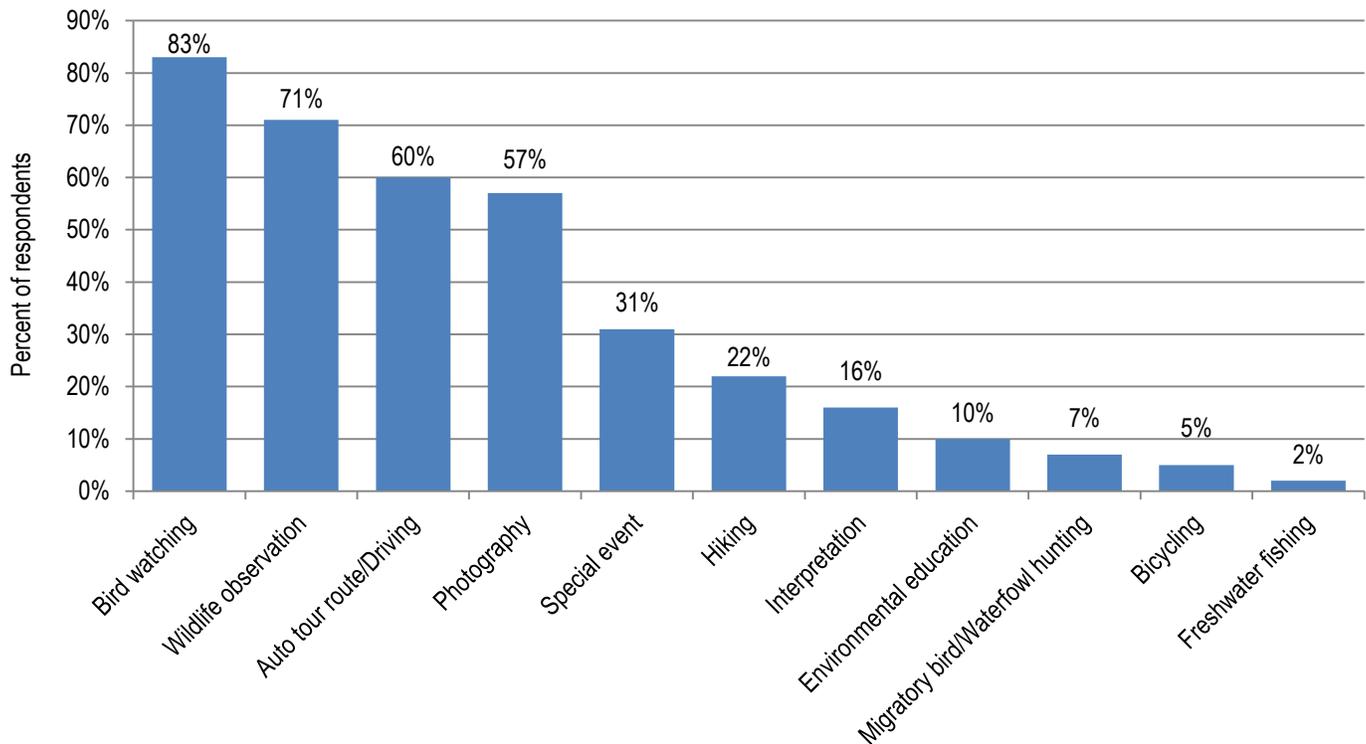


**Figure 5.** Modes of transportation used by visitors to Monte Vista NWR during *this* visit (n = 172).

**Table 4.** Type and size of groups visiting Monte Vista NWR (for those who indicated they were part of a group, n = 116).

Group type	Percent (of those traveling in a group)	Average group size		
		Number of adults	Number of children	Total group size
Family/Friends	85%	3	1	4
Commercial tour group	1%	2	0	2
Organized club/School group	3%	7	7	14
Other group type	10%	15	3	18

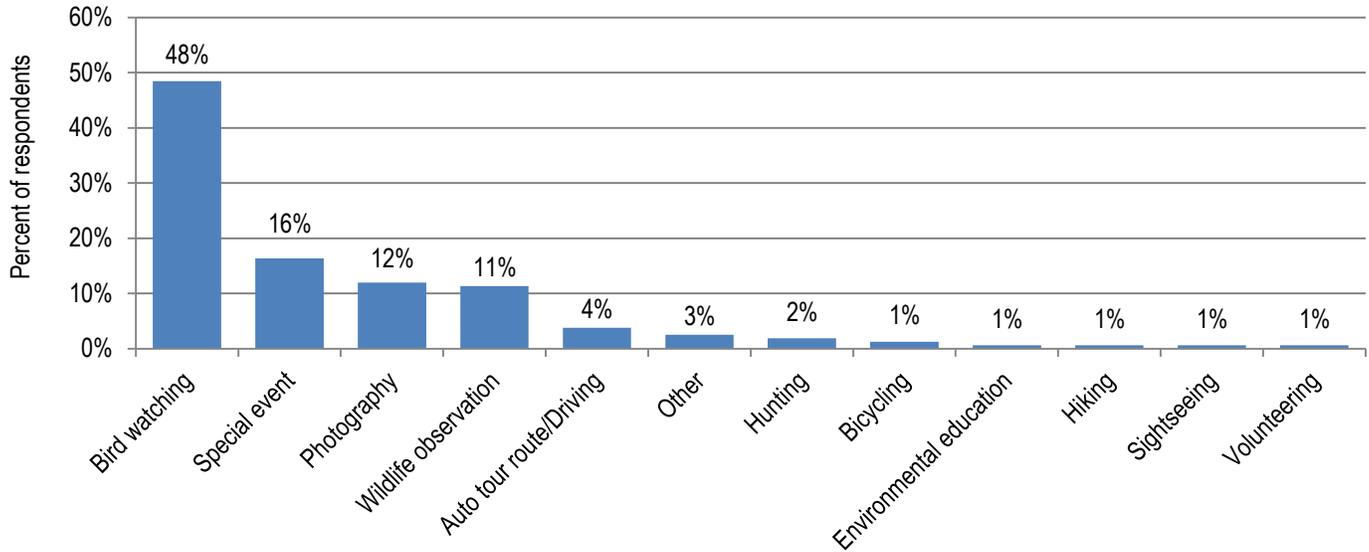
Surveyed visitors participated in a variety of refuge activities during the past 12 months (fig. 6); the top three activities reported were bird watching (83%), wildlife observation (71%), and auto tour route/driving (60%). The primary reasons for their most recent visit included bird watching (48%), special event (16%), and photography (12%; fig. 7). The visitor center was used by 31% of visitors, mostly to ask information of staff/volunteers (61%), view the exhibits (50%), and stop to use the facilities (48%; fig. 8). Although Monte Vista NWR does not have a visitor center, nearby Alamosa NWR does have one; some visitors may have been referencing this visitor center when they answered this question.



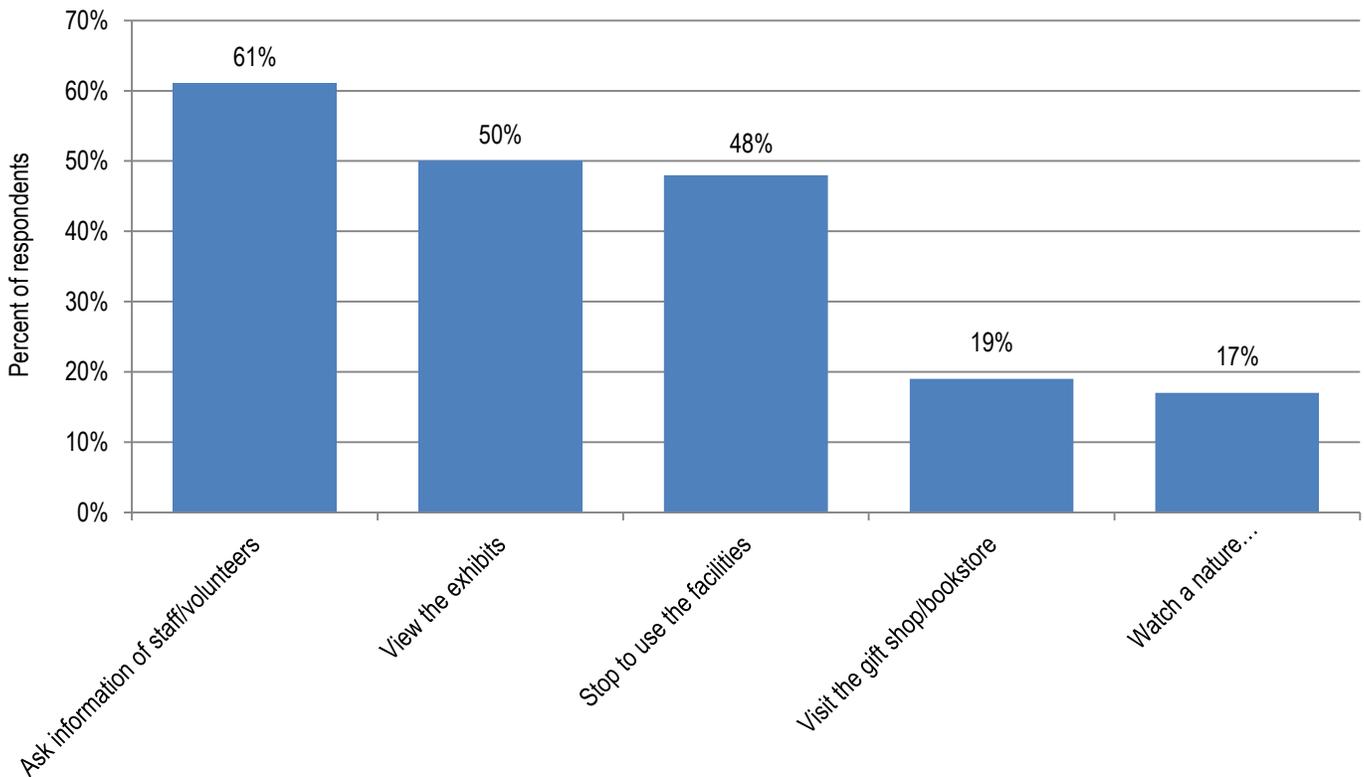
**Figure 6.** Activities in which visitors participated during the past 12 months at Monte Vista NWR (n = 167). See Appendix B for a listing of “other” activities.

### Visitor Characteristics

All surveyed visitors to Monte Vista NWR indicated that they were citizens or permanent residents of the United States. Only those visitors 18 years or older were sampled. Visitors were a mix of 44% male with an average age of 59 years and 56% female with an average age of 55 years. Visitors, on average, reported they had 16 years of formal education (college or technical school). The median level of income was \$50,000–\$74,999. See Appendix A for more demographic information. In comparison, the 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation found that participants in wildlife watching and hunting on public land were 55% male and 45% female with an average age of 46 years, an average level of education of 14 years (associate degree or two years of college), and a median income of \$50,000–\$74,999 (Harris, 2011, personal communication). Compared to the U.S. population, these 2006 survey participants are more likely to be male, older, and have higher education and income levels (U.S. Department of the Interior and U.S. Department of Commerce, 2007).



**Figure 7.** The primary activity in which visitors participated during *this* visit to Monte Vista NWR (n = 159). See Appendix B for a listing of “other” activities.



**Figure 8.** Use of the visitor center at Monte Vista NWR (for those visitors who indicated they used the visitor center, n = 54).

## Visitor Spending in Local Communities

*Tourists usually buy a wide range of goods and services while visiting an area. Major expenditure categories include lodging, food, supplies, and gasoline. Spending associated with refuge visitation can generate considerable economic benefits for the local communities near a refuge. For example, more than 34.8 million visits were made to national wildlife refuges in fiscal year 2006; these visits generated \$1.7 billion in sales, almost 27,000 jobs, and \$542.8 million in employment income in regional economies (Carver and Caudill, 2007). Information on the amount and types of visitor expenditures can illustrate the economic importance of refuge visitor activities to local communities. Visitor expenditure information also can be used to analyze the economic impact of proposed refuge management alternatives.*

A region (and its economy) is typically defined as all counties within 50 miles of a travel destination (Stynes, 2008). Visitors that live within the local 50-mile area of a refuge typically have different spending patterns than those that travel from longer distances. During the two sampling periods, 35% of surveyed visitors to Monte Vista NWR indicated that they live within the local area. Nonlocal visitors (65%) stayed in the local area, on average, for 2 days. Table 5 shows summary statistics for local and nonlocal visitor expenditures in the local communities and at the refuge, with expenditures reported on a per person per day basis. During the two sampling periods, nonlocal visitors spent an average of \$74 per person per day and local visitors spent an average of \$30 per person per day in the local area. Several factors should be considered when estimating the economic importance of refuge visitor spending in the local communities. These include the amount of time spent at the refuge, influence of refuge on decision to take this trip, and the representativeness of primary activities of the sample of surveyed visitors compared to the general population. Controlling for these factors is beyond the scope of the summary statistics presented in this report. Detailed refuge-level visitor spending profiles which do consider these factors will be developed during the next phase of analysis.

