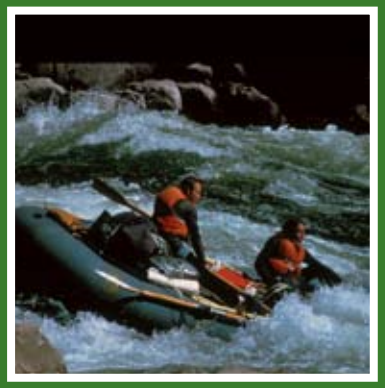
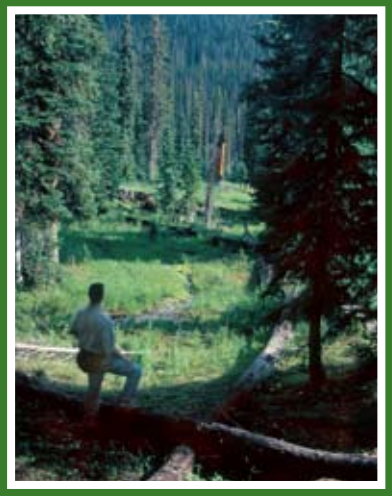
The American Public's Objectives and Beliefs Regarding Forests and Grasslands: 2004 Survey Results

Lori B. Shelby, Deborah J. Shields, Donna L. Lybecker,
Michael D. Miller, Brian M. Kent, Vesna Bashovska





United States Department of Agriculture / Forest Service
Rocky Mountain Research Station
General Technical Report RMRS-GTR-210
June 2008

Shelby, Lori B.; Shields, Deborah J.; Lybecker, Donna L.; Miller, Michael D.; Kent, Brian M.; Bashovska, Vesna. 2008. **The American public's objectives and beliefs regarding forests and grasslands: 2004 survey results.** Gen. Tech. Rep. RMRS-GTR-210. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 101 p.

Abstract

The USDA Forest Service revises its Strategic Plan according to the 1993 Government Performance and Results Act (Public Law 103-62). The goals and objectives included in the Strategic Plan are developed from natural resource trend data (Forest and Rangeland Renewable Resources Planning Act) and public input such as the results from this survey. The purpose of this report is to present results from the second version of this survey (RMRS-GTR-95). A random sample of the American public was asked about their *objectives* for the management of public lands and *beliefs* about the role the USDA Forest Service should play in fulfilling those objectives. Major findings include, but are not limited to: (a) The public sees the protection of ecosystems and habitats as an important objective and role for the agency; (b) There is a lack of support for developing new paved roads; (c) Managing motorized recreation is a high priority objective; (d) There is support for allowing diverse uses; (e) On average, the public is neutral with respect to expanding energy and mineral production, timber production, and livestock grazing; (f) Reducing the spread of invasive species is supported; and (g) Using management tools to reduce wildfires is an important objective and an appropriate role for the agency.

Keywords: beliefs, forests and grassland management, objectives, public involvement process, stakeholder engagement, strategic planning

You may order additional copies of this publication by sending your mailing information in label form through one of the following media. Please specify the publication title and series number.

Fort Collins Service Center

Telephone (970) 498-1392
FAX (970) 498-1122
E-mail rschneider@fs.fed.us
Web site http://www.fs.fed.us/rm/publications
Mailing address Publications Distribution
Rocky Mountain Research Station
240 West Prospect Road
Fort Collins, CO 80526

Rocky Mountain Research Station
Natural Resources Research Center
2150 Centre Avenue, Building A
Fort Collins, Colorado 80526

Authors' Bios

Lori B. Shelby is a Research Associate with the Department of Economics at Colorado State University, and is affiliated with the USDA Forest Service Rocky Mountain Research Station in Fort Collins, CO. She completed a Ph.D. in Human Dimensions of Natural Resources at Colorado State University.

Deborah J. Shields is Principal Mineral Economist with the USDA Forest Service Rocky Mountain Research Station in Fort Collins, CO. She completed a B.S. degree in Wildlife Biology at Colorado State University, a M.S. in Mineral Economics at Colorado School of Mines, and a Ph.D. in Rangeland Ecosystem Science at Colorado State University.

Donna L. Lybecker is an Assistant Professor with the Department of Political Science and Environmental Studies at The Pennsylvania State University, Altoona. She completed a Ph.D. in Political Science at the Colorado State University.

Michael D. Miller is an Economist working as a Research Associate with the Department of Economics at Colorado State University, and is affiliated with the USDA Forest Service Rocky Mountain Research Station in Fort Collins, CO. He completed a B.A. degree in History, with a concentration in Middle Eastern and Islamic studies, and a M.S. degree in Agricultural and Resource Economics from Colorado State University. He is presently in the final stages of completing his Ph.D. dissertation in Agricultural and Resource Economics.

Brian M. Kent is a Project Leader with the USDA Forest Service Rocky Mountain Research Station in Fort Collins, CO, and is affiliate faculty at Colorado State University. He completed a B.S. Degree in Forestry at Purdue University, a M.S. in Forest Biometry at Pennsylvania State University, and a Ph.D. in Forest Biometry and Management at Pennsylvania State University.

Vesna Bashovska is a Research Associate/Instructor with the Department of Economics at Colorado State University, and is affiliated with the USDA Forest Service Rocky Mountain Research Station in Fort Collins, CO. She completed a B.A. degree in Agricultural Engineering at St. Cyril & Methodius University in Skopje, Macedonia, and a M.S. degree in Agricultural Economics at Colorado State University.

Acknowledgments

This research has been undertaken for, and sponsored by, the Strategic Planning and Resource Assessment Staff of the USDA Forest Service. This project has been conducted in conjunction with Colorado State University Department of Economics with Dr. Robert Kling (Associate Professor of Economics) as the Principal Investigator. The foundational research was conducted with Drs. Wade and Ingrid Martin with California State University at Long Beach. Drs. Holly Bender and Michelle Haefele provided technical support. The National Survey on Recreation and the Environment (NSRE) provided administrative and scientific support. For example, NSRE staff reviewed the survey, implemented pretesting, cleaned the data, and calculated data weights. The Human Dimensions of Research Laboratory at the University of Tennessee, Knoxville administered the survey.

Contents

List of Tables

List of Figures

Executive Summary

The purpose of the National Survey of Values, Objectives, Beliefs, and Attitudes (VOBA) is to collect information about the preferences and goals of the American public regarding the management of forests and grasslands. VOBA is a recurring survey that is designed to reflect the changing goals and interests of the American public over time. Designated as Version 2 of the VOBA survey, this report presents the results gathered from telephone interviews conducted in 2003/2004. The respondents were asked to provide feedback to a randomly selected series of statements drawn from a pool of 30 statements. These responses were given on a 1 to 5 scale, where a "1" indicates not important and a "5" indicates very important. Regarding the survey statements, the respondents were asked about their:

objectives for the management, use, and conservation of publicly managed forests and grasslands; and

beliefs about the role of the Forest Service should play in fulfilling those objectives.

The results of the survey are summarized in two ways in this report. First, the results are presented for each pair of corresponding objective and belief statements. Second, results are organized by topic: preservation/conservation, information sharing/public involvement, economic development and community issues, cultural and traditional, access, and regulatory issues.

Of the 30 statements in the survey, only six are deemed *not* to be important objectives to pursue and *not* an appropriate (important) role for the Forest Service play. Those statements concern maintaining continuous trail systems for motorized vehicles (statement 2), developing new paved roads (statement 5), expanding energy and mineral production (statement 12), expanding timber production and livestock grazing (statement 13), expanding commercial recreation services (statement 16), and allowing for the transfer of forests and grasslands management to local community advisory boards (statement 22). Statement 14, which involves simplifying the permitting processes for some established uses of forests and grasslands, is not considered an important objective, but is considered to be an appropriate role for the Forest Service.

Analysis of the objective/belief statements by topical groupings finds that all statements that fall into the *Preservation/conservation* and *Cultural and traditional* groupings are considered important objectives and are believed to be appropriate (important) roles for the Forest Service. The majority of statements concerning the *Information sharing/public involvement* are considered important; however, statements concerning opportunities for public involvement vary in the level of public support. Overall, the responses to these objectives/beliefs range from neutral to important. Responses to the objective/belief statements on *Economic development and community issues*, on average, are neutral to somewhat supportive. However, statements on the expansion of commercial uses of forests and grasslands are deemed not important. The American public is divided on its opinions about the provision of *Access*. The public, on average, is supportive of designating existing trails for specific use, but neutral concerning developing new paved roads. Objective/belief statements regarding management through regulation (*Regulatory issues*) consistently showed moderate to strong support, with increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources receiving the greatest support.

Study Synopsis

Background and Study History

The Government Performance and Results Act (Public Law 103-63) requires that each Federal agency periodically submit to Congress a Strategic Plan. The current USDA Forest Service Strategic Plan has been completed for fiscal years 2004 through 2008. One of the most critical aspects of strategic planning is identifying long-term goals and objectives. The Government Performance and Results Act, as an essential part of the strategic planning process, requires an agency to ask for the views and suggestions of anyone "potentially affected by or interested in" its strategic plan. The long-term goals and objectives of the USDA Forest Service's strategic plan must reflect not only the agency's mission, but the public's views and beliefs regarding our country's publicly managed forests and grasslands.

The National Survey of Values, Objectives, Beliefs, and Attitudes (VOBA) is one source of information on the public's views and beliefs that is used to develop the Forest Service's strategic plan. The purpose of the VOBA survey is to collect information about the preferences and goals of the American public regarding the management of forests and grasslands. This recurring survey is designed to reflect the changing goals and interests of the American public over time. The original survey instrument was implemented in 1999/2000 as a module of the National Survey on Recreation and the Environment (NSRE). The results from Version 1 of the survey were published in Shields, Martin, Martin, and Haefele (2002).

The purpose of this report is to present the results from Version 2 of the VOBA survey that was administered in 2003/2004 to randomly selected members of the American public. In Version 2 of the survey respondents were asked about their:

objectives for the management, use, and conservation of publicly managed forests and grasslands; and

beliefs about the role of the Forest Service should play in fulfilling those objectives.

Methods

For Version 2 of the survey, a core set of 24 statements was retained from the original telephone survey and six new objective statements were added. A total of 30 objective statements and 30 corresponding belief statements composed Version 2 of the telephone survey. Based on input from the original focus group participants, FS Strategic Planning and Resource Assessment staff members, and NSRE staff members, the researchers developed the new objective statements. Objectives retained from the original survey were also updated to increase the effectiveness of the survey. Prefacing the objective statements with "It is a role of the Forest Service to…" created corresponding belief statements. This simple change shifted the focus from the general objective statement to a specific belief about the appropriate role of the Forest Service. For the objectives and beliefs statements, respondents indicated their level of approval or agreement on a five-point scale. The objectives item scale ranged from 1 = *not at all important* to 5 = *very important*. Beliefs ranged from 1 = *strongly disagree* to 5 = *strongly agree*. For ease of interpretation, results are generally presented in this report using a collapsed scale (objective, 1-2 = *not important*, 3 = *neutral*, and 4-5 = *important*; belief, 1-2 = *disagree*, 3 = *neutral*, and 4-5 = *agree*). Statistics, such as means and standard deviations, are calculated using the full (non-collapsed) scale. Other instances of reporting results using the full scale are made clear by use of specific labels (for example, *strongly agree* or *very important*).

Version 2 of the survey had a sample size of 3,503, which was collected from October, 2003 through March, 2004 as a module of NSRE. The VOBA survey used a nationwide random sample of telephone numbers facilitated by a computer-aided telephone interviewing system (CATI). Each respondent was given a random selection of the objective statement and the corresponding belief statement. Due to this sampling design, the number of respondents for each item in the objectives and beliefs varied. The overall goal of this matrix sampling design was to control interview time with respondents, yet still collect analytically valuable information.

This not only lowered costs, but reduced respondent burden, which generally leads to fewer non-responses and a better sample quality. The number of respondents for each statement ranged from 642 to 739.

NSRE provided weights that were used with the VOBA results to adjust the sample demographics to reflect the actual U.S. population. Therefore, the VOBA data is corrected for the under- and over-representation of demographic groups (in other words, age, sex, race, urban/rural, and education) based on U.S. Census data.

Emphasis in reporting the results is placed on weighted descriptive statistics of respondents, such as percents, frequencies, means, and standard deviations. Independent and paired sample t-tests were also used to statistically examine differences between rural and urban residents and objective and belief responses.

Results

The results are summarized in two ways. First, the results are presented for each pair of corresponding objective and belief statements. Second, results are organized by topic: preservation/conservation, information sharing/public involvement, economic development and community issues, cultural and traditional, access, and regulatory issues. Detailed statistical information is located in Appendices A through C.

Corresponding Objective and Belief Statements

68 percent of respondents stated that *managing motorized off-highway use* was important, and 74 percent believed it was an appropriate role of the Forest Service.

45 percent of respondents stated that *maintaining continuous trail systems for motorized vehicles* was important and 48 percent believe it is an appropriate role of the Forest Service.

70 percent of respondents stated that *maintaining continuous trail systems for non-motorized recreation* was important and 68 percent believed it was an important role for the Forest Service.

66 percent of respondents stated that *designating recreation trails for specific use* was important and 68 percent believed it was an important role for the Forest Service.

38 percent of respondents stated that *developing new paved roads* was important and 45 percent believed it was an important role for the Forest Service.

89 percent of respondents stated that *conserving and protecting our water resources* was important and 89 percent believed it was an important role for the Forest Service.

88 percent of respondents stated that *protecting ecosystems and habitats* was important and 85 percent believed it was an important role for the Forest Service.

77 percent of respondents stated that *preserving wilderness experience* was important and 76 percent believed it was an important role for the Forest Service.

63 percent of respondents stated that *preserving cultural uses* was important and 60 percent believed it was an important role for the Forest Service.

71 percent of respondents stated that *reducing loss of open space* was important and 65 percent believed it was an important role for the Forest Service.

62 percent of respondents stated that *providing natural resources to support communities* was important and 54 percent believed it was an important role for the Forest Service.

44 percent of respondents stated that *expanding energy and mineral production* was important and 38 percent believed it was an important role for the Forest Service.

47 percent of respondents stated that *expanding timber production and livestock grazing* was important and 44 percent believed it was an important role for the Forest Service.

48 percent of respondents stated that *simplifying the permitting process* was important and 55 percent believed it was an important role for the Forest Service.

64 percent of respondents stated that *developing national policies that guide natural resource development* was important and 66 percent believed it was an important role for the Forest Service.

42 percent of respondents stated that *expanding commercial recreation services* was important and 47 percent believed it was an important role for the Forest Service.

55 percent of respondents stated that *providing companies with forest commodities* was important and 55 percent believed it was an important role for the Forest Service.

87 percent of respondents stated that *developing volunteer programs to maintain resources* was important and 79 percent believed it was an important role for the Forest Service.

85 percent of respondents stated that *informing the public about recreation concerns* was important and 88 percent believed it was an important role for the Forest Service.

78 percent of respondents stated that *informing the public on environmental impacts* was important and 84 percent believed it was an important role for the Forest Service.

70 percent of respondents stated that *informing the public on economic value* received by developing our natural resources was important and 65 percent believed it was an important role for the Forest Service.

44 percent of respondents stated that *allowing transfer of responsibility to local community advisory boards* was important and 47 percent believed it was an important role for the Forest Service.

58 percent of respondents stated that *using public advisory committees* was important and 69 percent believed it was an important role for the Forest Service.

72 percent of respondents stated that *allowing diverse uses* was important and 73 percent believed it was an important role for the Forest Service.

62 percent of respondents stated that *making management decisions at a local level* was important and 64 percent believed it was an important role for the Forest Service.

52 percent of respondents stated that *collecting entry fees* was important and 61 percent believed it was an important role for the Forest Service.

70 percent of respondents stated that *increasing law enforcement efforts* was important and 72 percent believed it was an important role for the Forest Service.

73 percent of respondents stated that *using management tools to reduce wildfires in general* was important and 82 percent believed it was an important role for the Forest Service.

65 percent of respondents stated that *using management tools to reduce wildfires around communities* was important and 73 percent believed it was an important role for the Forest Service.

65 percent of respondents stated that *reducing spread of invasive species* was important and 69 percent believed it was an important role for the Forest Service.

Topical Groupings of Objective/Belief Statements

Preservation/conservation. Protection of ecosystems is seen as an important objective and an appropriate role for the Forest Service. Especially noteworthy is the strong support for conserving and protecting forests and grasslands that are the source of our water resources.

Information sharing/public involvement. Providing information to the public about recreation concerns on forests and grasslands, potential environmental impacts of all uses associated with forests and grasslands, and economic value received from natural resource development are each considered important objectives and appropriate roles for the Forest Service. Objective/belief statements concerning opportunities for public involvement vary in the level of public support. The average responses range from neutral to supportive for all statements. Developing volunteer programs to improve or maintain forests and grasslands, for example, received widespread support.

Economic development and community issues. These objective/belief statements address extractive uses of public lands (for example, mining, grazing, and timber removals), in addition to addressing development of undisturbed natural areas. Commercial concerns, such as expanding commercial recreational services and providing companies with forest commodities, are also included. The American public, on average, is neutral to somewhat supportive of these objectives/beliefs.

Cultural and traditional. These objective/belief statements involve activities on forests and grasslands that are perceived as being traditional in some communities or having cultural meaning to participants. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access, is an important objective and believed to be an appropriate role for the Forest Service.

Access. The American public is divided in its opinions about the provision of access. This is evidenced by the difference between support for trail development and maintenance for motorized and non-motorized vehicles. The public, on average, was supportive of designating existing trails for specific use, but was neutral concerning developing new paved roads.

Regulatory issues. Objective/belief statements regarding management through regulation consistently showed moderate to strong support. Notably, increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources was an important objective and believed to be an appropriate role of the Forest Service.

Objective and Belief Statements Ordered by Percentage

Objectives. The majority of respondents considered most of the objective statements in Version 2 (23 of 30 statements) to be *important*. Developing new paved roads showed the highest percentage of respondents rating the objective as *not important* (40 percent). Although not achieving a majority, more respondents rated the objective as *important* than *not important*. The objectives are developing trail systems for motorized users, expanding energy and mineral production, expanding timber production and livestock grazing, simplifying the permitting process, expanding commercial recreation services, and allowing transfer of responsibility to local community advisory boards.

Beliefs. The majority of respondents believed most of the statements were also important roles of the USDA Forest Service (24 of 30 statements). The remaining six statements had a greater percentage of Northeastern Area respondents agreeing with the belief statement than disagreeing. These statements include developing new paved roads, developing and maintaining continuous trail systems for motorized vehicles, expanding timber production and livestock grazing, expanding energy and mineral production, expanding commercial recreation services, and allowing transfer of responsibility to local community advisory boards.

Introduction

Legal Background

The 1993 Government Performance and Results Act (Public Law 103-62) requires that each federal agency periodically submit to Congress a Strategic Plan that includes long-term goals and objectives. The current USDA Forest Service Strategic Plan has been completed for fiscal years 2004 through 2008. One of the most critical aspects of strategic planning is identifying long-term goals and objectives. These objectives must be consistent with the mission of the Forest Service, which is to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations. To fulfill this mission, the agency not only manages public lands, but assists State government and private landowners in the practice of good land stewardship and collaborates with the public and other partners as stewards of the forests and grasslands that it holds in trust for the American people. The agency also conducts scientific research on a wide range of subjects related to the performance of its mission. The Government Performance and Results Act, as an essential part of the strategic planning process, requires an agency to ask for the views and suggestions of anyone "potentially affected by or interested in" its strategic plan. The long-term goals and objectives of the Forest Service's strategic plan must therefore reflect not only the agency's mission, but the public's views and beliefs regarding our country's forests and grasslands.

Study History

The National Survey of Values, Objectives, Beliefs, and Attitudes (VOBA) is one source of information on the public's views and beliefs that is used to develop the Forest Service's strategic plan. The purpose of the VOBA survey is to collect information about the preferences and goals of the American public regarding the management of forests and grasslands. This recurring survey is designed to reflect the changing goals and interests of the American public over time. Therefore, it is necessary that the content of the survey not be static, and that the survey be implemented on a regular basis. The following gives a brief history of the VOBA survey development and implementation leading up to the Version 2 (2003/2004) survey results that are presented in this report.

Between September 1999 and June 2000, over 80 stakeholder focus groups (including some individual interviews) were conducted across the lower 48 states (See Shields, Martin, Martin, & Haefele, 2002, for more information). These focus groups concentrated on three topics: (1) issues related to the use of public lands in general and forests and grasslands in particular, (2) the objectives (goals) of the group (or individual) regarding the use, management, and conservation of the forests and grasslands, and (3) the role of the Forest Service in the use, management and conservation of the forests and grasslands.

An objectives hierarchy was constructed for each of the focus groups. These hierarchies indicated the group's goals for the management of forests and grasslands and how they would like to see each goal or objective achieved. The objectives ranged from the very abstract strategic level to the more focused or applied means level (chart 1). The strategic-level objectives are overarching, general objectives, while the fundamental level objectives represent a context-specific application of strategic objectives. Fundamental end-state objectives represent the desired state of the world. Fundamental means objectives capture the methods by which the desired end-state should be achieved. The full set of 80 hierarchies was merged into a master set and duplicates were removed. The 28 upper level objectives forming the master set were rephrased as statements. The original (1999/2000) survey instrument used these statements plus two additional objective statements that were developed by the research team.