**Table 5.** Total visitor expenditures in local communities and at Monte Vista NWR expressed in dollars per person per day.

Visitors	n <sup>1</sup>	Median	Mean	Standard deviation	Minimum	Maximum
Nonlocal	99	\$65	\$74	\$56	\$0	\$300
Local	40	\$6	\$30	\$50	\$0	\$270

<sup>1</sup>n = number of visitors who answered both locality *and* expenditure questions.

Note: For each respondent, reported expenditures were divided by the number of persons in their group that shared expenses in order to determine the spending per person per trip. This was then divided by the number of days spent in the local area to determine the spending per person per day for each respondent. For respondents who reported spending less than one full day, trip length was set equal to one day. These visitor spending estimates are appropriate for the sampling periods selected by refuge staff (see table 2 for sampling period dates and figure 7 for the primary visitor activities). They may not be representative of the total population of visitors to this refuge.

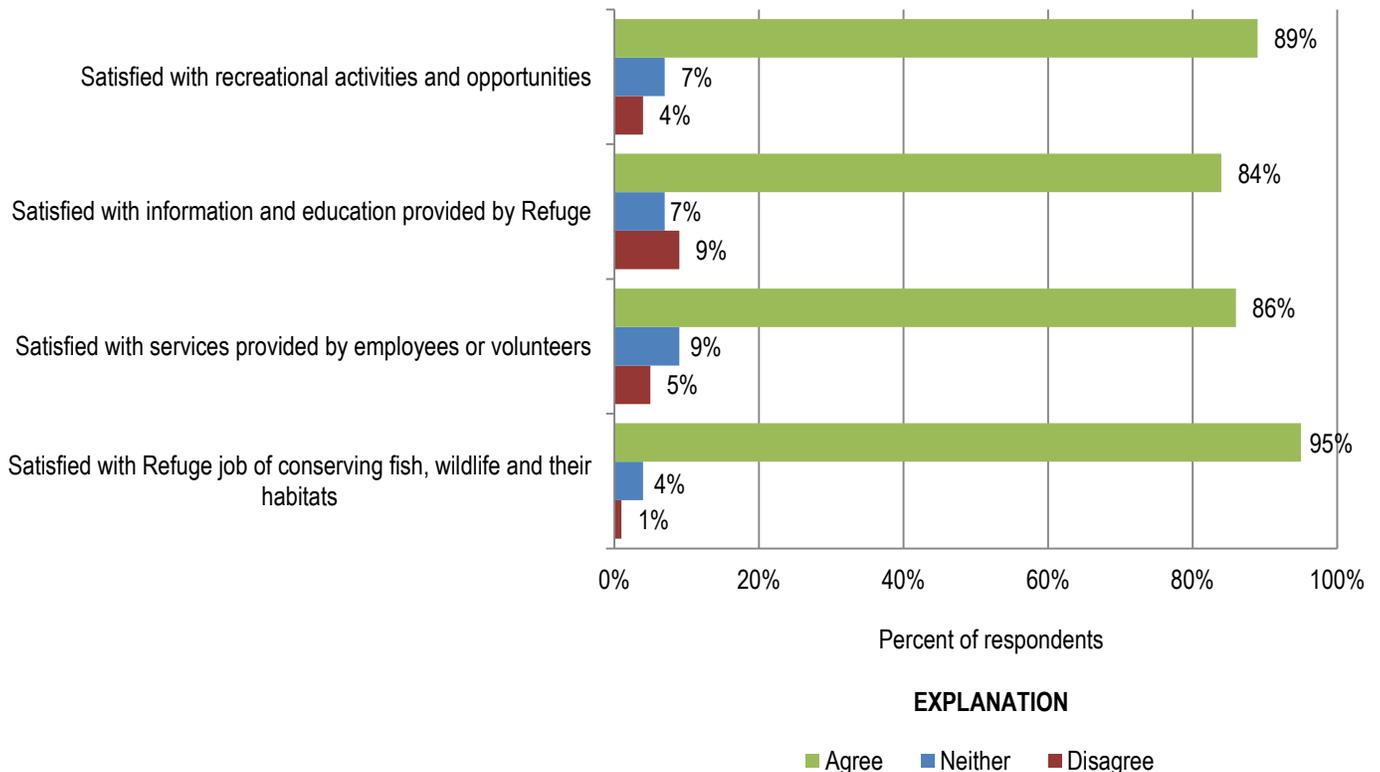
## Visitor Opinions about This Refuge

National wildlife refuges provide visitors with a variety of services, facilities, and wildlife-dependent recreational opportunities. Understanding visitors' perceptions of their refuge experience is a key component of the Refuge System mission as it pertains to providing high-quality wildlife-dependent recreational opportunities. Having a baseline understanding of visitor experience can inform management decisions to better balance visitors' expectations with the Refuge System mission. Recent studies in outdoor recreation have included an emphasis on declining participation in traditional activities such as hunting and an increasing need to connect the next generation to nature and wildlife. These factors highlight the importance of current refuge visitors as a key constituency in wildlife conservation. A better understanding is increasingly needed to better manage the visitor experience and to address the challenges of the future.

Surveyed visitors' overall satisfaction with the services, facilities, and recreational opportunities provided at Monte Vista NWR were as follows (fig. 9):

- 89% were satisfied with the recreational activities and opportunities,
- 84% were satisfied with the information and education about the refuge and its resources,
- 86% were satisfied with the services provided by employees or volunteers, and
- 95% were satisfied with the refuge's job of conserving fish, wildlife and their habitats.

Although 6% (n = 10) of visitors indicated they paid a fee to enter Monte Vista NWR, the refuge does not have an entrance fee. Based on discussions with refuge staff, it is possible that this small number of visitors were basing their response on a donation they made to the refuge.



**Figure 9.** Overall satisfaction with Monte Vista NWR during this visit (n ≥ 154).

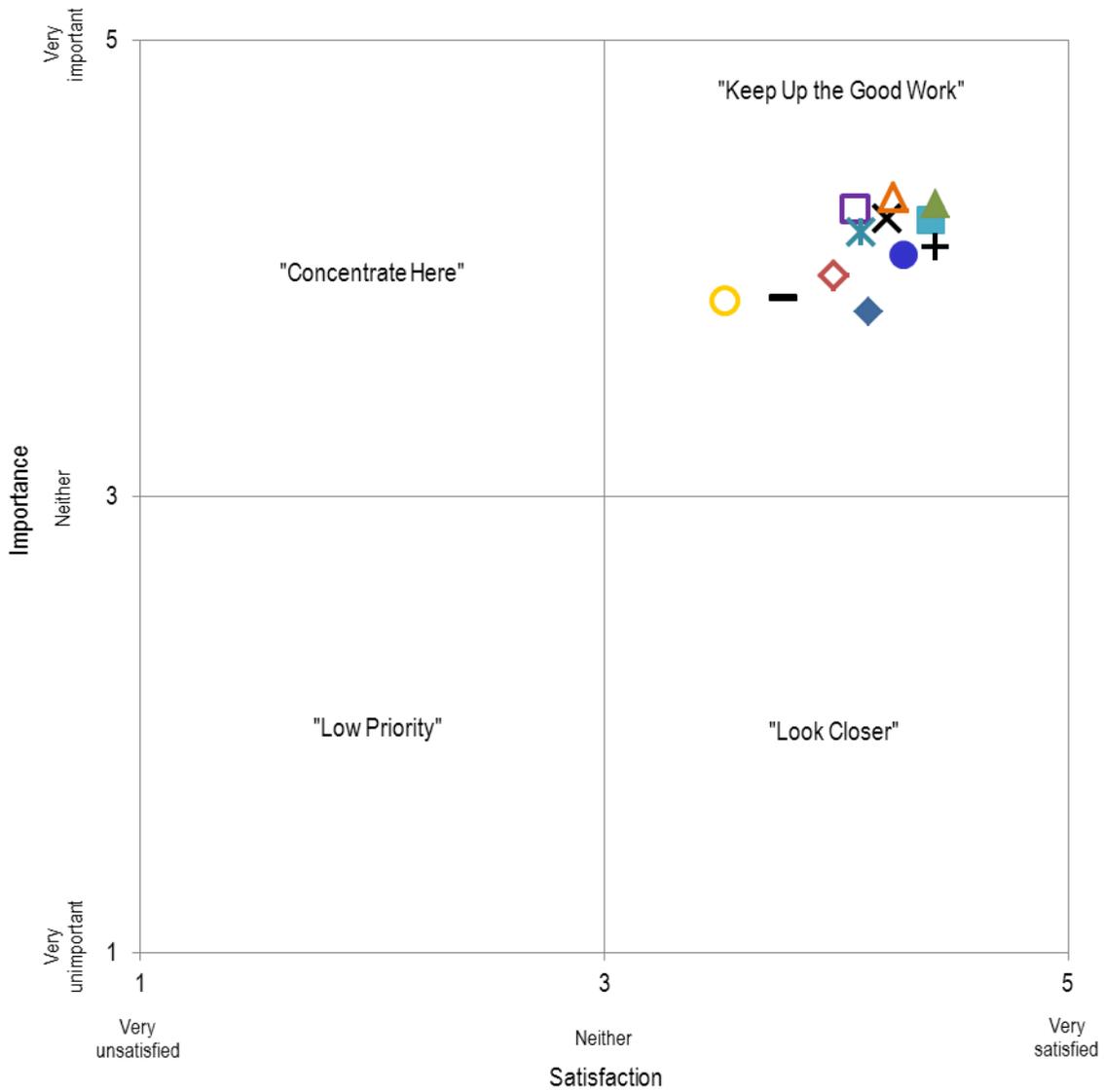
## Importance/Satisfaction Ratings

*Comparing the importance and satisfaction ratings for visitor services provided by refuges can help to identify how well the services are meeting visitor expectations. The importance-performance framework presented in this section is a tool that includes the importance of an attribute to visitors in relation to their satisfaction with that attribute. Drawn from marketing research, this tool has been applied to outdoor recreation and visitation settings (Martilla and James, 1977; Tarrant and Smith, 2002). Results for the attributes of interest are segmented into one of four quadrants (modified for this national study):*

- Keep Up the Good Work = high importance/high satisfaction;
- Concentrate Here = high importance/low satisfaction;
- Low Priority = low importance/low satisfaction; and
- Look Closer = low importance/high satisfaction.

*Graphically plotting visitors' importance and satisfaction ratings for different services, facilities, and recreational opportunities provides a simple and intuitive visualization of these survey measures. However, this tool is not without its drawbacks. One is the potential for variation among visitors regarding their expectations and levels of importance (Vaske et al., 1996; Bruyere et al., 2002; Wade and Eagles, 2003), and certain services or recreational opportunities may be more or less important for different segments of the visitor population. For example, hunters may place more importance on hunting opportunities and amenities such as blinds, while school group leaders may place more importance on educational/informational displays than would other visitors. This potential for highly varied importance ratings needs to be considered when viewing the average results of this analysis of visitors to Monte Vista NWR. This consideration is especially important when reviewing the attributes that fall into the "Look Closer" quadrant. In some cases, these attributes may represent specialized recreational activities in which a small subset of visitors participate (for example, hunting, kayaking) or facilities and services that only some visitors experience (for example, exhibits about the refuge). For these visitors, the average importance of (and potentially the satisfaction with) the attribute may be much higher than it would be for the overall population of visitors.*

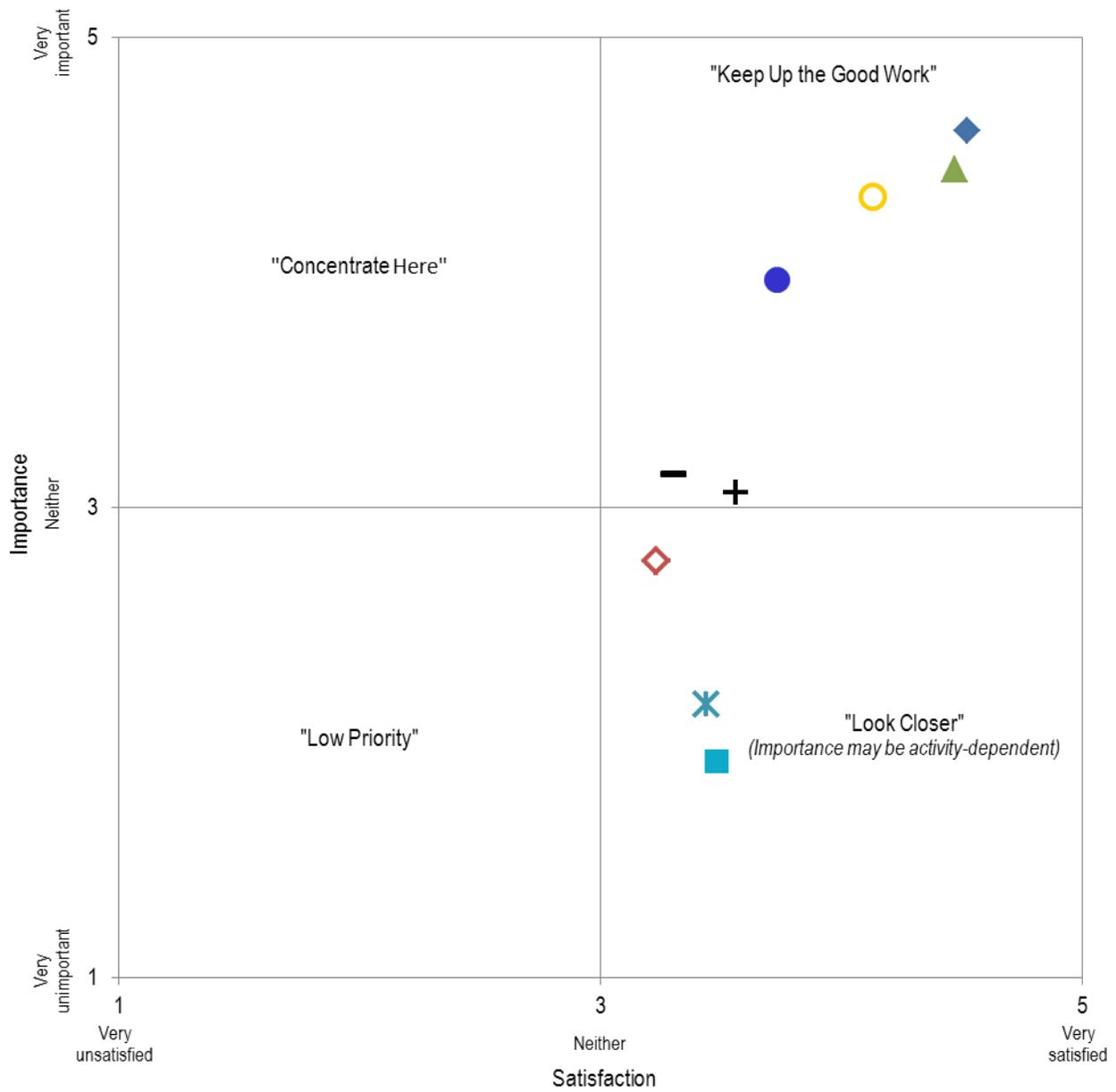
Figures 10-12 depict surveyed visitors' importance-satisfaction results for refuge services and facilities, recreational opportunities, and transportation-related features at Monte Vista NWR, respectively. All refuge services and facilities fell in the "Keep Up the Good Work" quadrant (fig. 10). Nearly all refuge recreational opportunities fell in the "Keep Up the Good Work" quadrant except fishing opportunities, hunting opportunities, and kayak/canoe opportunities, which all fell into the "Look Closer" quadrant (fig. 11). The average importance of fishing and hunting opportunities in the "Look Closer" quadrant may be higher among visitors who have participated in these activities during the past 12 months; however, there were not enough individuals in the sample to evaluate the responses of such participants. Kayaking/canoe opportunities are not provided on the refuge. All transportation-related features fell in the "Keep Up the Good Work" quadrant (fig. 12).



**EXPLANATION**

- ◆ Availability of employees/volunteers
- Signs with rules/regulations
- Environmental education programs/activities
- Convenient hours/days of operation
- ▲ Knowledgeable employees/volunteers
- Wildlife observation structures
- ✕ Printed information about this Refuge
- ◇ Exhibits about this Refuge
- Visitor Center
- ✚ Courteous/welcoming employees/volunteers
- ▲ Well-maintained restrooms
- ✕ Infomational kiosks/displays about this Refuge

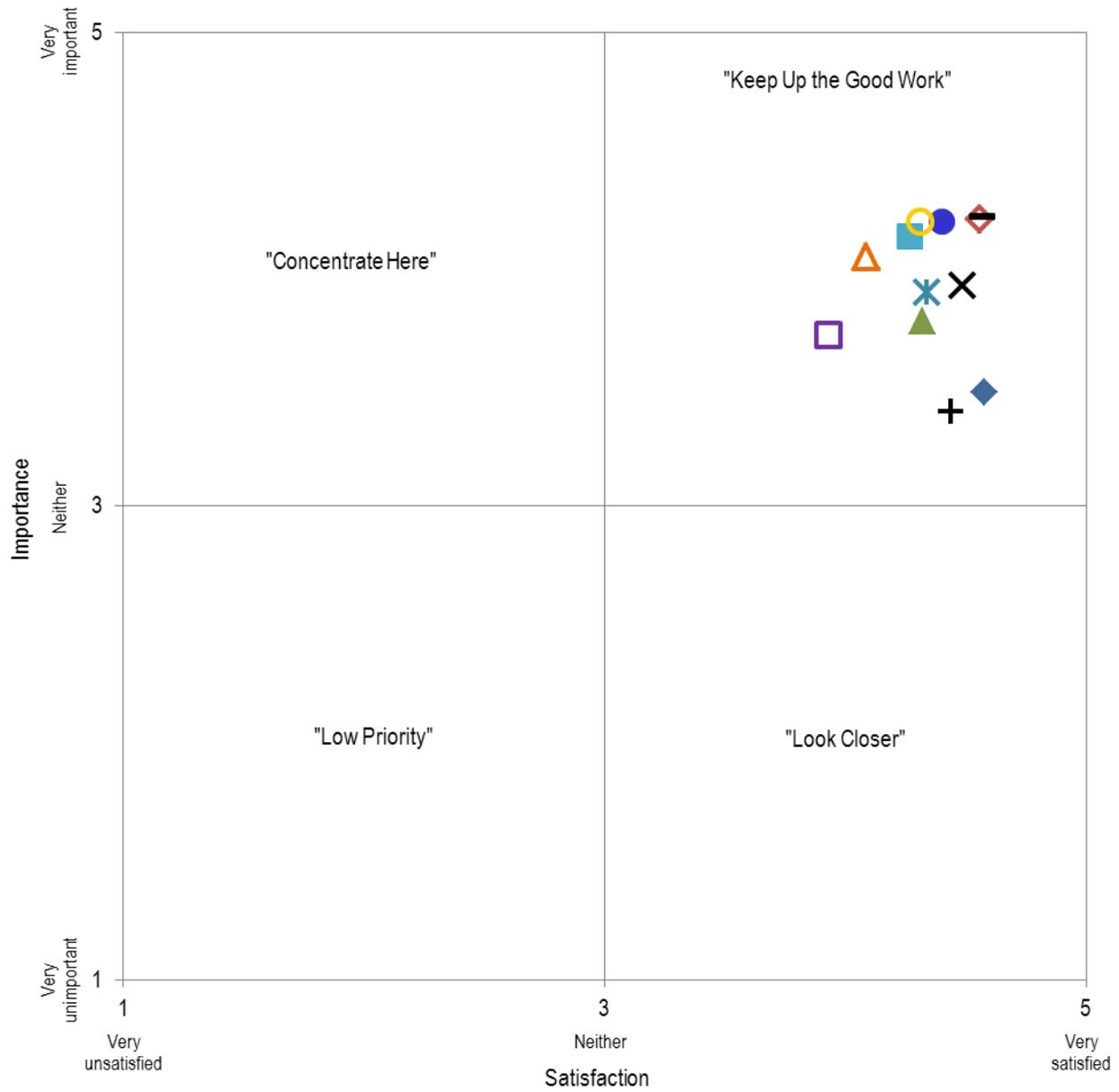
**Figure 10.** Importance-satisfaction ratings of services and facilities provided at Monte Vista NWR.



**EXPLANATION**

- ◆ Bird watching opportunities
- Wildlife viewing opportunities
- ▲ Photography opportunities
- Hunting opportunities
- ✱ Fishing opportunities
- Hiking opportunities
- ◇ Kayak/Canoe opportunities
- Bicycling opportunities
- ⊕ Volunteer opportunities

**Figure 11.** Importance-satisfaction ratings of recreational opportunities provided at Monte Vista NWR.



**EXPLANATION**

- ◆ Condition of roads
- ◆ Condition of parking areas
- ▲ Condition of bridges
- ✕ Condition of trails/boardwalks
- ✕ Number of parking places
- Number of pullovers
- ◇ Safety of driving conditions
- Safety of Refuge entrances
- Directional signs on Refuge
- Directional signs on highways
- △ Directional signs on trails
- Disabled access

**Figure 12.** Importance-satisfaction ratings of transportation-related features at Monte Vista NWR.

## Visitor Opinions about National Wildlife Refuge System Topics

*One goal of this national visitor survey was to identify visitor trends across the Refuge System to more effectively manage refuges and provide visitor services. Two important issues to the Refuge System are transportation on refuges and communicating with visitors about climate change. The results to these questions will be most meaningful when they are evaluated in aggregate (data from all participating refuges together). However, basic results for Monte Vista NWR are reported here.*

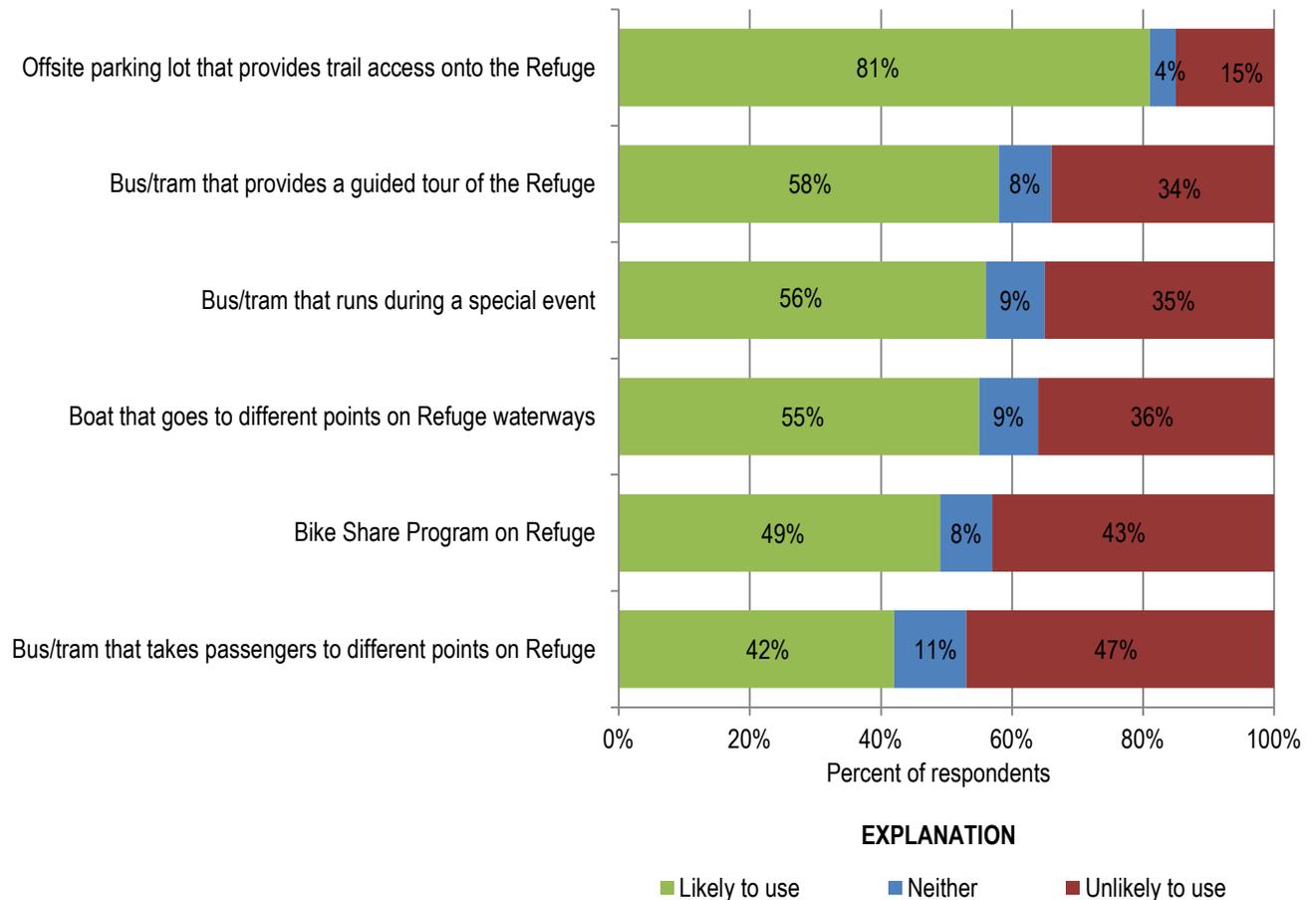
### Alternative Transportation and the National Wildlife Refuge System