Objectives may be applicable at only one level of geographic scale (for example, a specific location, region, or nation), or they may be relevant at multiple scales. The VOBA survey objectives are applicable to the management of forests and grasslands at a broad geographic scale. Belief statements (and the attitude statements in the 1999/2000 VOBA survey) tier down directly from the objectives (See chart 1) and

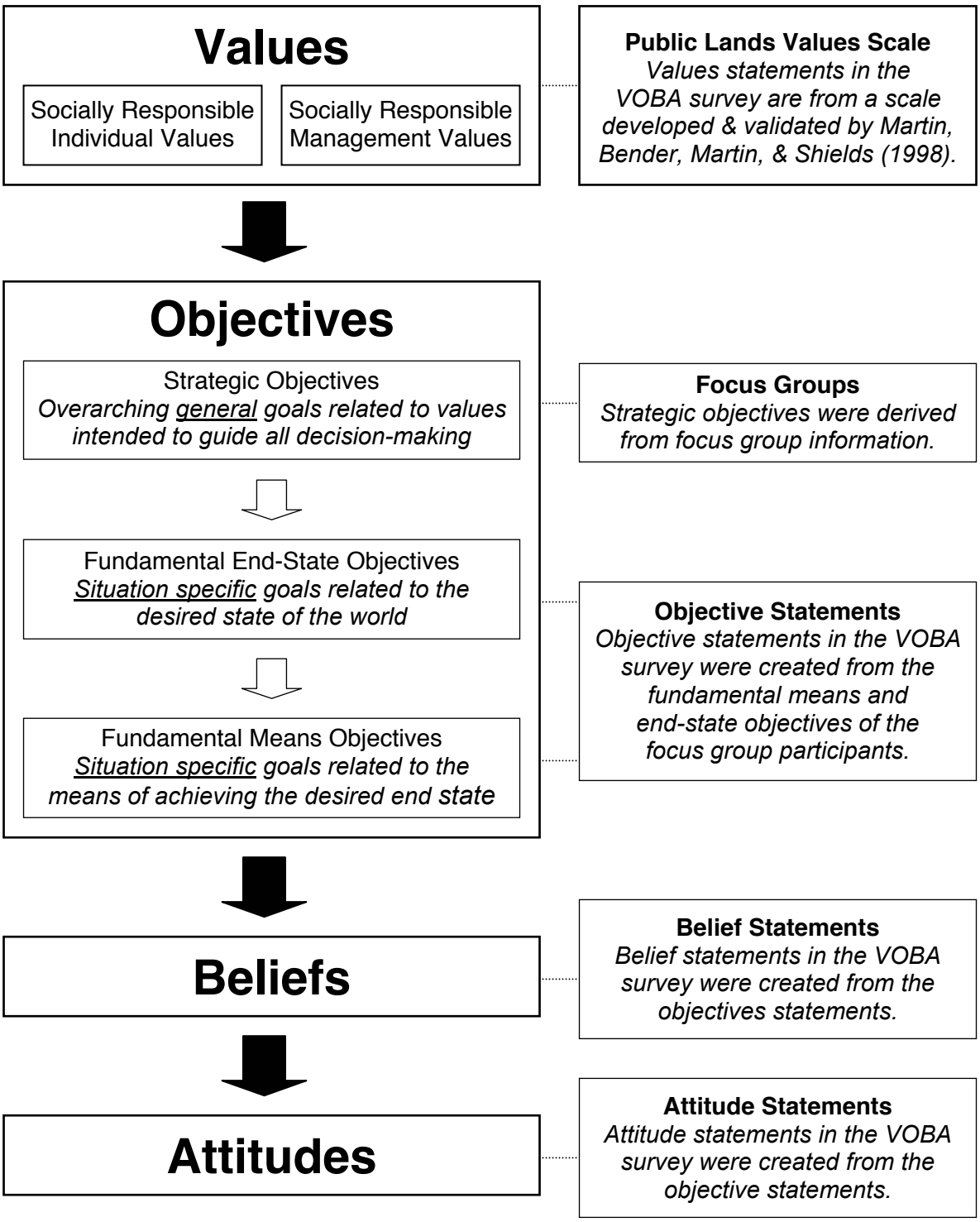


Chart 1. Theoretical Model for Study and the Corresponding Measurement Methods.

are applicable at the same broad scale. For example, an objective might be to have more hiking trails. The corresponding belief statement asks whether or not the respondent believes that providing more hiking trails is an appropriate role for the Forest Service. The attitude statement would then elicit the respondent's perception of how well the agency is doing at providing hiking trails. The 1999/2000 survey also included values statements from the Public Lands Values Scale developed and validated by Martin, Bender, Martin, & Shields (1998).

The VOBA survey is implemented as a module of the National Survey on Recreation and the Environment (NSRE). NSRE is conducted by the Forest Service as an ongoing telephone survey that randomly selects members of the American public to participate. A comprehensive source on NSRE results that includes trend information on recreation from 1960 was provided by Cordell (2004). In addition, Cordell & Overdevest (2001) provided a detailed assessment of demographic trends and their relationships to the future of natural lands in the United States. NSRE has also provided national level information on environmental attitudes. In fact, Cordell, Betz, and Green (2002) found a statistical link between demographic differences, recreation activity choices, and environmental attitudes. More information about NSRE can be obtained online (http://www.srs.fs.usda.gov/trends/NSRE).

The original survey instrument was implemented in 1999/2000 as a module of the National Survey on Recreation and the Environment (NSRE). This survey is conducted by the Forest Service as a telephone survey that randomly selects members of the American public to participate. The results from the 1999/2000 survey were published in Shields, Martin, Martin, & Haefele (2002). The survey was revised and implemented again as part of NSRE in Version 2 of this survey. The methods and results for Version 2 of the survey are provided in this report. Detailed results are found in Appendix A to C.

Version 2 VOBA Survey Study Purpose

This report presents the results from Version 2 of the VOBA survey that was administered in 2003/2004 to randomly selected members of the American public. In Version 2 of the survey, respondents were asked about their:

objectives for the management, use, and conservation of forests and grasslands; and

beliefs about the role the Forest Service should play in fulfilling those objectives.

The survey results help the Forest Service understand the public's *objectives* and provide information about which of the agency's current and potential activities the public believes to be important.

Methods

Survey Design

For Version 2 of the VOBA survey (implemented in 2003/2004), a core set of 24 objectives was retained from the original telephone survey and six new objectives statements were added (See Appendix D for complete Version 2 survey and Shields, Martin, Martin, & Haefele, 2002, for the Version 1 survey). A total of 30 objective statements and 30 corresponding belief statements composed Version 2 of the telephone survey. Based on input from the original focus group participants and the FS Strategic Planning and Resource Assessment staff members, the researchers developed the new objective statements (See statements 10, 17, 22, 28, 29, and 30 in Appendix D). Some objectives retained from the original survey were also reworded to increase the effectiveness of the survey. Prefacing the objective statement with "It is a role of the Forest Service to..." created corresponding belief statements. This simple change shifted the focus from the general objectives statement to a specific belief about the appropriate role of the Forest Service. Both the objective and beliefs statements were accompanied by a script used by the telephone interviewers to ensure consistency in their explanations (See Appendix D). For the objectives and beliefs statements, respondents indicated their level of approval or agreement on a five-point scale. The objectives items are anchored by 1 = *not at all important* to 5 = *very important*. Beliefs are anchored by 1 = *strongly disagree* to 5 = *strongly agree*. Version 2 of the survey did not include values or attitude statements due to financial and time constraints.

Sampling Design and Data Collection

The Human Dimensions of Research Laboratory at the University of Tennessee, Knoxville administered this random telephone survey as a part of the NSRE for the Forest Service. The 2003/2004 VOBA update was implemented as a part of Version 16a of NSRE that also included statements on people's recreation participation, controlled burns and wildfires, and demographics. The Office of Management and Budget limited the NSRE survey to an average of 15 minutes. The VOBA module of the survey was limited to 5 minutes.

Version 2 of the survey, which was collected from October 2003 through March 2004, as a module of NSRE, has a total sample size of 3,503. The VOBA survey, as a module of NSRE, used a nationwide random sample of telephone numbers facilitated by a computer-aided telephone interviewing system (CATI). This resulted in a possible under sampling of people who do not have telephones, refuse to speak to surveyors, have unlisted phone numbers, have disabilities precluding phone use, or use cell phones instead of a land line phone. Only individuals 16 years and older were surveyed. Due to a limited amount of time available for each phone interview, participants were asked to respond to only a subset of the full set of statements. Respondents were first asked a subset of objective statements randomly selected from the total set of 30 objective statements. Then respondents were asked the matching belief statements. In this manner, objective/belief pairs were randomly selected for each respondent. Due to this sampling design, the number of individual respondents to each objective/belief pair varied. The number of responses ranged from 642 to 739. An acceptable confidence level of 95 percent, with a confidence interval of ±4 percent, was obtained for all objective and belief statements. The overall goal of this matrix sampling design was to control interview time with respondents, but still collect analytically valuable information. This not only lowered costs but reduced respondent burden, which generally should lead to fewer non-responses and a better sample quality.

Data Weighting

In order to adjust sample proportions to reflect the population, NSRE provided post-stratification weights that were applied to the VOBA survey results (see Holt & Smith, 1979 for information on post-stratification). Therefore, the VOBA data is corrected for the under- and over-representation of the demographic groups shown in table 1 based on U.S. Census data (age,

Table 1—Comparison of Version 2 sample demographics with U. S. population [a].

Demographic	Sample	U.S. population
Age [b]		
16 to 24	13 percent	13 percent
25 to 34	15 percent	14 percent
35 to 44	19 percent	16 percent
45 to 54	20 percent	13 percent
55 to 64	16 percent	9 percent
65 and over	16 percent	12 percent
Sex		
Male	44 percent	49 percent
Female	56 percent	51 percent
Race and ethnicity [c]		
Non-Hispanic White	85 percent	69 percent
Non-Hispanic Black or African American	6 percent	12 percent
Non-Hispanic Asian	4 percent	
Non-Hispanic Native American	2 percent	< 1 percent
Non-Hispanic Islander	< 1 percent	< 1 percent
Hispanic	5 percent	13 percent
Education [d]		
8th grade or less	1 percent	8 percent
9th-11th grade	8 percent	12 percent
High school graduate	22 percent	29 percent
Some college	21 percent	21 percent
Associate's degree	9 percent	6 percent
Bachelor's degree	22 percent	16 percent
Master's degree	12 percent	6 percent
Professional degree	2 percent	2 percent
Doctorate degree	2 percent	1 percent
Residence [e]		
Rural	35 percent	21 percent
Urban	65 percent	79 percent

[a] The variables listed were used for weighting by NSRE. U.S. Census results from the 2000 Census were used for NSRE Version 16a (including 2003/2004 VOBA) and are reported in percents given above. See http://www.census.gov for more details on the U.S. Census and Cordell, Betz, and Green (2002) for more information on NSRE weighting.