*Visitors use a variety of transportation means to access and enjoy national wildlife refuges. While many visitors arrive at the refuge in a private vehicle, alternatives such as buses, trams, watercraft, and bicycles are increasingly becoming a part of the visitor experience. Previous research has identified a growing need for transportation alternatives within the Refuge System (Krechmer et al., 2001); however, less is known about how visitors perceive and use these new transportation options. An understanding of visitors' likelihood of using certain alternative transportation options can help in future planning efforts. Visitors were asked their likelihood of using alternative transportation options at national wildlife refuges in the future.*

Of the six Refuge System-wide alternative transportation options listed on the survey, the majority of Monte Vista NWR visitors who were surveyed were likely to use the following options at national wildlife refuges in the future (fig. 13):

- an offsite parking lot that provides trail access;
- a bus/tram that provides a guided tour;
- a bus/tram that runs during a special event; and
- a boat that goes to different points on Refuge waterways.

When asked about using alternative transportation at Monte Vista NWR specifically, 40% of visitors indicated they were unsure whether it would enhance their experience; however, some visitors thought alternative transportation would enhance their experience (21%) and others thought it would not (39%).



**Figure 13.** Visitors’ likelihood of using alternative transportation options at national wildlife refuges in the future (n ≥ 164).

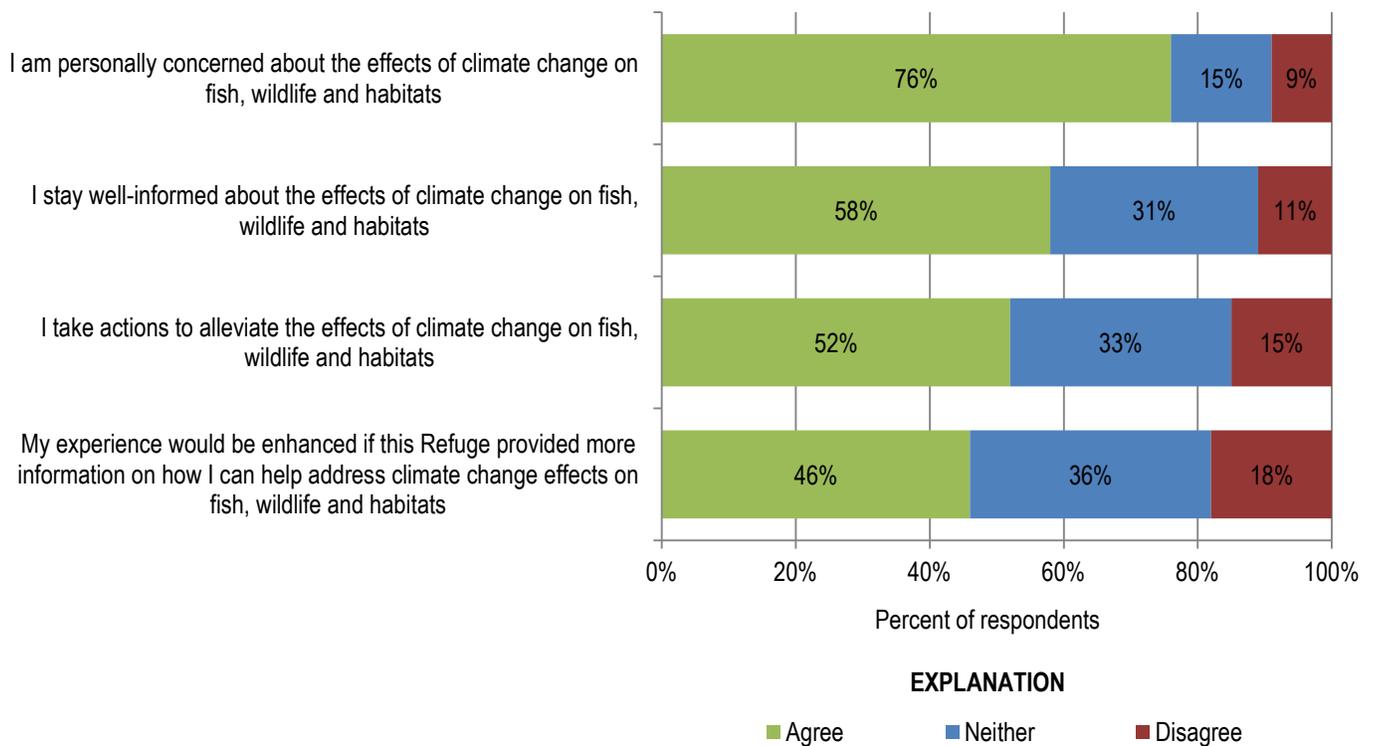
### Climate Change and the National Wildlife Refuge System

*Climate change represents a growing concern for the management of national wildlife refuges. The Service’ climate change strategy, titled “Rising to the Urgent Challenge,” establishes a basic framework for the agency to work within a larger conservation community to help ensure wildlife, plant, and habitat sustainability (U.S. Fish and Wildlife Service, 2010). To support the guiding principles of the strategy, refuges will be exploring options for more effective engagement with visitors on this topic. The national visitor survey collected information about visitors’ level of personal involvement in climate change related to fish, wildlife and their habitats and visitors’ beliefs regarding this topic. Items draw from the “Six Americas” framework for understanding public sentiment toward climate change (Leiserowitz, Maibach, and Roser-Renouf, 2008) and from literature on climate change message frames (e.g., Nisbet, 2009). Such information provides a baseline for understanding visitor perceptions of climate change in the context of fish and wildlife conservation that can further inform related communication and outreach strategies.*

Factors that influence how individuals think about climate change include their basic beliefs, levels of involvement, policy preferences, and behaviors related to this topic. Results presented below provide

baseline information on visitors' levels of involvement with the topic of climate change related to fish, wildlife and their habitats. The majority of surveyed visitors to Monte Vista NWR agreed with the following statements (fig. 14):

- “I am personally concerned about the effects of climate change on fish, wildlife and habitats;”
- “I stay well-informed about the effects of climate change;” and
- “I take actions to alleviate the effects of climate change.”



**Figure 14.** Visitors' personal involvement with climate change related to fish, wildlife and their habitats (n ≥ 165).

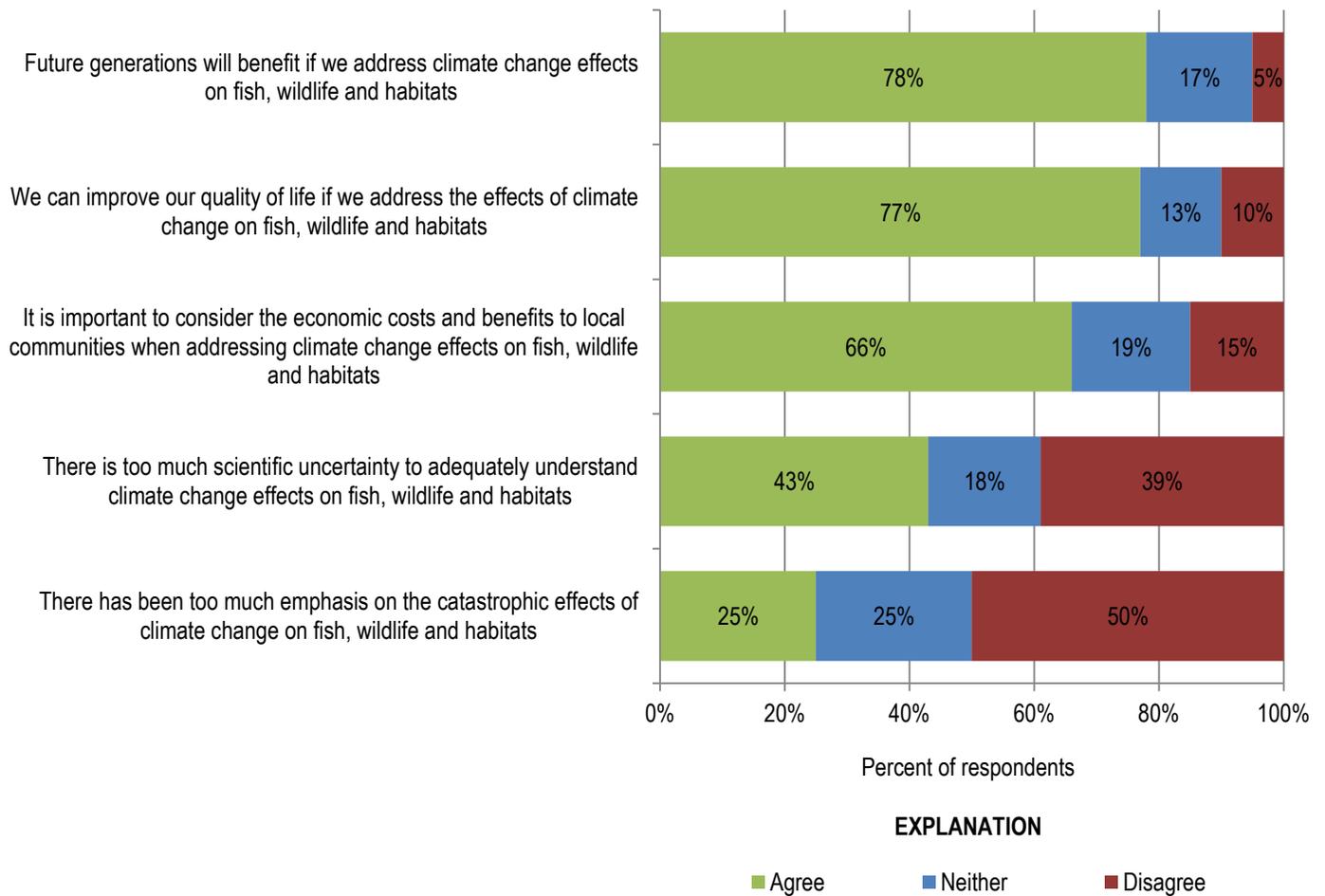
These results are most useful when coupled with responses to belief statements about the effects of climate change on fish, wildlife and their habitats, because such beliefs may be used to develop message frames (or ways to communicate) about climate change with a broad coalition of visitors. Framing science-based findings will not alter the overall message, but rather place the issue in a context in which different audience groupings can relate. The need to mitigate impacts of climate change on Refuges could be framed as a quality-of-life issue (for example, preserving the ability to enjoy fish, wildlife, plants, and their habitat) or an economic issue (for example, maintaining tourist revenues, supporting economic growth through new jobs/technology).

For Monte Vista NWR, the majority of visitors believed the following regarding climate change related to fish, wildlife and their habitats (fig. 15):

- “Future generations will benefit if we address climate change effects;”
- “We can improve our quality of life if we address the effects of climate change;” and
- “It is important to consider the economic costs and benefits to local communities when addressing climate change effects.”

The majority of visitors did *not* believe “There has been too much emphasis on the catastrophic effects of climate change.”

Such information suggests that certain beliefs resonate with a greater number of visitors than other beliefs do. This information is important to note because nearly half of visitors (46%) indicated that their experience would be enhanced if Monte Vista NWR provided information about how they could help address the effects of climate change on fish, wildlife, and their habitats (fig. 14), and framing the information in a way that resonates most with visitors may result in a more engaged public who support strategies aimed at alleviating climate change pressures. Data will be analyzed further at the aggregate, or national level, to inform the development of a comprehensive communication strategy about climate change.



**Figure 15.** Visitors’ beliefs about the effects of climate change on fish, wildlife and their habitats (n ≥ 166).

## Conclusion

These individual refuge results provide a summary of trip characteristics and experiences of a sample of visitors to Monte Vista NWR during 2010–2011. These data can be used to inform decision-making efforts related to the refuge, such as Comprehensive Conservation Plan implementation, visitor services management, and transportation planning and management. For example, when modifying (either minimizing or enhancing) visitor facilities, services, or recreational opportunities, a solid understanding of visitors' trip and activity characteristics, their satisfaction with existing offerings, and opinions regarding refuge fees is helpful. This information can help to gauge demand for refuge opportunities and inform both implementation and communication strategies. Similarly, an awareness of visitors' satisfaction ratings with refuge offerings can help determine if any potential areas of concern need to be investigated further. As another example of the utility of these results, community relations may be improved or bolstered through an understanding of the value of the refuge to visitors, whether that value is attributed to an appreciation of the refuge's uniqueness, enjoyment of its recreational opportunities, or spending contributions of nonlocal visitors to the local economy. Such data about visitors and their experiences, in conjunction with an understanding of biophysical data on the refuge, can ensure that management decisions are consistent with the Refuge System mission while fostering a continued public interest in these special places.

Individual refuge results are available for downloading at <http://pubs.usgs.gov/ds/643/> as part of USGS Data Series 643 (Sexton and others, 2011). For additional information about this project, contact the USGS researchers at [national\\_visitor\\_survey@usgs.gov](mailto:national_visitor_survey@usgs.gov) or 970.226.9205.

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# National Wildlife Refuge Visitor Survey



**PLEASE READ THIS FIRST:**

Thank you for visiting a National Wildlife Refuge and for agreeing to participate in this study! We hope that you had an enjoyable experience. The U.S. Fish and Wildlife Service and the U.S. Geological Survey would like to learn more about National Wildlife Refuge visitors in order to improve the management of the area and enhance visitor opportunities.

**If you have recently visited more than one National Wildlife Refuge or made more than one visit to the same Refuge, please respond regarding only the Refuge and the visit when you were asked to participate in this survey. Any question that uses the phrase “this Refuge” refers to the Refuge and visit when you were contacted.**

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**SECTION 1. Your visit to this Refuge**

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1. Including your most recent visit, which activities have you participated in during the past 12 months at this Refuge?  
(Please mark **all that apply.**)

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> 1% Big game hunting                 | <input type="checkbox"/> 22% Hiking   | <input type="checkbox"/> 10% Environmental education (for example, classrooms or labs, tours) |
| <input type="checkbox"/> 0% Upland/Small-game hunting        | <input type="checkbox"/> 5% Bicycling   |   |
| <input type="checkbox"/> 7% Migratory bird/Waterfowl hunting | <input type="checkbox"/> 60% Auto tour route/Driving                                | <input type="checkbox"/> 31% Special event ( <i>please specify</i> )<br><u>See Appendix B</u> |
| <input type="checkbox"/> 71% Wildlife observation            | <input type="checkbox"/> 0% Motorized boating                                       |   |
| <input type="checkbox"/> 83% Bird watching                   | <input type="checkbox"/> 0% Nonmotorized boating (including canoes/kayaks)          | <input type="checkbox"/> 2% Other ( <i>please specify</i> )<br><u>See Appendix B</u>          |
| <input type="checkbox"/> 0% Freshwater fishing               |   |   |
| <input type="checkbox"/> 0% Saltwater fishing                | <input type="checkbox"/> 16% Interpretation (for example, exhibits, kiosks, videos) | <input type="checkbox"/> 1% Other ( <i>please specify</i> )<br><u>See Appendix B</u>          |
| <input type="checkbox"/> 57% Photography                     |   |   |

2. Which of the activities above was the **primary** purpose of your visit to this Refuge?  
(Please write **only one activity** on the line.) See report for categorized results; see Appendix B for miscellaneous responses

3. Did you go to a Visitor Center at this Refuge?

- 69% No
- 31% Yes → If yes, what did you do there? (Please mark **all that apply.**)
- |  |   |
|--|---|
| <input type="checkbox"/> 19% Visit the gift shop or bookstore    | <input type="checkbox"/> 17% Watch a nature talk/video/presentation                               |
| <input type="checkbox"/> 50% View the exhibits                   | <input type="checkbox"/> 48% Stopped to use the facilities (for example, get water, use restroom) |
| <input type="checkbox"/> 61% Ask information of staff/volunteers | <input type="checkbox"/> 9% Other ( <i>please specify</i> ) <u>See Appendix B</u>                 |

4. Which of the following best describes your visit to this Refuge? (*Please mark **only one.***)

Nonlocal	Local	Total	
66%	86%	73%	It was the primary purpose or sole destination of my trip.
16%	5%	12%	It was one of many equally important reasons or destinations for my trip.
18%	9%	15%	It was just an incidental or spur-of-the-moment stop on a trip taken for other purposes or to other destinations.

5. Approximately how many **miles** did you travel to get to this Refuge?

**Nonlocal**   253   number of miles

**Local**   15   number of miles

6. How much time did you spend at this Refuge on your visit?

See Report for Results

7. Were you part of a group on your visit to this Refuge?

33% No (*skip to question #9*)

67% Yes → What **type of group** were you with on your visit? (*Please mark **only one.***)

85% Family and/or friends

3% Organized club or school group

1% Commercial tour group

10% Other (*please specify*) See Appendix B

8. How many people were in your group, including yourself? (*Please answer each category.*)

  4   number 18 years and over

  1   number 17 years and under

9. How did you **first learn or hear about** this Refuge? (*Please mark **all that apply.***)

36% Friends or relatives

13% Refuge website

24% Signs on highway

3% Other website (*please specify*) See Appendix B

5% Recreation club or organization

4% Television or radio

22% People in the local community

27% Newspaper or magazine

13% Refuge printed information (brochure, map)

12% Other (*please specify*) See Appendix B

10. During which seasons have you visited this Refuge in the last 12 months? (*Please mark **all that apply.***)

82% Spring  
(March-May)

27% Summer  
(June-August)

47% Fall  
(September-November)

22% Winter  
(December-February)

11. How many times have you visited...

...this Refuge (including this visit) in the last 12 months?   4   number of visits

...other National Wildlife Refuges in the last 12 months?   3   number of visits

**SECTION 2. Transportation and access at this Refuge**

1. What **forms of transportation** did you use on your visit to this Refuge? (*Please mark **all that apply.***)

- |                              |   |                             |                                  |                              |                                       |
|------------------------------|---|-----------------------------|----------------------------------|------------------------------|---------------------------------------|
| <input type="checkbox"/> 91% | Private vehicle without a trailer                             | <input type="checkbox"/> 5% | Refuge shuttle bus or tram       | <input type="checkbox"/> 2%  | Bicycle                               |
| <input type="checkbox"/> 1%  | Private vehicle with a trailer<br>(for boat, camper or other) | <input type="checkbox"/> 0% | Motorcycle                       | <input type="checkbox"/> 19% | Walk/Hike                             |
| <input type="checkbox"/> 2%  | Commercial tour bus   | <input type="checkbox"/> 0% | ATV or off-road vehicle          | <input type="checkbox"/> 6%  | Other ( <i>please specify below</i> ) |
| <input type="checkbox"/> 1%  | Recreational vehicle (RV)                                     | <input type="checkbox"/> 0% | Boat                             | <u>See Appendix B</u>        |                                       |
|                              |   | <input type="checkbox"/> 0% | Wheelchair or other mobility aid |                              |                                       |

2. Which of the following did you use to find your way to this Refuge? (*Please mark **all that apply.***)

- |                              |  |                              |   |
|------------------------------|--|------------------------------|---|
| <input type="checkbox"/> 50% | Signs on highways  | <input type="checkbox"/> 15% | Directions from Refuge website                        |
| <input type="checkbox"/> 12% | A GPS navigation system  | <input type="checkbox"/> 12% | Directions from people in community near this Refuge  |
| <input type="checkbox"/> 27% | A road atlas or highway map                                      | <input type="checkbox"/> 10% | Directions from friends or family                     |
| <input type="checkbox"/> 13% | Maps from the Internet (for example,<br>MapQuest or Google Maps) | <input type="checkbox"/> 44% | Previous knowledge/I have been to this Refuge before  |
|                              |  | <input type="checkbox"/> 5%  | Other ( <i>please specify</i> ) <u>See Appendix B</u> |

3. Below are different alternative transportation options that could be offered at some National Wildlife Refuges in the future. Considering the different Refuges you may have visited, please tell us **how likely you would be to use each transportation option.** (*Please circle one number for each statement.*)

How likely would you be to use...	Very Unlikely	Somewhat Unlikely	Neither	Somewhat Likely	Very Likely
...a bus or tram that takes passengers to different points on the Refuge (such as the Visitor Center)?	<input type="checkbox"/> 36%	<input type="checkbox"/> 11%	<input type="checkbox"/> 11%	<input type="checkbox"/> 28%	<input type="checkbox"/> 14%
...a bike that was offered through a Bike Share Program for use while on the Refuge?	<input type="checkbox"/> 34%	<input type="checkbox"/> 10%	<input type="checkbox"/> 8%	<input type="checkbox"/> 31%	<input type="checkbox"/> 17%
...a bus or tram that provides a guided tour of the Refuge with information about the Refuge and its resources?	<input type="checkbox"/> 24%	<input type="checkbox"/> 11%	<input type="checkbox"/> 8%	<input type="checkbox"/> 37%	<input type="checkbox"/> 21%
...a boat that goes to different points on Refuge waterways?	<input type="checkbox"/> 28%	<input type="checkbox"/> 7%	<input type="checkbox"/> 9%	<input type="checkbox"/> 31%	<input type="checkbox"/> 25%
...a bus or tram that runs during a special event (such as an evening tour of wildlife or weekend festival)?	<input type="checkbox"/> 23%	<input type="checkbox"/> 12%	<input type="checkbox"/> 9%	<input type="checkbox"/> 28%	<input type="checkbox"/> 28%
...an offsite parking lot that provides trail access for walking/hiking onto the Refuge?	<input type="checkbox"/> 11%	<input type="checkbox"/> 5%	<input type="checkbox"/> 4%	<input type="checkbox"/> 42%	<input type="checkbox"/> 38%
...some other alternative transportation option? ( <i>please specify</i> ) <u>See Appendix B</u>	<input type="checkbox"/> 13%	<input type="checkbox"/> 0%	<input type="checkbox"/> 7%	<input type="checkbox"/> 47%	<input type="checkbox"/> 33%

4. If alternative transportation were offered at *this* Refuge, would it enhance your experience?

- 21% Yes       39% No       40% Not Sure

5. For each of the following transportation-related features, first, **rate how important** each feature is to you when visiting this Refuge; then **rate how satisfied** you are with the way this Refuge is managing each feature. *If this Refuge does not offer a specific transportation-related feature, please rate how important it is to you and then circle NA "Not Applicable" under the Satisfaction column.*

Importance						Satisfaction					
Circle one for each item.						Circle one for each item.					
Very Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Very Important		Very Unsatisfied	Somewhat Unsatisfied	Neither	Somewhat Satisfied	Very Satisfied	Not Applicable
8%	15%	14%	46%	17%	Surface conditions of roads	2%	1%	4%	21%	72%	NA
7%	14%	25%	44%	11%	Surface conditions of parking areas	3%	1%	11%	20%	65%	NA
6%	5%	22%	41%	27%	Condition of bridges	0%	0%	24%	20%	56%	NA
3%	8%	9%	53%	27%	Condition of trails and boardwalks	1%	2%	6%	29%	62%	NA
2%	7%	10%	61%	21%	Number of places for parking	1%	4%	11%	29%	56%	NA
6%	2%	2%	46%	44%	Number of places to pull over along Refuge roads	0%	4%	8%	32%	56%	NA
4%	4%	5%	39%	47%	Safety of driving conditions on Refuge roads	1%	1%	6%	25%	67%	NA
4%	3%	5%	42%	46%	Safety of Refuge road entrances/exits	1%	2%	6%	22%	69%	NA
3%	3%	4%	50%	40%	Signs on highways directing you to the Refuge	2%	5%	9%	29%	55%	NA
4%	2%	6%	54%	35%	Signs directing you around the Refuge roads	1%	6%	10%	31%	52%	NA
3%	4%	16%	43%	36%	Signs directing you on trails	2%	6%	19%	27%	46%	NA
7%	6%	25%	32%	30%	Access for people with physical disabilities or who have difficulty walking	2%	4%	31%	25%	38%	NA

6. If you have any comments about transportation-related items at this Refuge, please write them on the lines below.

See Appendix B

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**SECTION 3. Your expenses related to your Refuge visit**

1. Do you live in the local area (within approximately 50 miles of this Refuge)?

35% Yes

65% No → How much time did you spend **in local communities** on this trip?