[b] Age percents do not sum to 100 due to rounding and the absence of individuals ages <1 to 15 being included in the survey.

[c] Although percents sum to approximately 100, these groups do not completely represent the entire U.S. population. Additional census categories for the United States population exist that were not included in weighting (for example, those who responded to 2 or more races).

[d] Education percents do not sum to 100 due to rounding.

[e] Respondents were classified according to the criterion used by the United States Bureau of the Census. A respondent residing in a county that included a central city (a city or urban area of 50,000 or more) or at least 50 percent of the population of a central city was considered metropolitan (urban). All other respondents were considered non-metropolitan (rural). See http://www.census.gov for more detailed information on the metropolitan designation.

sex, race, urban/rural, and education; See Cordell, Betz, & Green, 2002 for more information on NSRE weighting).

Analysis Strategy

Survey results for the objective and belief statements are presented independently for each set of corresponding objective and belief statements and according to overarching topical categories. These categories include preservation/conservation, information sharing/public involvement, economic development and community issues, cultural and traditional, access, and regulatory issues. The objective statements were grouped into these non-exclusive categories by the authors. Although it is possible to group the categories differently, the categorization shown in table 2 is seen as useful for discussing similarities and differences among statements for the purpose of this report.

Table 2—Researcher defined objective statement categories.

Category	Statement
Preservation/Conservation	
	6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.
	7. Protecting ecosystems, and wildlife and fish habitats.
	8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.
	10. Reducing loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.
	24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.
	27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.
	28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.
	29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.
	30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).
Information Sharing/Public Involvement	
	18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).
	19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.
	20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.
	21. Informing the public on the economic value received by developing our natural resources.
	22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.
	23. Using public advisory committees to advise government agencies on public land management issues.
	25. Making management decisions concerning the use of forests and grasslands at the local level rather then the national level.
Economic Development and Community Issues	
	11. Providing natural resources from forests and grassland to support communities dependent on grazing, energy production, mining, or timber harvesting.
	12. Expanding energy and mineral production on forests and grasslands.
	13. Expanding timber production and livestock grazing on forests and grasslands.
	16. Expanding commercial recreational services on forests and grasslands (for example, guide services or outfitters).
	17. Providing companies with forest commodities in exchange for assistance in achieving management goals such as ecosystem restoration on public forests and grasslands.
	21. Informing the public on the economic value received by developing our natural resources.
	24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat

Table 2—*Continued*.

Category	Statement
Cultural and Traditional	
	9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.
	11. Providing natural resources from forests and grassland to support communities dependent on grazing, energy production, mining, or timber harvesting.
Access	
	1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.
	2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.
	3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.
	4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).
	5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.
Regulatory Issues	
	1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.
	4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).
	14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.
	15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).
	26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.
	27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.

Analysis of VOBA results places primary emphasis on weighted descriptive statistics of respondents, such as percents, frequencies, means, and standard deviations. For ease of interpretation, results are generally presented in this report using a collapsed scale (objective, 1-2 = *not important*, 3 = *neutral*, and 4-5 = *important*; belief, 1-2 = *disagree*, 3 = *neutral*, and 4-5 = *agree*). Statistics, such as means and standard deviations, are calculated using the original scale. Other instances of reporting results using the full scale are made clear by use of specific labels (for example, *strongly agree* or *very important*). Two statistical analysis strategies were used for determining statistically significant differences: independent samples *t*-tests and paired samples *t*-tests.

Independent samples *t*-tests were used to determine whether individuals residing in rural areas responded differently to a given statement than did individuals residing in urban areas. The independent samples *t*-test is a test of statistical significance between two group means, in this case, the mean response of rural residents to a given statement is compared with the mean response of urban residents to the same statement. Respondents were classified as rural or urban according to the criterion used by the U. S. Bureau of the Census. A respondent residing in a county that included a

central city (a city or urban area of 50,000 or more), or at least 50 percent of the population of a central city, was considered urban (referred to by the Census Bureau as metropolitan). All other respondents were considered rural (or non-metropolitan) (See http://www.census.gov for more detailed information on the metropolitan designation).

Paired samples *t*-tests were used to examine whether the statement response was statistically significantly different from the matching belief statement response over all respondents in the sample. The paired samples *t*-test is a test of statistical significance of the mean difference scores. A mean difference score is calculated using two steps: (1) for each individual respondent, the difference between their response on one survey statement (an objective) and their response on another survey statement (the matching belief) is calculated. For example, a respondent who stated an objective was *very important* (score of 5) and *strongly agreed* (score of 5) with the corresponding belief statement would receive a difference score of 0 and (2) the mean of the difference scores across all respondents is calculated. In other words, the paired samples *t*-test does not test the overall mean scores calculated for two separate groups of respondents as in the independent samples *t*-test, but tests if there is a statistically significant difference between the responses to an objective statement and a matching belief statement for each individual respondent.

Results

The results are summarized in two ways. First, the results are presented for each set of corresponding objective and belief statements. Second, results are organized by topic: preservation/conservation, information sharing/public involvement, economic development and community issues, cultural and traditional, access, and regulatory issues. More detailed statistical tables can be found in Appendices, A, B, and C.

Corresponding Objective and Belief Statements

Motorized Off-Highway Vehicle (OHV) Use

Statement 1, as it appeared in the 2003/2004 survey, was: "Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails, and areas." The results illustrated in figure 1 and reported in Appendices A, B, and C are summarized below.

Only fourteen percent of the respondents stated that managing motorized off-highway vehicles was *not important* (fig. 1). Fewer respondents (10 percent) believed that achieving the objective was not an appropriate role of the Forest Service (*disagreed*). The majority of the respondents identified the objective statement as *important* (55 percent chose *very important*) and *agreed* with the corresponding belief statement (58 percent chose *strongly agree*; See Appendix table A1 for detailed percents). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements (Appendix table A2). Overall, the mean of the responses for both the objective (mean = 4.01, s.d. = 1.31) and belief statements (mean = 4.15, s.d. = 1.21) was high (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant (t = -2.46; $p < .05$; Appendix table B1). In other words, on average, respondents were less likely to think that managing the use of OHVs was important than they were to believe that achieving the objective was an appropriate role of the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Trails for Motorized Vehicles

Statement 2, as it appeared in the 2003/2004 survey, was: "Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs." The results illustrated in figure 2 and reported in Appendices A, B, and C are summarized below.

Fewer respondents were *neutral* about maintaining continuous trail systems for motorized vehicles than stated that the objective was *not important* or

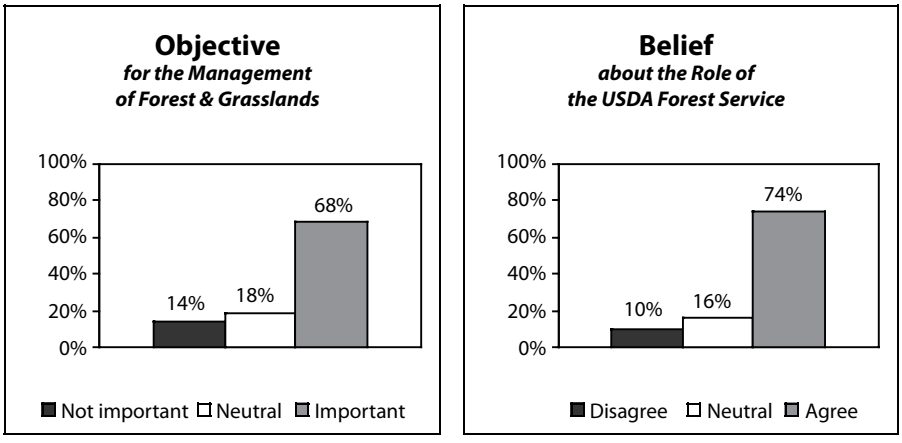


Figure 1. Importance of Managing Motorized Off-highway Vehicle Use and Level of Agreement with the Corresponding Role of the USDA Forest Service.

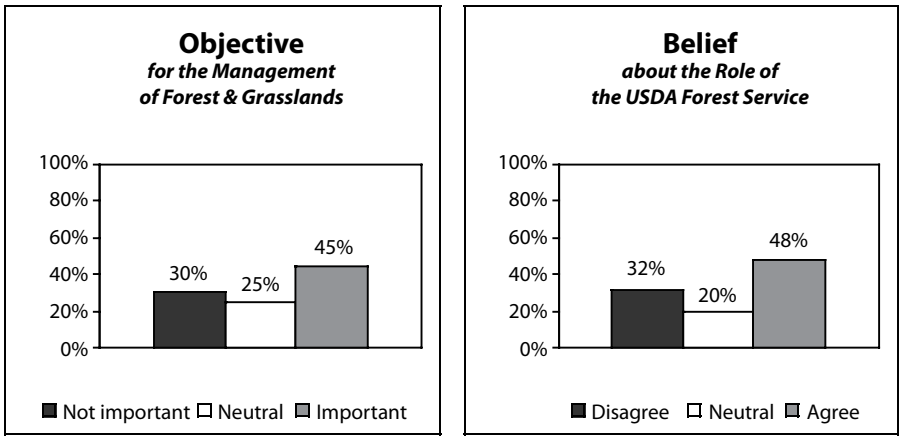


Figure 2. Importance of Maintaining Continuous Trail Systems for Motorized Vehicles and Level of Agreement with the Corresponding Role of the USDA Forest Service.

important (fig. 2). The responses to the corresponding belief statement were similarly distributed. More respondents stated that the maintaining continuous trail systems for non-motorized vehicles was *important* (45 percent) and believed that achieving the objective was an appropriate role for the Forest Service (48 percent) than chose either *not important*/*disagree* or *neutral* (See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The sum of the responses rated *not important*/*disagree* or *neutral* is, in both cases, approximately 50 percent and greater than the frequency of responses rated as *important*/*agree*. This distribution of responses resulted in means near *neutral* and high standard deviations for both the objective (mean = 3.27, s.d. = 1.44) and the belief statement (mean = 3.32, s.d. = 1.47) (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant ($t = -1.58$; $p < .05$, table B1).

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Trails for Non-motorized Use

Statement 3, as it appeared in the 2003/2004 survey, was: "Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding." The results illustrated in figure 3 and reported in Appendices A, B, and C are summarized below.

Ten percent of the respondents stated that maintaining continuous trail systems for non-motorized recreation was *not important* (fig. 3). Marginally more respondents (11 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (70 percent) and *agreed* with the corresponding belief statement (68 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements. Overall, the mean of the responses for both the objective (mean = 4.02,

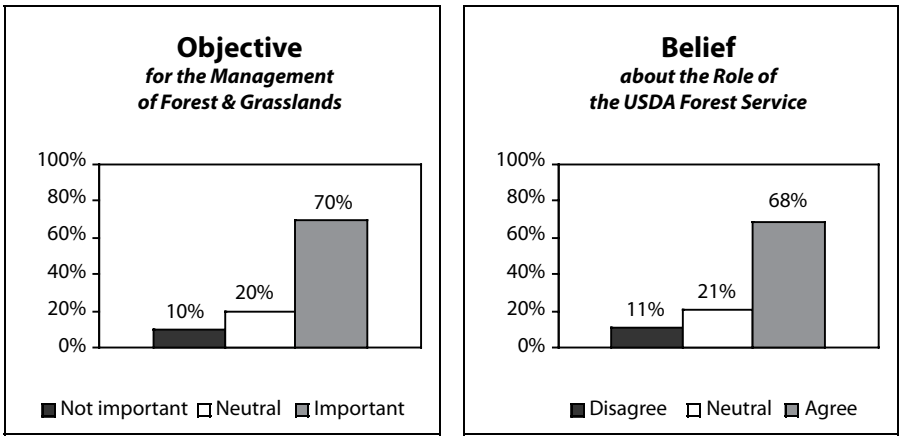


Figure 3. Importance of Maintaining Continuous Trail Systems for Non-motorized Recreation and Level of Agreement with the Corresponding Role of the USDA Forest Service.

s.d. = 1.13) and the belief statement (mean = 3.98, s.d. = 1.20) were higher than *neutral* (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Trails for Specific Use

Statement 4, as it appeared in the 2003/2004 survey, was: "Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding)." The results illustrated in figure 4 and reported in Appendices A, B, and C are summarized below.

14 percent of the respondents stated that designating recreation trails for specific use was *not important* (fig. 4). Likewise, 14 percent of respondents believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (66 percent) and *agreed* with the corresponding belief statement (68 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, the mean of the responses for the objective (mean = 3.89, s.d. = 1.24) and the belief statement (mean = 3.88, s.d. = 1.24) was higher than *neutral* (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or belief statement (Appendix tables C1, C2).

Developing Paved Roads

Statement 5, as it appeared in the 2003/2004 survey, was: "Developing new paved roads on forests and grasslands for access by cars and recreational vehicles." The results illustrated in figure 5 and reported in Appendices A, B, and C are summarized below.

Fewer respondents were *neutral* about developing new paved roads than stated that the objective was

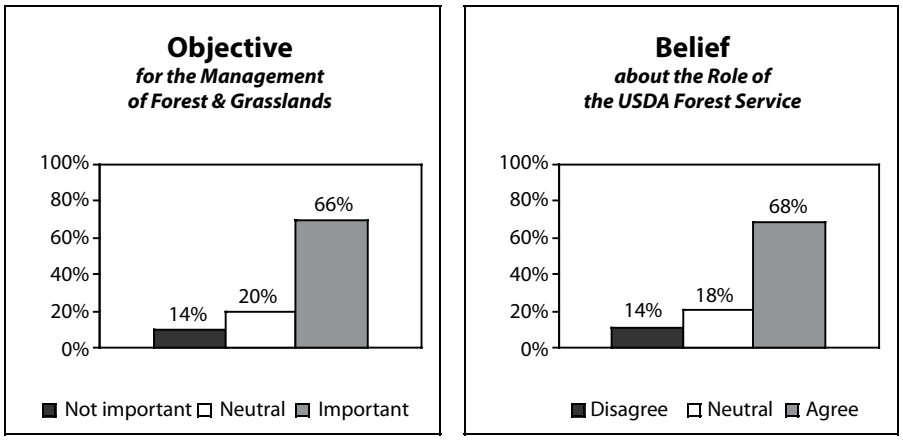


Figure 4. Importance of Designating Recreation Trails for Specific Use and Level of Agreement with the Corresponding Role of the USDA Forest Service.

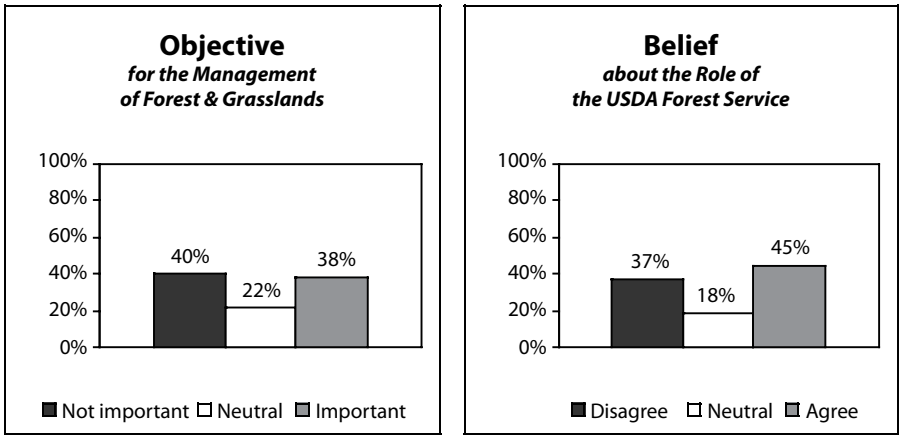


Figure 5. Importance of Developing New Paved Roads and Level of Agreement with the Corresponding Role of the USDA Forest Service.

either *not important* or *important* (fig. 5). Forty percent of the respondents stated that the objective was *not important*, whereas fewer respondents (38 percent) stated that they thought this was an *important* objective (See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The responses to the corresponding belief statement were similarly distributed; however, 37 percent of respondents believed that developing new paved roads was not an appropriate role for the Forest Service. More respondents (45 percent) believed that it is an appropriate role. The sum of the responses rated *neutral* or *not important*/*disagree* is, in both cases, greater than the frequency of responses *important*/*agree*, and neither end of the distribution is greater than 50 percent. This distribution of responses resulted in means near *neutral* and high standard deviations for both the objective (mean = 3.02, s.d. = 1.51) and the belief statement (mean = 3.17, s.d. = 1.52) (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ($t = -2.29$; $p < .05$; Appendix table B1). In other words, on average, respondents were less likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statements (Appendix tables C1, C2).

Protecting Water Resources

Statement 6, as it appeared in the 2003/2004 survey, was: "Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas." The results illustrated in figure 6 and reported in Appendices A, B, and C are summarized below.

Eighty-nine percent of the respondents stated that conserving and protecting our water resources was an *important* objective (fig. 6). Likewise, 89 percent of the respondents believed that the objective was an appropriate role for the Forest Service to play. The majority of the respondents identified the objective statement to be *important* (75 percent chose *very important*) and *agreed* with the corresponding belief statement (74 percent chose *strongly agree*; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, the mean of the responses was high and standard deviation was low for both the objective (mean = 4.60, s.d. = 0.80) and belief statements (mean = 4.56, s.d. = 0.88) (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Protecting Ecosystems and Habitats

Statement 7, as it appeared in the 2003/2004 survey, was: "Protecting ecosystems, and wildlife and fish habitats." The results illustrated in figure 7 and reported in Appendices A, B, and C are summarized below.

Eighty-eight percent of the respondents stated that protecting ecosystems and habitats was an *important* objective (fig. 7). Similarly, 85 percent of the respondents believed that the objective was an appropriate role for the Forest Service to play. The majority of the respondents identified the objective statement as *important* (73 percent chose *very important*) and *agreed* with the corresponding

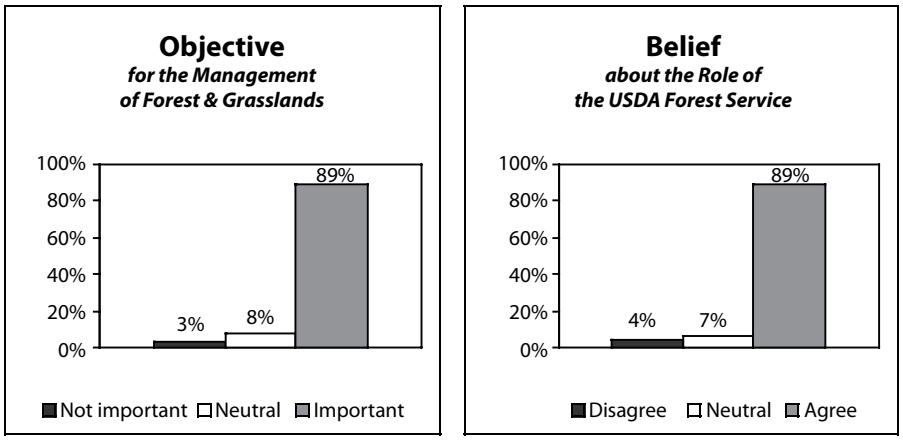


Figure 6. Importance of Conserving and Protecting Our Water Resources and Level of Agreement with the Corresponding Role of the USDA Forest Service.

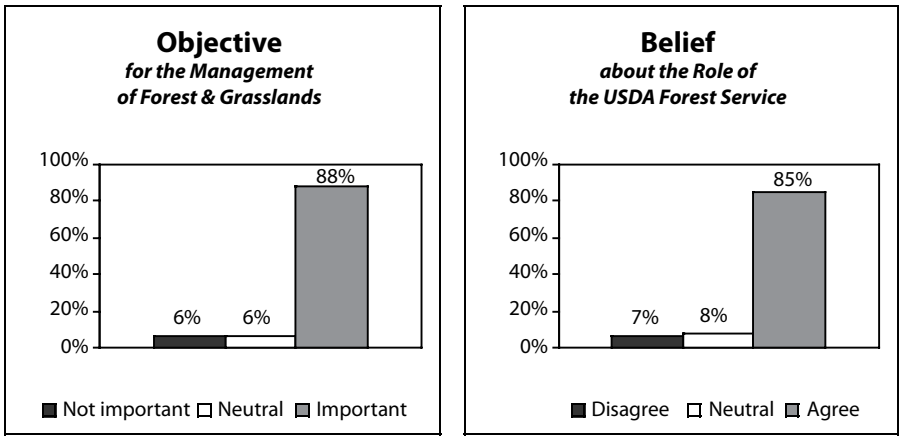


Figure 7. Importance of Protecting Ecosystems and Habitats and Level of Agreement with the Corresponding Role of the USDA Forest Service.

belief statement (71 percent chose *strongly agree*; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements (Appendix table A3). Overall, the mean of the responses was high and standard deviation was low for the objective (mean = 4.50, s.d. = 1.01) and belief statement (mean = 4.46, s.d. = 1.02). Note that the percent of *not important* and *neutral* responses were marginally different for the objective statement and the percent of *disagree* and *neutral* responses were marginally different for the belief statement. A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Preserving Wilderness Experiences

Statement 8, as it appeared in the 2003/2004 survey, was: "Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems." The results illustrated in figure 8 and reported in Appendices A, B, and C are summarized below.