  4   number of hours      OR        3   number of days

2. Please record the amount that **you and other members of your group** with whom you shared expenses (for example, other family members, traveling companions) spent in the local 50-mile area during **your most recent visit** to this Refuge. *(Please enter the amount spent to the nearest dollar in each category below. Enter 0 (zero) if you did not spend any money in a particular category.)*

Categories	Amount Spent in Local Communities & at this Refuge <i>(within 50 miles of this Refuge)</i>
Motel, bed & breakfast, cabin, etc.	
Camping	
Restaurants & bars	
Groceries	
Gasoline and oil	
Local transportation (bus, shuttle, rental car, etc.)	
Refuge entrance fee	
Recreation guide fees (hunting, fishing, wildlife viewing, etc.)	
Equipment rental (canoe, bicycle, kayak, etc.)	
Sporting good purchases	
Souvenirs/clothing and other retail	
Other <i>(please specify)</i> _____	

See Report for Results

3. Including yourself, how many people in your group shared these trip expenses?

  2   number of people sharing expenses

4. As you know, some of the costs of travel such as gasoline, hotels, and airline tickets often increase. If your total trip costs were to increase, what is the maximum extra amount you would pay and still visit this Refuge? (*Please circle the highest dollar amount.*)

\$0	\$10	\$20	\$35	\$50	\$75	\$100	\$125	\$150	\$200	\$250
9%	16%	17%	7%	18%	5%	18%	1%	3%	4%	3%

5. If you or a member of your group paid a fee or used a pass to enter this Refuge, how appropriate was the fee? (*Please mark **only one.***)

0%	Far too low	10%	Too low	90%	About right	0%	Too high	0%	Far too high	94%	Did not pay a fee (skip to Section 4)
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6. Please indicate whether you disagree or agree with the following statement. (*Please mark **only one.***)

**The value of the recreation opportunities and services I experienced at this Refuge was at least equal to the fee I paid.**

0%	Strongly disagree	0%	Disagree	33%	Neither agree or disagree	44%	Agree	22%	Strongly agree
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#### SECTION 4. Your experience at this Refuge

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1. Considering your visit to this Refuge, please indicate the extent to which you disagree or agree with each statement. (*Please circle one number for each statement.*)

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	Not Applicable
Overall, I am satisfied with the recreational activities and opportunities provided by this Refuge.	1%	3%	7%	43%	46%	NA
Overall, I am satisfied with the information and education provided by this Refuge about its resources.	2%	7%	7%	44%	40%	NA
Overall, I am satisfied with the services provided by employees or volunteers at this Refuge.	2%	3%	8%	31%	55%	NA
This Refuge does a good job of conserving fish, wildlife and their habitats.	1%	0%	4%	29%	66%	NA

2. For each of the following services, facilities, and activities, first, **rate how important** each item is to you when visiting this Refuge; then, **rate how satisfied** you are with the way this Refuge is managing each item.  
*If this Refuge does not offer a specific service, facility, or activity, please rate how important it is to you and then circle NA "Not Applicable" under the Satisfaction column.*

Importance					Refuge Services, Facilities, and Activities	Satisfaction					
Circle one for each item.						Circle one for each item.					
Very Unimportant	Somewhat Unimportant	Neither	Somewhat Important	Very Important		Very Unsatisfied	Somewhat Unsatisfied	Neither	Somewhat Satisfied	Very Satisfied	Not Applicable
4%	8%	13%	52%	22%	Availability of employees or volunteers	5%	5%	14%	25%	51%	NA
2%	6%	12%	43%	38%	Courteous and welcoming employees or volunteers	3%	3%	10%	17%	68%	NA
4%	3%	6%	33%	54%	Knowledgeable employees or volunteers	3%	1%	10%	21%	64%	NA
2%	1%	8%	51%	38%	Printed information about this Refuge and its resources (for example, maps and brochures)	1%	6%	12%	35%	47%	NA
2%	1%	8%	57%	32%	Informational kiosks/displays about this Refuge and its resources	2%	6%	14%	37%	42%	NA
3%	3%	15%	46%	34%	Signs with rules/regulations for this Refuge	1%	2%	13%	36%	48%	NA
2%	3%	16%	52%	26%	Exhibits about this Refuge and its resources	2%	8%	18%	33%	40%	NA
2%	4%	26%	41%	27%	Environmental education programs or activities	3%	11%	29%	22%	36%	NA
3%	5%	19%	50%	23%	Visitor Center	10%	9%	29%	24%	28%	NA
5%	1%	7%	43%	44%	Convenient hours and days of operation	1%	4%	9%	25%	61%	NA
1%	1%	9%	43%	45%	Well-maintained restrooms	1%	2%	20%	25%	52%	NA
1%	2%	11%	41%	45%	Wildlife observation structures (decks, blinds)	1%	8%	16%	34%	41%	NA
2%	1%	3%	24%	70%	Bird-watching opportunities	1%	3%	3%	29%	64%	NA
3%	1%	6%	43%	47%	Opportunities to observe wildlife other than birds	1%	5%	15%	38%	41%	NA
1%	1%	10%	28%	60%	Opportunities to photograph wildlife and scenery	1%	3%	9%	25%	63%	NA
58%	7%	24%	6%	5%	Hunting opportunities	2%	5%	62%	7%	25%	NA
48%	11%	25%	11%	6%	Fishing opportunities	2%	2%	69%	5%	22%	NA
5%	3%	13%	48%	31%	Trail hiking opportunities	4%	13%	13%	44%	26%	NA
25%	9%	36%	25%	6%	Water trail opportunities for canoeing or kayaking	3%	9%	63%	11%	14%	NA
21%	6%	23%	36%	13%	Bicycling opportunities	6%	10%	44%	28%	13%	NA
17%	5%	44%	22%	12%	Volunteer opportunities	1%	1%	60%	17%	21%	NA

3. If you have any comments about the services, facilities, and activities at this Refuge, please write them on the lines below.

See Appendix B

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**SECTION 5. Your opinions regarding National Wildlife Refuges and the resources they conserve**

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1. Before you were contacted to participate in this survey, were you aware that National Wildlife Refuges...

...are managed by the U. S. Fish and Wildlife Service?

88%

Yes

12%

No

...have the primary mission of conserving, managing, and restoring fish, wildlife, plants and their habitat?

91%

Yes

9%

No

2. Compared to other public lands you have visited, do you think Refuges provide a unique recreation experience?

88%

Yes

12%

No

3. If you answered "Yes" to Question 2, please briefly describe what makes Refuges unique. \_\_\_\_\_

See Appendix B

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4. There has been a lot of talk about climate change recently. We would like to know what you think about climate change as it relates to fish, wildlife and their habitats. To what extent do you disagree or agree with each statement below? (Please circle one number for each statement.)

Statements about climate change	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I am personally concerned about the effects of climate change on fish, wildlife and their habitats.	3%	6%	15%	38%	38%
We can improve our quality of life if we address the effects of climate change on fish, wildlife and their habitats.	4%	7%	13%	39%	38%
There is too much scientific uncertainty to adequately understand how climate change will impact fish, wildlife and their habitats.	18%	21%	18%	28%	14%
I stay well-informed about the effects of climate change on fish, wildlife and their habitats.	1%	10%	31%	47%	11%
It is important to consider the economic costs and benefits to local communities when addressing the effects of climate change on fish, wildlife and their habitats.	4%	11%	19%	53%	13%
I take actions to alleviate the effects of climate change on fish, wildlife and their habitats.	4%	11%	33%	38%	14%
There has been too much emphasis on the catastrophic effects of climate change on fish, wildlife and their habitats.	24%	26%	25%	18%	7%
Future generations will benefit if we address the effects of climate change on fish, wildlife and their habitats.	2%	3%	17%	38%	40%
My experience at this Refuge would be enhanced if this Refuge provided more information about how I can help address the effects of climate change on fish, wildlife and their habitats.	7%	12%	36%	32%	14%

## SECTION 6. A Little about You

**\*\* Please tell us a little bit about yourself. Your answers to these questions will help further characterize visitors to National Wildlife Refuges. Answers are not linked to any individual taking this survey. \*\***

1. Are you a citizen or permanent resident of the United States?

100% Yes  0% No → If not, what is your home country? See Figure 4 in Report

2. Are you?  44% Male  56% Female

3. In what year were you born? 1954 (YYYY)

4. What is your highest year of formal schooling? *(Please circle one number.)*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20+
(elementary)					(junior high or middle school)			(high school)				(college or technical school)				(graduate or professional school)			
					0%			11%				44%				45%			

5. What ethnicity do you consider yourself?  7% Hispanic or Latino  93% Not Hispanic or Latino

6. From what racial origin(s) do you consider yourself? *(Please mark **all that apply.**)*

- 2% American Indian or Alaska Native  0% Black or African American  99% White  
 1% Asian  0% Native Hawaiian or Pacific Islander

7. How many members of your household contribute to paying the household expenses? 2 persons

8. Including these members, what was your approximate household income from all sources (before taxes) last year?

- |  |  |  |
|--|--|--|
| <input checked="" type="checkbox"/> 4% Less than \$10,000  | <input type="checkbox"/> 19% \$35,000 - \$49,999 | <input type="checkbox"/> 17% \$100,000 - \$149,999 |
| <input checked="" type="checkbox"/> 7% \$10,000 - \$24,999 | <input type="checkbox"/> 22% \$50,000 - \$74,999 | <input type="checkbox"/> 4% \$150,000 - \$199,999  |
| <input checked="" type="checkbox"/> 4% \$25,000 - \$34,999 | <input type="checkbox"/> 19% \$75,000 - \$99,999 | <input type="checkbox"/> 4% \$200,000 or more      |

9. How many outdoor recreation trips did you take in the last 12 months (for activities such as hunting, fishing, wildlife viewing, etc.)?

15 number of trips

**Thank you for completing the survey.**

**There is space on the next page for any additional comments you may have regarding your visit to this Refuge.**

See Appendix B for Comments

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## Appendix B: Visitor Comments to Open-Ended Survey Questions for Monte Vista National Wildlife Refuge

### Survey Section 1

Question 1: "Including your most recent visit, which activities have you participated in during the past 12 months at this Refuge?"

Special Event	Frequency
Crane Festival	24
Crane Festival Tour	1
Crane Festival/Kid's Fishing Day	1
Crane Migration Festival at Montrose, Colorado	1
Cub Scout, Go-and-see-it	1
Gather photos for Monte Vista Crane Festival and art work	1
Kid's Crane Festival	11
Kid's Crane Festival; Kid's Fishing Day	1
Monte Vista Crane Festival	3
Monte Vista Kid's Crane Festival	1
Sandhill Crane Festival	2
Total	47

Other Activity	Frequency
Relaxation	1
Research Project on Sandhill Cranes	1
Volunteer	1
Total	3

2 <sup>nd</sup> Other Activity	Frequency
Providing wildlife education	1

Question 2: "Which of the activities above was the primary purpose of your visit to this Refuge?"  
*Primary activities are categorized in the main report; the table below lists the "other" miscellaneous primary activities listed by survey respondents.*

Other Miscellaneous Primary Activities	Frequency
Pit Stop	1
Relaxation	1
Research Project on Sandhill Cranes	1
Sight Seeing	1
Volunteering	1
We used to live in the area and wanted to come back to visit this lovely site.	1
<b>Total</b>	<b>6</b>

Question 3: "Did you go to a Visitor Center at this Refuge?"; If Yes, "What did you do there?"

Other Visitor Center Activity	Frequency
Guided interpretive field trip with home school group	1
Kid's Crane Festival	1
Visited the Craft Fair	1
Was invited for activities	1
Watched puppet show	1
<b>Total</b>	<b>5</b>

Question 7: "Were you part of a group on your visit to this Refuge?; If Yes, "What type of group were you with on your visit?"