7 percent of the respondents stated that preserving wilderness experiences was *not important* (fig. 8). Marginally more respondents (8 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (55 percent chose *very important*) and *agreed* with the corresponding belief statement (56 percent chose *strongly agree*; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, the mean of the responses for both the objective (mean = 4.22, s.d. = 1.06) and the belief statement (mean = 4.21, s.d. = 1.08) was high (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

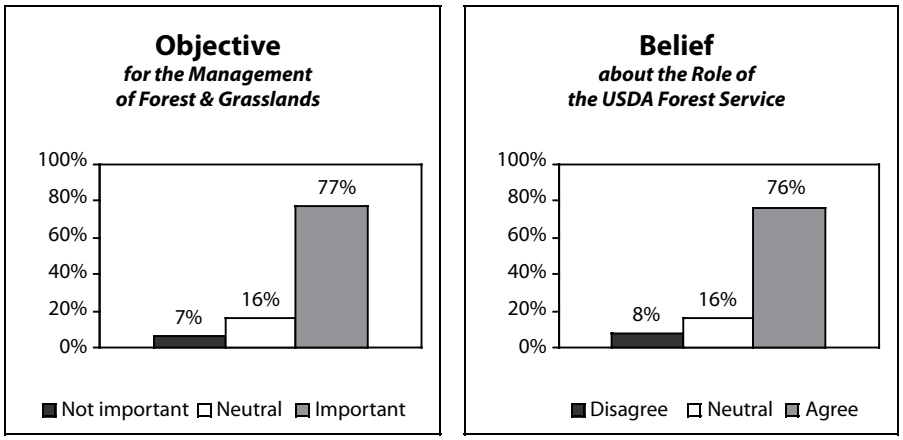


Figure 8. Importance of Preserving Wilderness Experiences and Level of Agreement with the Corresponding Role of the USDA Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Preserving Cultural Uses

Statement 9, as it appeared in the 2003/2004 survey, was: "Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access." The results illustrated in figure 9 and reported in Appendices A, B, and C are summarized below.

Twelve percent of the respondents stated that preserving cultural uses was *not important* (fig. 9). More respondents (19 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (63 percent) and *agreed* with the corresponding belief statement (60 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements. Overall, the mean of the responses for both the objective (mean = 3.91, s.d. = 1.23) and the belief statement (mean = 3.73, s.d. = 1.34) was higher than *neutral* (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ($t = 2.89$; $p < .05$; Appendix table B1). In other words, on average, respondents were more likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Reducing Loss of Open Space

Statement 10, as it appeared in the 2003/2004 survey, was: "Reducing loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development." The results illustrated in figure 10 and reported in Appendices A, B, and C are summarized below.

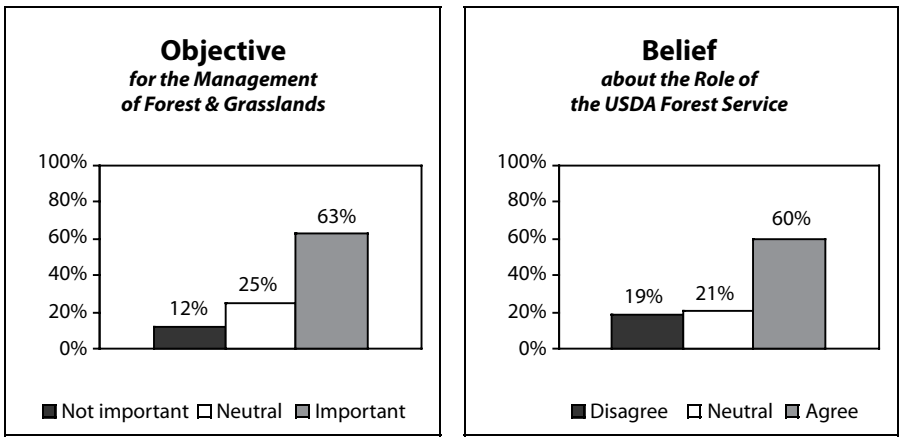


Figure 9. Importance of Preserving Cultural Uses and Level of Agreement with the Corresponding Role of the USDA Forest Service.

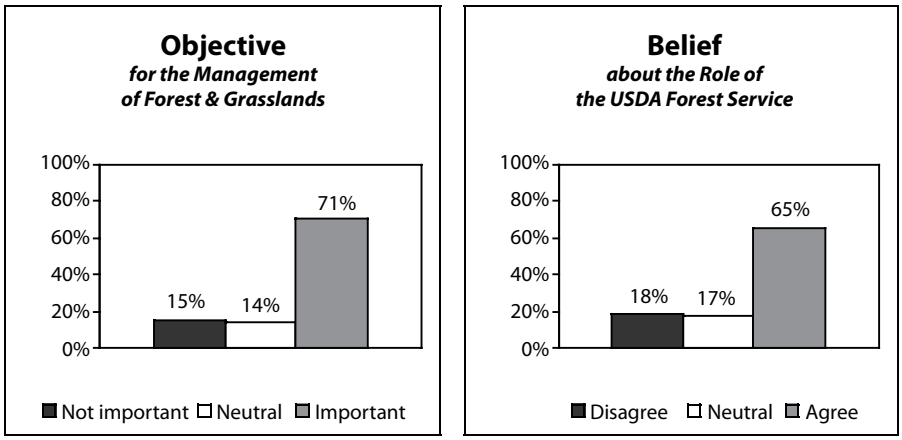


Figure 10. Importance of Reducing Loss of Open Space and Level of Agreement with the Corresponding Role of the USDA Forest Service.

Fifteen percent of the respondents stated that reducing loss of open space was *not important* (fig. 10). Slightly more respondents (18 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (71 percent) and *agreed* with the corresponding belief statement (65 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements (Appendix table A3). Overall, the mean of the responses for both the objective (mean = 3.99, s.d. = 1.29) and the belief statement (mean = 3.81, s.d. = 1.35) was higher than *neutral*. Note that the percent of *not important*/*disagree* and *neutral* responses was marginally different for both the objective and the belief statement. A paired *t*-test showed that the difference between the objective and the belief statement responses was statistically significant ($t = 2.90$; $p < .05$; Appendix table B1). In other words, on average, respondents were more likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Providing Natural Resources to Support Communities

Statement 11, as it appeared in the 2003/2004 survey, was: "Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting." The results illustrated in figure 11 and reported in Appendices A, B, and C are summarized below.

Fifteen percent of the respondents stated that providing natural resources to support communities was *not important* (fig. 11). More respondents (24 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (62 percent) and *agreed* with the corresponding belief statement (54 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). Fewer respondents were *neutral* for the belief statement than either *disagreed* or *agreed*. The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, the mean of the responses for the objective statement (mean = 3.81, s.d. = 1.21) was higher than the mean of the responses for the belief statement (mean = 3.50, s.d. = 1.38) (Appendix table A3). Note that the belief statement also had a higher standard deviation than the objective. In other words, there is less *agree*ment among respondents for the belief statement. Nonetheless, in both cases the majority of the responses were above *neutral*. A paired *t*-test showed that the difference between the objective and the belief statement responses was statistically significant ($t = 5.48$; $p < .05$; Appendix table B1). In other words, on average, respondents were more likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses for the objective statement were not statistically significantly different. The means of the responses for the belief statement, however, were statistically different ($t = 2.53$, $p < .05$; Appendix table C2). The mean of the response for rural residents

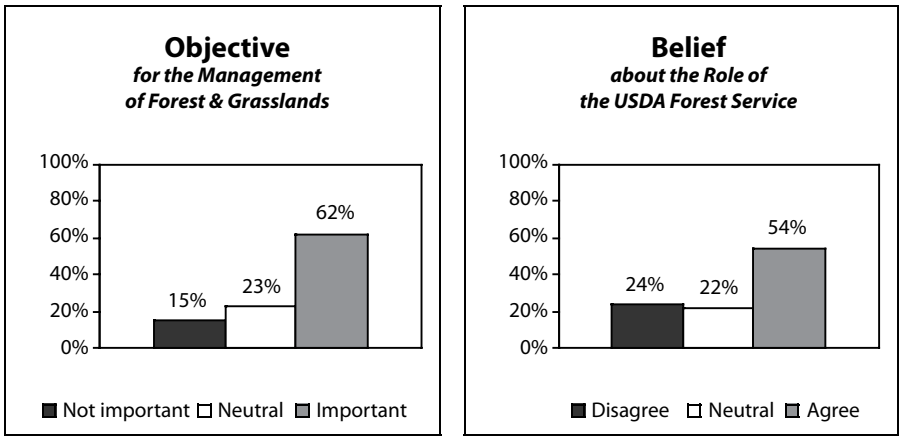


Figure 11. Importance of Providing Natural Resources to Support Communities and Level of Agreement with the Corresponding Role of the USDA Forest Service.

(mean = 3.79, s.d. = 1.33) was higher than the mean of the responses for urban residents (mean = 3.43, s.d. = 1.39). This suggests that more rural residents believe that providing natural resources to support communities is an appropriate role of the Forest Service.

Expanding Energy and Mineral Production

Statement 12, as it appeared in the 2003/2004 survey, was: "Expanding energy and mineral production on forests and grasslands." The results illustrated in figure 12 and reported in Appendices A, B, and C are summarized below.

Forty-four percent of the respondents stated that expanding energy and mineral production was an *important* objective (fig. 12). Fifty-six percent stated that objective was *not important* or *neutral*. Thirty-eight percent of respondents believed that the objective is an appropriate role of the Forest Service. A slightly lower percent (35 percent) believed that achieving this objective is not an appropriate role for the Forest Service (See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The weak skewness to the higher numeric response for the objective and lack of skewness for the belief responses is consistent with means near *neutral* and high standard deviations for both the objective (mean = 3.28, s.d. = 1.37) and belief statement (mean = 3.05, s.d. = 1.44; See Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ($t = 4.09$; $p < .05$; Appendix table B1). In other words, on average, respondents were more likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Expanding Timber Production and Livestock Grazing

Statement 13, as it appeared in the 2003/2004 survey, was: "Expanding timber production and livestock grazing on forests and grasslands." The results illustrated in figure 13 and reported in Appendices A, B, and C are summarized below.

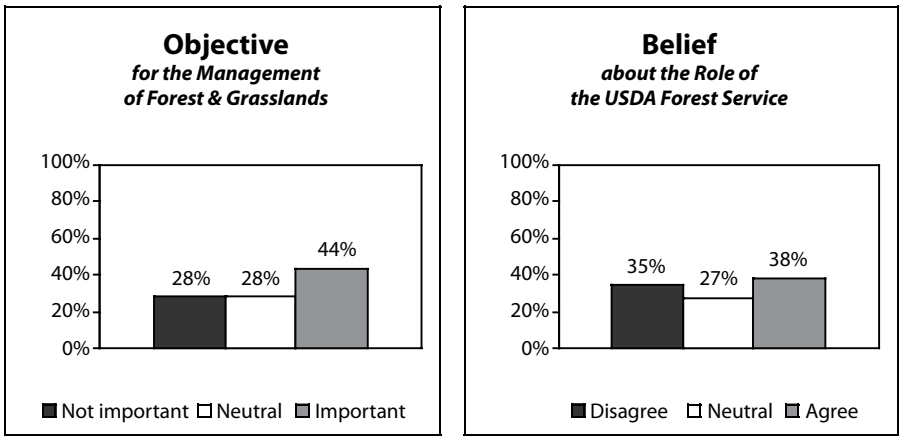


Figure 12. Importance of Expanding Energy and Mineral Production and Level of Agreement with the Corresponding Role of the USDA Forest Service.

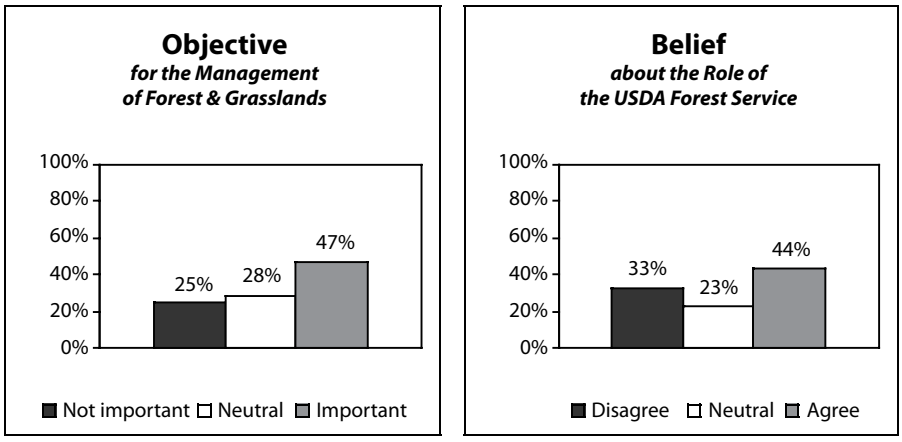


Figure 13. Importance of Expanding Timber Production and Livestock Grazing and Level of Agreement with the Corresponding Role of the USDA Forest Service.

Forty-seven percent of the respondents stated that expanding timber production and livestock grazing was an *important* objective (fig. 13). Fifty-three percent stated that the objective was *not important* or *neutral*. Forty-four percent of respondents believed that the objective is an appropriate role of the Forest Service, while fifty-six percent believed that achieving this objective is not an appropriate role for the Forest Service or responded *neutral* (See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The weak skewness to the higher numeric response for the objective and lack of skewness for the belief response is consistent with means near *neutral* and high standard deviations for both the objective (mean = 3.41, s.d. = 1.38) and the belief statement (mean = 3.20, s.d. = 1.47; See Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant (t = 3.37; $p < .05$; Appendix table B1). In other words, on average, respondents were more likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Simplifying the Permitting Process

Statement 14, as it appeared in the 2003/2004 survey, was: "Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation." The results illustrated in figure 14 and reported in Appendices A, B, and C are summarized below.

Forty-eight percent of the respondents stated that simplifying the permitting process was an *important* objective (fig. 14). Fifty-two percent stated that the objective was *not important* or *neutral*. Fifty-five percent of respondents believed that the objective is an appropriate role of the Forest Service. Twenty-two percent of respondents believed that achieving this objective is not an appropriate role for the Forest Service (See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The weak skewness to the higher numeric response for the objective and for the belief response is consistent with means near *neutral* and high standard deviations being high for both the objective (mean = 3.40, s.d. = 1.32) and the belief statement (mean = 3.56, s.d. = 1.40; See Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant (t = -2.13; $p < .05$; Appendix table B1). In other words, on average, respondents were less likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statements, however, the *p*-value of .053 for the objective means was very close to the cut-off of $p < .05$. This suggests that the difference between the rural and urban respondents deserves recognition (Appendix tables C1, C2).

Develop National Policies for Natural Resource Development

Statement 15, as it appeared in the 2003/2004 survey, was: "Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts)." The results

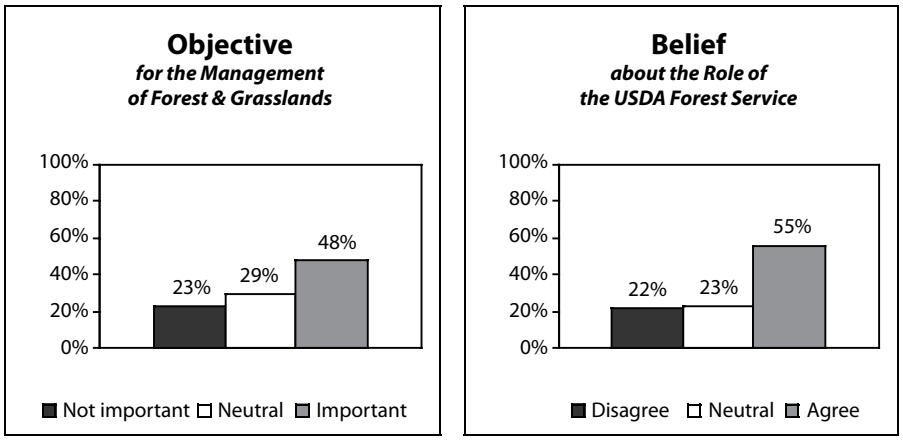


Figure 14. Importance of Simplifying the Permitting Process and Level of Agreement with the Corresponding Role of the USDA Forest Service.

illustrated in figure 15 and reported in Appendices A, B, and C are summarized below.

Eleven percent of the respondents stated that developing national policies that guide natural resource development was *not important* (fig. 15). Marginally more respondents (13 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (64 percent) and *agreed* with the corresponding belief statement (66 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements. Overall, the mean of the responses for the objective (mean = 3.90, s.d. = 1.20) and the belief statements (mean = 3.90, s.d. = 1.19) was higher than *neutral* (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Expand Commercial Recreation Services

Statement 16, as it appeared in the 2003/2004 survey, was: "Expanding commercial recreational services on forests and grasslands (for example, guide services or outfitters)." The results illustrated in figure 16 and reported in Appendices A, B, and C are summarized below.

Forty-two percent of the respondents stated that expanding commercial recreation services was an *important* objective (fig. 16). Fifty-eight percent stated that objective was *not important* or *neutral*. Forty-seven percent of respondents believed that the objective is an appropriate role of the Forest Service, while 53 percent believed that achieving this is not an appropriate role for the Forest Service or responded *neutral* (See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The weak skewness to the higher numeric response for the objective and lack of skewness for the belief response was consistent with means near *neutral* and high standard deviations for both the objective (mean = 3.33, s.d. = 1.19) and the belief statement (mean = 3.45, s.d. = 1.29; See Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant

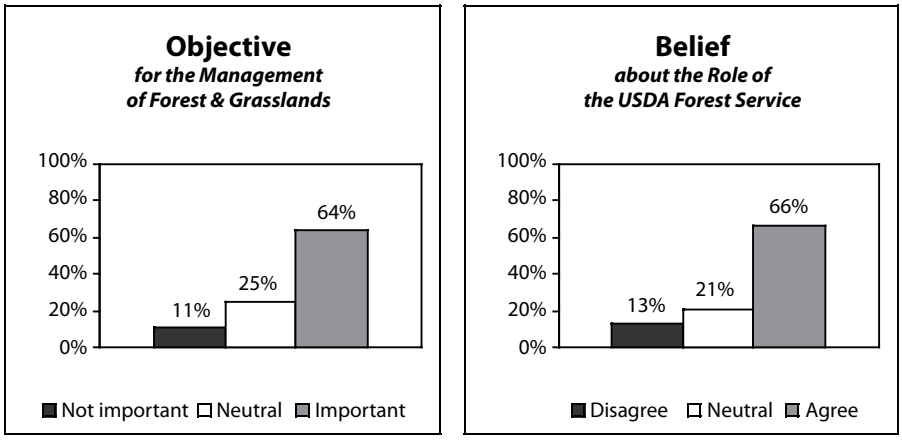


Figure 15. Importance of Developing National Policies that Guide Natural Resource Development and Level of Agreement with the Corresponding Role of the USDA Forest Service.

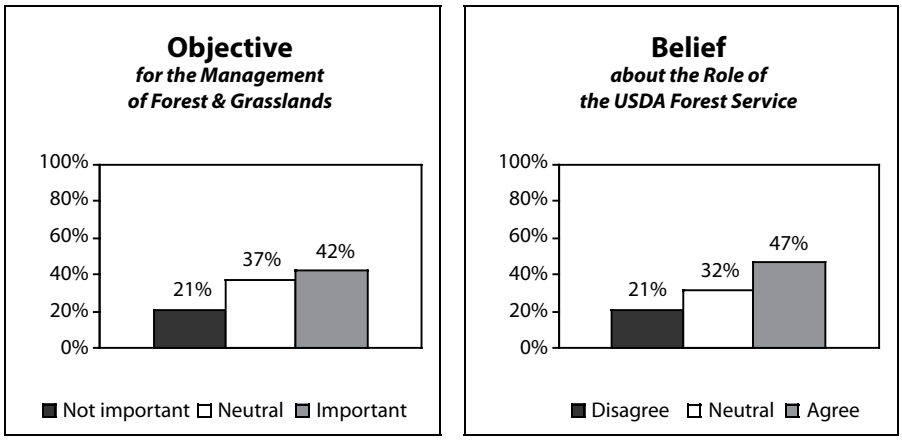


Figure 16. Importance of Expanding Commercial Recreation Services and Level of Agreement with the Corresponding Role of the USDA Forest Service.

($t = -2.53$; $p < .05$; Appendix table B1). In other words, on average, respondents were less likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Provide Companies with Forest Commodities

Statement 17, as it appeared in the 2003/2004 survey, was: "Providing companies with forest commodities in exchange for assistance in achieving management goals such as ecosystem restoration on public forests and grasslands." The results illustrated in figure 17 and reported in Appendices A, B, and C are summarized below.

Seventeen percent of the respondents stated that providing companies with forest commodities was *not important* (fig. 17). Marginally fewer (16 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (55 percent) and *agreed* with the corresponding belief statement (55 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, the means of the responses for both the objective (mean = 3.65, s.d. = 1.25) and the belief statement (mean = 3.62, s.d. = 1.23) were higher than *neutral* (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Develop Volunteer Programs for Resource Improvement

Statement 18, as it appeared in the 2003/2004 survey, was: "Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites)." The results illustrated in figure 18 and reported in Appendices A, B, and C are summarized below.