Other Group Type	Frequency
Alone and in tour organized by Sandhill Crane Festival	1
Cub Scouts	1
Division of Wildlife Volunteer	1
Monte vista Crane Festival group	1
Monte Vista Crane Festival tour	1
Organized crane watching events	1
Organized tour through the festival	1
Sandhill Crane Festival tour group	1
School Bus	1
Tour Bus	1
Volunteers for the Division of Wildlife	1
Work colleague	1
Total	12

Question 9: "How did you first learn or hear about this Refuge?"

Other Website	Frequency
Cranefest.com	1
E-mail reply from park ranger after e-mail inquiry about the Sand Dunes	1
Monte Vista Crane Festival website	1
Sandhill Crane Search	1
Sandhill Crane websites	1
Total	5

Other Ways Heard about This Refuge	Frequency
AAA Trip Book	1
Atlas	1
Colorado State Highway Map	1
Coworkers, teachers	1
Crane Festival	1
DOW	2
Dr. Seilheimer at CSU-Pueblo	1
Employed by USFWS	1
Flyers at school	1
Have had family in the Fish & Wildlife Service.	1
Invitation to do research by NWR staff	1
Kearney Nebraska migration made us look for more info.	1
Local wildlife festival	1
Monte Vista Crane Festival	1
Park ranger at Great Sand Dunes	1
Press release for the Crane Festival	1
Pueblo Chieftain	1
Rangers at Great Sand Dunes National Park & Preserve	1
School-note with child	1
The Nature Conservancy mailing	1
Total	21

## Survey Section 2

Question 1: "What forms of transportation did you use on your visit to this Refuge?"

Other Forms of Transportation	Frequency
County Vehicle	1
DOW SUV	1
Monte Vista Crane Festival school bus	1
Monte Vista High School bus	1
School Bus	4
School Van	1
Truck	1
Total	10

Question 2: "Which of the following did you use to find your way to this Refuge?"

Other Ways Found This Refuge	Frequency
AAA Club Colorado Book	1
Bus tour	1
Denver Post article with directions	1
Map on refuge brochure	1
Motel clerk	1
Sandhill Crane Festival literature	1
School bus with ranger as guide	1
Through the Crane Festival	1
Total	8

Question 5: "Below are different alternative transportation options that could be offered at some National Wildlife Refuges in the future...please tell us how likely you would be to use each transportation option."

Other Transportation Option Likely to Use	Frequency
ATV Trails	1
ATVs	1
Bike/Walk	1
Gondolas/Trams	1
Guided hike/walk	1
Horse drawn carriage	1
Horses	1
I would want access to the car because it was relaxing and restful. When we were there not many cars were there, maybe because of gas prices. The bike as stated above would only have been if conditions were perfect and for a brief period of time.	1
Kayak	1
Mule/ horse trains	1
My car	1
Own vehicle	2
Skis	1
This is not a big refuge like Bosque del Apache- too much transportation would ruin it.	1
Walking trails from offsite parking, etc.	1
Total	16

Question 6: "If you have any comments about transportation-related items at this Refuge, please write them on the lines below."

Comments on Transportation-related Items at This Refuge (n = 26)

A sign 1/4 mile from the entrance would be nice.

Bicycles would be a great way to keep the peace and hear the sounds of the birds.

I would have liked more trails open and I enjoy good maintained roads and parking lots.

Don't waste money on transportation.

FWS provided sufficient buses and knowledgeable tour guides.

I understand the USFWS mission and the mission of the Monte Vista NWR, but there is very little access to

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a very large refuge. During critical nesting times I understand closure, but most of the year the refuge could be accessible. Even if they didn't buy off on a trail system, the public could use admin roads for foot/horse/bike. The refuge should work with the city of Monte Vista, Rio Grande County, CDOT and private landowners to develop a trail from Monte Vista to the refuge. Other possibilities exist with BLM and USFS, which are nearby. The lack of trails and access are the most disappointing parts of the Monte Vista refuge.

It wasn't very crowded so parking and all was fine, but if there were larger crowds, there would probably be issues, but then again there probably are never that many people at Monte Vista.

It would be great to have an area or a trail built where you could ride an ATV.

Limited expectation and use, brief visit looking for Sandhill Cranes.

Loved it!

Monte Vista should allow bicycles, just as other refuges do such as Alamosa NWR!

More and/or longer hiking trails would be nice; perhaps a trail that rings the border of the refuge?

More foot trails would be great.

More for physical disabilities.

Motorcycles ruined the bird viewing. Smoking should not be permitted outdoors because of other people nearby.

The access point to this refuge was a bit dangerous as there was no turn off. One has to stop on a 50 MPH road to turn into the refuge.

The bus tours of the refuge and especially the quality of the guides were great! We enjoyed our time there.

The refuge roads, parking, and bridges were excellent. It was difficult to find the refuge; maps and GPS did not feature the refuge to my satisfaction. Only when we drove into Monte Vista, the town, did we see the first sign.

Trucks along RT 112 by the refuge exceed speed limits! Very unsafe even though they can be seen from far away.

We had trouble finding the exact location.

We used our own vehicle to get to the refuge and then used refuge transportation, which was terrific, during our tour.

We were late catching a bus. Your employees let us catch the bus and then drove us back to get our vehicle. That was very nice of your employees. Thanks again.

When I was in Monte Vista in March the roads were in good condition. I enjoyed the ride through the refuge.

When we were there the traffic and bird watchers were light. Perhaps because of that, one driver (from Texas) stopped his vehicle in the middle of the road. And another (not sure from where) was driving the wrong way. My friend muttered under her breath at these situations. Perhaps they wouldn't have done it if more people would have been out. It really didn't cause me too much consternation... as I trusted that we could maneuver around or get out of the way if necessary. But it sure did bother my friend, who was driving and who commented on the Texas license plate. I was less judgmental. People can sometimes get turned around the wrong way or just don't want to behave. And sometimes arrogance or a lack of courtesy cannot be controlled. What are you going to do?

Wish more of the refuge was open to wildlife and birding with blinds.

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## Survey Section 4

Question 6: "If you have any comments about services, facilities, and activities at this Refuge, please write them on the lines below."

### Comments on Services, Facilities, and Activities at This Refuge (n = 39)

A refuge Visitors Center was not present on the refuge - this refuge should do much better in connecting the refuge to the Visitors Center, if there is one. There was no available information (at least that we saw).

Again could not fill out the above, but the attendant there was very nice and available at the entrance. No restrooms that I saw, no Visitors Center that we noticed.

All buses should have microphones for guides. Change the information about pancake breakfast - tell us earlier. We would not have chosen a burrito. Inform us about booths that didn't take credit cards or checks - tell people to bring cash. School bus tours were great. Nice array of events and something for everyone. Craft fair was good.

Except for the guy (Patrick Gonzales) who contacted me at the refuge for survey, I haven't seen any employees there!

I am uncertain if there is an operating Visitors Center at this refuge, if so it's not advertised locally.

I didn't spend a lot of time here but I did enjoy watching the cranes.

I have been to Monte Vista NWR many times and still don't know where I can and can't go and where the trails are. I never go inside the buildings so maybe that is where the information is.

I have visited this birding area on many occasions while driving through Colorado. Have never had an employee stop to talk to us. Didn't even know there was a Visitors Center.

I was able to see several large mule deer as well as birds.

I wish there were more hiking opportunities. However, this refuge is in a complex of refuges which doesn't have the staff or funding to provide such things. Too bad!

I'm a bird watcher so when we saw road signs about the bird refuge we stopped. We viewed birds through telescopes that were useful for spotting birds. We were impressed with the ability of water and space for migrating birds. When our visit was over the Visitors Center was closed.

Incidental stop, nice experience.

Keep up the good work.

Monte Vista Crane Festival was a wonderful experience. All the refuge employees/rangers were very knowledgeable and exceptionally well versed in crane behavior and their environment.

No concerns

Our tour guide was excellent. He loved the topic, had great knowledge, and was congenial.

Pretty rustic - I'm not sure that there was a Visitors Center - the ranger was in a truck and gave us information about the refuge.

The Crane Festival was great, the workers and volunteers were very nice.

The ranger I met was very knowledgeable and enthusiastic. It was a pleasure to meet him.

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The refuge manager was the guide in our bus during the Crane Festival. His talks were excellent and he was a real credit to the refuge. We were thrilled to have him with us both days. We learned so much! Great guy!

The staff and volunteers did a great job for the kids.

The volunteer (Mr. Gonzales) at the entrance gave us a lot of information about the refuge, photo opportunities, and the local area. Thank you.

There is no Visitors Center and I've almost never seen an employee there outside a special event. There is a 3 mile auto tour route and a 100 ft interpretation trail and bird watching area. The vast majority of the refuge is closed to the public throughout the year.

This is the second time I have attended the Crane Festival and would like to attend again- recommend it to my friends and acquaintances. The US Fish and Wildlife employees were friendly, knowledgeable and interested - first rate.

Very clean roads and trails. Thank you for doing a great job making both the animals and the people comfortable and safe.

Very peaceful place.

Very poor hunting for waterfowl and very poor water ways. Needs more water ditches and ponds.

Visitors Center is never open. I would be nice if someone was around that we could talk to about the birds and maybe get a full map of the refuge

Visitors Center was not open on the days we visited.

We appreciate them.

We lost the outdoor recreation position several years ago and with it, the environmental education outreach program. Our local refuge has no Visitors Center.

We only met one employee and he was courteous and helpful in explaining park policy like closing hours structured to avoid having headlights startle the birds, etc.

We spent nine hours in the refuge itself and the rest of the time on the roads nearby where we could see the cranes and use the telescope. We were only in town for lunch, dinner (after the refuge closed) and B/B. Total of 48 hours.

We were not there very long.

We were on a tour bus so I cannot comment on these. However, the tour leader from the refuge was exceptional. I think he was the refuge manager.

We would like to see photo blinds and more access to the refuge for birding and wildlife watching. I would like to see more trails. Why should hunters have more access?

Why was the Visitors Center open and manned but not the Monte Vista Visitors Center and no volunteers present for the Sandhill Crane migration other than the weekend?

Wish there was more wildlife viewing opportunities, trails, canoeing, etc.

Wonderful place to take family and friends who visit.

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## Survey Section 5

Question 3: "If you answered "Yes" to Question 2, please briefly describe what makes Refuges unique."

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### Comments on What Makes Refuges Unique? (n = 132)

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A good place to see wildlife up close.

A place for wildlife first and foremost.

A place that caters to the needs of particular wildlife so that your chances of seeing them are good.

Ability to view Sandhill Cranes.

Accessibility to the community.

Animals are not hunted so they seem less likely to run away or hide on the refuge.

Any area that helps preserve nature is important! Especially in the middle of farm and ranching land.

As far as I know, the crane migration is unique.

At the majority of refuges I've visited, wetlands are the main focus so I feel that is an important area of land that needs focus. I guess recreationally, I could do things here that I do on other public lands, but refuges provide this habitat for animals, which is something unique.

Because it is a motor route with opportunities to get out at observation points and it is relatively short, it is a pleasant, short and interesting side trip for people passing through or for locals to fill in a little time.

Because it is focused on wildlife and wildlife conservation. Provides education to the public and great opportunities for viewing wildlife.

Because they are concerned ONLY with wildlife, they are a unique experience. That's good.

Better control of visitors and a safe feeling.

Bird watching made easy.

Can drive our own car through the refuge, at our own pace, not hurried to do our viewing.

Close to nature - realistic.

Close to population areas - easy to get to.

Conservation of habitat.

Crane Migration.

Focus is on providing habitat for wildlife.

Great balance of hunting and non-hunting areas for safety.

Great opportunity to photograph wildlife.

I appreciate that parts of the geography in places of special interest for wildlife or scenery are set aside for the general public to see.

I enjoy being in the natural habitat of wildlife without too much noise or congestion to effect the animals. Here, I felt non-intrusive in the animals' territory.

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I have been to National Parks and National Forests, the Refuge provides a wetland opportunity to get up-close with nature in another ecosystem. They need to be preserved and maintained!

I have noticed many good improvements to the Monte Vista Wildlife Refuge over the last ten years.

I have only been to this one refuge this one time. My friend, who is giving all her assets in her will to the cranes, wanted me to have this experience. I loved being able to rest in the car and use my binoculars. I really needed to be seated. So, this refuge was perfect for me. We could drive and watch and drive a little more and watch. On our last morning we were the first ones there and on the two evenings we were the last ones in. One day we did walk a short trail and it was lovely. The cranes were flying overhead. Thank goodness my friend told me to close my mouth! I was glad the trip was not too physically exerting. Thank-you!

I know that the birds in the refuge are safe and are there only for a short time to refuel and then move on. They cannot be hunted, therefore the birds are not afraid.

I liked the educational aspects, both from the kiosks and talks with the rangers and volunteers.

In my experience, refuges are less developed than National Parks, for example, or National Forests which may include logging activities. They are usually more 'wild' and the wildlife seems less accustomed to people. They are usually less crowded with people as well, due to the lack of activities and services and this is a big PLUS for me.

It has information for children to learn about wildlife.

It is a good place to observe wildlife that is not to afraid of humans (except allowing hunting), and provides excellent habitat for wildlife whether living on the refuge or passing through.

It is a great place to go and "get out of town" and get connected with nature. We go there a lot as a family during all the seasons and time of day. Our kids appreciate this place.

It is a local viewing of swamp land for water birds.

It is an opportunity to see animals in their natural habitats.

It is important to educate people about conserving wildlife.

It is in a very unique environmental niche.

It seems to be primarily designed for the comfort and conservation of nature- as it should be- not just entertainment for tourists with wildlife in second place.

It was a nice day, kids enjoyed it.

It's a great location. Well maintained and enjoyable.

It's a wonderful opportunity to get outside and enjoy the weather, scenery, and wildlife. Thanks!

Large abundance of birds.

Less interruptions and obstacles between people and wildlife.

Limited bias toward industrial use, or competitive commercial use. Usually logistically critical for migratory birds and waterfowl.

Lots of wonderful sites and sights. Also opportunity to see the Sandhill Cranes in abundance!!!!

Lovely to see birds in large numbers that are relatively unafraid of people watching them.

Monte Vista is a small refuge compared to others I've been to but I do enjoy going there to see the cranes and other waterfowl and birds. I lived in New Mexico for several years and went to Bosque del Apache from

September to March and other times.

More information available regarding wildlife in areas.

Multi-purpose use.

My experience with refuges is limited and I see them as islands of solace within the landscape of more activities. For both wildlife and humans refuges provide solace from human activity.

National Wildlife Refuges' primary purpose is to provide wildlife habitat. This is a 5 function especially in today's fragmented and increasingly developed landscapes.

Nature in action.

Nice place to watch birds.

Not as much oversight that I see compared to other federal facilities.

Numbers of the birds and variety of species. Opportunity to see large mammals such as deer and elk.

Offers land for the cranes and other wildlife.

Only place for wildlife to be protected from urban growth and all the problems that come with that.

Opportunities for observation, volunteering and research.

Opportunity to observe wildlife in natural habitat under nicely arranged conditions and facilities.

Opportunity to see wildlife in a natural environment.

Opportunity to view wildlife in a natural setting- strictly managed for their protection.

Opportunity to view wildlife- came for the cranes and was not disappointed.

Preservation of important migration routes.

Preservation of wildlife.

Provide experiences not readily available elsewhere.

Recreation opportunities, viewing places, trails, and tour routes.

Refuges are unique in that they provide less access than other public lands, i.e., unlike other public lands, most all of refuge is off limits. It is understandable that in order to satisfy their primary mission, they need to limit human access. But some hiking trails, particularly around the outer border, would be nice.

Refuges are wonderful; they offer access to bird watching, safe places to park, habitats that attract wildlife, brochures and bird lists, and like minded people that appreciate wildlife.

Refuges protect the habitat of plants, fish and wildlife.

Refuges provide a protected environment for wildlife and offer the public an opportunity to observe wildlife in its natural habitat. Refuges must be properly funded in order to ensure that the "primary mission" is carried out satisfactorily and to ensure that refuges are properly maintained and staffed for visitors. **THIS MUST HAVE A HIGH PRIORITY REGARDING THE ALLOCATION OF TAX MONEY!**

Sandhill Crane migration and festival.

Sandhill Cranes

Sandhill Cranes and other wildlife.

Sandhill Cranes - a chance to see them in their own environment, we love to go there and watch all the animals, hearing the birds is awesome.

Sandhill Cranes.

See nature in its natural habitat and to know it will continue to be there.

Small, compact area so valuable to locals and visitors both human and animal.

So many birds, and not just Cranes. The festival provided good tours as well.

So many wild places are being developed and not taken care of. Enjoy going to watch the birds and other wildlife. So peaceful there.

Sometimes the wildlife viewing and photography opportunities are better in refuges than on other public lands. We appreciate the close cooperation of refuges with neighboring ranchers very much.

The ability to observe wild creatures rather up close and photograph them.

The abundance of wildlife they attract, and the learning opportunities available.

The amazing abundance of wildlife can be appreciated by all.

The birds seem to be better protected and cared for at refuges, certainly at Monte Vista. The crowds are smaller, the vehicles fewer, and the quiet more pervasive. Refuges are not as well known as parks, so to "get away" I prefer a Refuge.

The chance of seeing wildlife is far greater. The fact that there are often opportunities for hunting does bother me about the refuge sites.

The chance to observe nature/animals/birds and unique locations up close.

The chance to view wildlife in natural habitat.

The chance to watch wildlife less disturbed. The ability to protect the habitat of wildlife.

The complete focus on protecting animals and the environment.

The dedicated staff.

The different kinds of wildlife.

The different wild birds and always a good time to view the birds.

The focus on wildlife. Visiting a refuge is fundamentally different than visiting a National Park or National Forest or BLM lands to hike and recreate.

The guide we had who also manages the refuge was very knowledgeable about the cranes. We were so impressed that the refuge supplied food for the cranes.

The migratory path of Sandhill Cranes.

The Monte Vista NWR is great because I can go anytime I want. It is rarely crowded, but I wish there were more clearly marked hiking trails.

The opportunity for environmental education on site, not in a classroom or book.

The opportunity to see so many Sandhill Cranes in one location. To be able to observe the interactions

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between individual birds. The USFWS's ability to maintain wetlands in close proximity to commercial agricultural enterprises.

The protection provided to the species that visit there.

The refuge appears to be more actively managed than other public lands, i.e., with visitor participation.

The refuge provides important habitat for migrating birds. We never saw so many birds in one place, and never saw Sandhill Cranes before. We are not "birders" but we enjoy all wildlife.

The Sandhill Cranes were amazing.

The special events.

Their focus is on wildlife, not recreation.

Their primary mission.

They are trying to maintain habitat for unique species.

They are unique in that they deny public access to the best places to observe wildlife.

They have a conservation mission and specific management interests contribute to the mission: wildlife first, people second.

They provide unique conservation opportunities within various landscapes - for example within urban areas and agricultural areas and places otherwise inhospitable to wildlife - a "refuge" within development.

They seem to be more of a barebones operation and as an individual I feel like I can connect more personally to the areas.

They usually do not allow hunting so they are quieter. They are usually cleaner and less spoiled by what people leave behind. The focus is usually more on the environment and the animals than on the human visitors.

This is the only place to see the Sandhill Cranes. We used to live in Maryland and visited Blackwater NWR- Monte Vista was similar!

To be close to birds and animals in their natural environment.

To help wildlife and habitat.

To see birds (Cranes) come there, the beautiful elk/deer/ducks. The peaceful quiet there, no one bothers you- you can stop and read about the habitat.

Unique opportunities to observe wildlife.

Very spread out - not crowded.

Very well organized and close by to visit.

Waterfowl and birds at the ones I have visited.

We enjoy what they provide and think they are needed to encourage others to get out to use them.

We had the opportunity to view wildlife up close and in their habitats.

We live in Loveland and visit Rocky Mountain National Park often (senior passes). The refuges provide sites for wildlife viewing for both seasonal and non-seasonal observation. Information on seasonal viewing could be helpful.

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We loved watching the cranes, coyote, and fox. The coyote and fox were pointed out to us.

We were able to see various areas where birds could find habitats that suited them. Liked the written information and telescopes that were available.

When the migratory birds are present it is pretty unique compared to the BLM, USFA, NPS and State Wildlife and Trust Lands, the NWR system in the valley is a weak recreation provider and could do a much better job of providing recreational opportunities and access to public lands without compromising its vital mission. Like the BLM and Forest Service, the FWS is grossly underfunded in recreation, despite public interest.

Wildlife

Wildlife focus.

Wildlife observation

Wildlife preservation makes observing wildlife more accessible.

Wildlife protection comes first, recreation opportunities come second.

You get to see firsthand how our government manages the land and wildlife.

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#### Additional Comments (n = 29)

Could use more advertising. We thought we had to travel to Nebraska or farther to see the crane migration. Didn't know it was so close to home (Denver). Didn't know the birds use the refuge on their fall migration as well.

I didn't visit the refuge at this time, but have many times in the past. I wouldn't have agreed to take this survey had I been informed of this. I was a Cub Scout and Girl Scout leader and we took them on trips to the refuge. We visited many times when the Whooping Cranes were traveling with the Sandhills.

I enjoyed the refuge. It was low key and not too produced.

I love this refuge. We visit often - sometimes everyday when babies are hatching, cranes are here, elk and deer gather, etc. It's one of the best things about our valley. I wish I could hike and bike.

I would have happily paid an entrance fee or made a donation, but the loop drive did not direct one back to the Visitors Center to do so. Perhaps a donation box on the way out would be convenient? Otherwise, 100% enjoyable and well worth the visit.

I'd like to stop sometime during duck migration.

I'll be interested in the results of this survey.

It is nice to see people getting out and seeing the cranes and other wildlife in the refuge.

It was very special to be comfortably in nature and witness thousands of cranes in their eons old migration.

Keep up the good work, I have visited this refuge in Monte Vista since I was a small child.

My aunt (79 years old) and I come to this refuge at least once a year. She used to go herself, when she could drive, at least twice a year but now she has to wait for me to be off work. This refuge is quiet and peaceful with plenty of birds to see. We have traveled some of the back roads (which are usually nicely graded) in search of birds. We always visit the Alamosa NWR as well. Please keep up the good work.

My refuge is in a complex of three and my answers were with only the one. I visit the other two whenever I can.

Need more water rights, larger area.

Several years ago there was an outdoor recreation planner that worked between the Alamosa and Monte Vista NWR. She left for private industry years ago (about 6 years) and they never filled in behind her (and it shows). Since then, there's now the addition of the Baca NWR (Colorado's largest) that has basically one full time employee and a seasonal employee and it is closed to the public as well. These comments are directed to the regional leadership that oversees SLV refuges - hire a recreation planner for the valley and let them creatively explore the six pillars of recreation. There is a ton of potential to link the other recreational providers, communities, economies, etc. The FWS does a great job protecting natural resources (especially biological resources) but essentially ignores social values and is unnecessarily paranoid about people, though I understand they don't have adequate capacity to deal with much public interest. On the other hand, they miss out on increased public support because the answer on a NWR is always 'no'. Don't get me wrong, I'm not talking about turning any of the refuges into Disneyland like a National Park.

Sorry this took so long to answer - had family health issues. Thank you, hope the answers help. I have gone to this refuge 2-3 times a week for over 40 years - always a nice evening drive for family and friends. I always go in the fall because of the elk herds.

Thank you for your services. I know personally I would like to see the refuge turned into an outdoor adventure. I have two young boys who love to fish and ride ATV's. I would love to see a kid fishing pond. I would gladly pay a membership fee of some sort to have a safe fun place to take my children. Thank you. (Signed)

The MVNWR is a wonderful place geared to the life of the animals and habitat is still accessible for people to enjoy and learn more. Thank you.

The refuge should be opened sooner and kept open later than sunrise/sunset.

The refuge was stunning. We enjoyed it immensely and tried to interest our friends in going next year.

There needs to be more information on climate change and the effects on fish and wildlife.

This refuge is close to my home and I treasure it dearly. I think it is being managed the best it can be due to financial circumstances. I would like to see more employees, more hiking trails, more water, but it is what it is and my family and I still love it! Thank you for this opportunity.

This refuge needs a Visitors Center providing information about the Sandhill Cranes.

Very informative, personable employee at the Visitors Center. Extremely helpful, enthusiastic about wildlife and very interested in making our visit enjoyable. Gave excellent information on when/where to view Sandhill Cranes!!! Thanks much.

Visitor Center is usually closed on the days we have been there. That's not a problem, unless the driving loop is also closed...this fall it was open and the attendant was very friendly.

We appreciate your work! (Signed)

We had a fantastic experience at the Monte Vista National Wildlife Refuge. The area is beautiful and the cranes were amazing.

We love our refuge! And all the SCV refuges and ALL refuges!

We visited just three days before the Crane Festival so we did not encounter any congestion driving through the refuge, nor was the Visitors Center open. Thank you for the good signage. We had a great time.

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