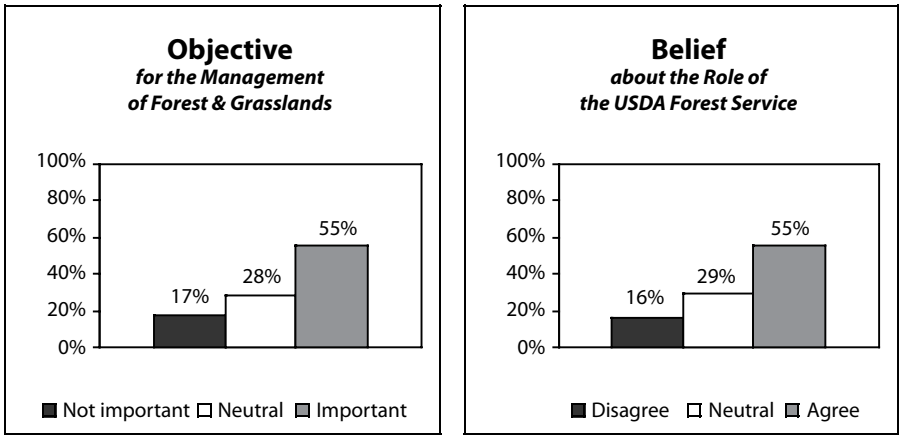


Figure 17. Importance of Providing Companies with Forest Commodities and Level of Agreement with the Corresponding Role of the USDA Forest Service.

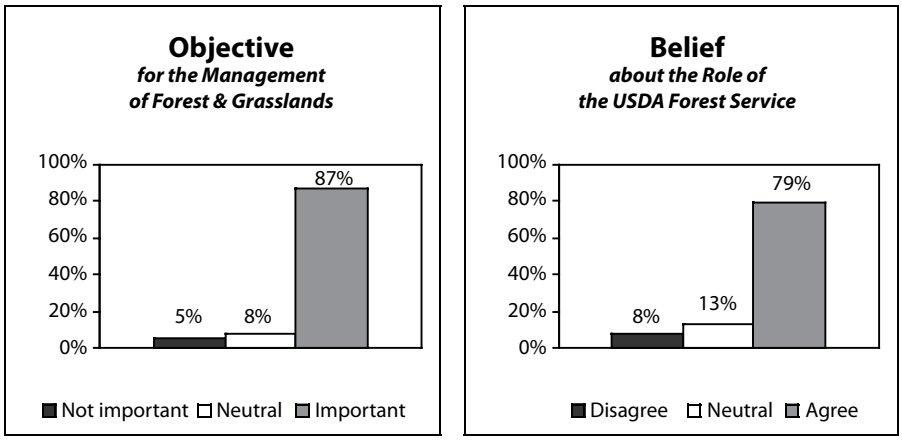


Figure 18. Importance of Developing Volunteer Programs to Maintain Resources and Level of Agreement with the Corresponding Role of the USDA Forest Service.

Eighty-seven percent of the respondents identified the objective statement as *important* (67 percent chose *very important*) and *agreed* with the corresponding belief statement (57 percent chose *strongly agree*) (fig. 18; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). Fewer respondents (79 percent) believed that the objective was an appropriate role for the Forest Service to play. The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, the mean of the responses was high and standard deviations were low for the objective (mean = 4.45, s.d. = 0.95) and the belief statement (mean = 4.22, s.d. = 1.11) (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ($t = 4.75$; $p < .05$; Appendix table B1). In other words, on average, respondents were more likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Inform the Public about Recreation Concerns

Statement 19, as it appeared in the 2003/2004 survey, was: Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use." The results illustrated in figure 19 and reported in Appendices A, B, and C are summarized below.

Eighty-five percent of the respondents stated that informing public about recreation concerns was an *important* objective (66 percent chose *very important*) and eighty-eight percent *agreed* with the corresponding belief statement that the objective was an appropriate role for the Forest Service (68 percent chose *strongly agree*) (fig. 19; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements. Overall, the mean of the responses was high and standard deviations were low for the objective (mean = 4.44, s.d. = 0.93) and the belief statement (mean = 4.50, s.d. = 0.88) (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Inform the Public about Environmental Impacts

Statement 20, as it appeared in the 2003/2004 survey, was: "Informing the public on the potential environmental impacts of all uses associated with forests and grasslands." The results illustrated in figure 20 and reported in Appendices A, B, and C are summarized below.

Seventy-eight percent of the respondents stated that informing the public on environmental impacts was an *important* objective (59 percent chose *very important*) and 84 percent of the respondents believed that the objective was an appropriate role for the Forest Service (64 percent chose *strongly agree*) (fig. 20; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements. Overall, the mean

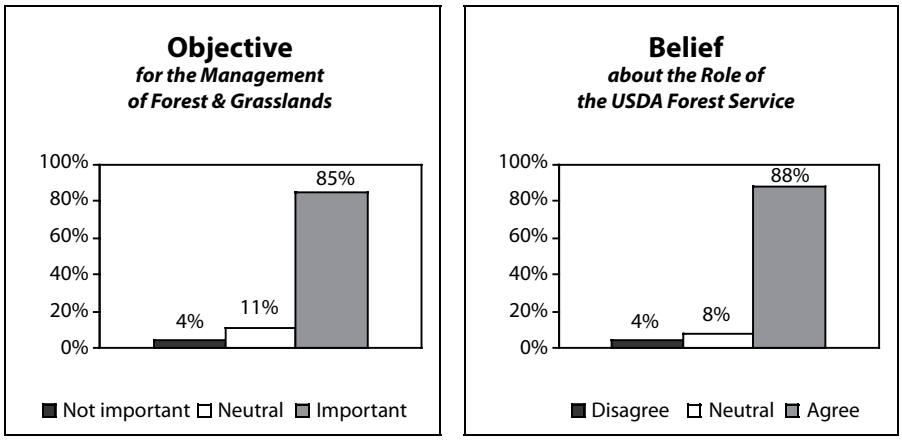


Figure 19. Importance of Informing Public about Recreation Concerns and Level of Agreement with the Corresponding Role of the USDA Forest Service.

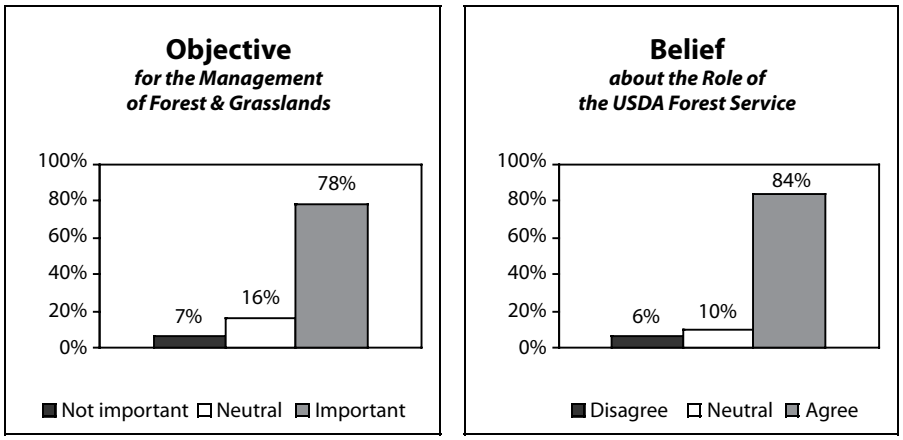


Figure 20. Importance of Informing Public on Environmental Impacts and Level of Agreement with the Corresponding Role of the USDA Forest Service.

of the responses was high and standard deviations were low for the objective (mean = 4.26, s.d. = 1.07) and the belief statement (mean = 4.38, s.d. = 0.99) (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant (t = -2.75; $p < .05$; Appendix table B1). In other words, on average, respondents were less likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Inform Public on Economic Value

Statement 21, as it appeared in the 2003/2004 survey, was: "Informing the public on the economic value received by developing our natural resources." The results illustrated in figure 21 and reported in Appendices A, B, and C are summarized below.

Ten percent of the respondents stated that informing public on economic value was *not important* (fig. 21). More respondents (15 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (70 percent) and *agreed* with the corresponding belief statement (65 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, means of the responses for both the objective (mean = 4.04, s.d. = 1.14) and the belief statements (mean = 3.86, s.d. = 1.27) were higher than *neutral* (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant (t = 3.32; $p < .05$; Appendix table B1). In other words, on average, individual respondents were more likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

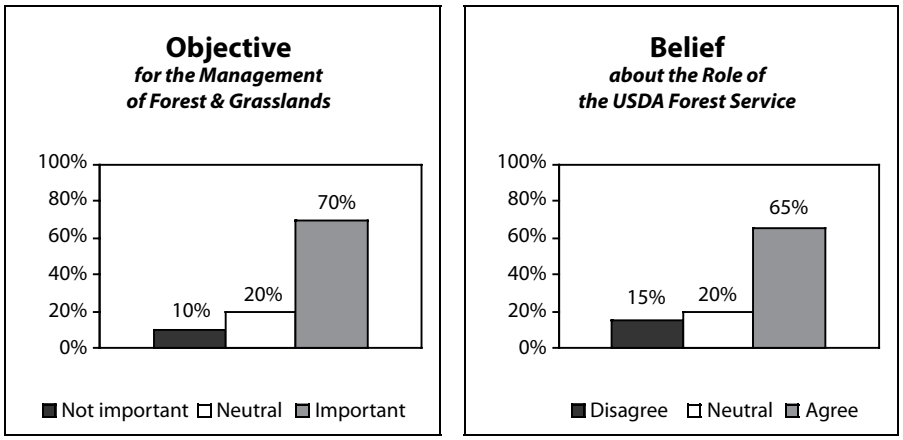


Figure 21. Importance of Informing Public on Economic Value and Level of Agreement with the Corresponding Role of the USDA Forest Service.

Give Responsibility to Local Community Advisory Boards

Statement 22, as it appeared in the 2003/2004 survey, was: "Allowing the transfer of responsibility for managing public lands to members of a local community advisory board." The results illustrated in figure 22 and reported in Appendices A, B, and C are summarized below.

Forty-four percent of the respondents stated that allowing transfer of responsibility to local community advisory boards was an *important* objective (fig. 22). Fifty-six percent stated that objective was *not important* or was *neutral*. Forty-seven percent of respondents believed that the objective is an appropriate role of the Forest Service, while 53 percent believed that achieving this is not an appropriate role for the Forest Service or responded *neutral* (See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The weak skewness to the higher numeric response for the objective and lack of skewness for the belief response are also apparent, as the means are near *neutral* and standard deviations high for both the objective (mean = 3.35, s.d. = 1.23) and the belief statement (mean = 3.32, s.d. = 1.32; See Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement, however, the *p*-value of .052 for the belief means is very close to the cut-off of $p < .05$. This suggests that the difference between the rural and urban respondents deserve recognition (Appendix tables C1 and C2).

Use Public Advisory Committees

Statement 23, as it appeared in the 2003/2004 survey, was: "Using public advisory committees to advise government agencies on public land management issues." The results illustrated in figure 23 and reported in Appendices A, B, and C are summarized below.

Fourteen percent of the respondents stated that using public advisory committees was *not important* (fig. 23). Fewer respondents (10 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (58 percent) and *agreed* with the corresponding belief statement (69 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). This distribution of responses resulted in means greater than *neutral* for both the objective and belief, although the mean for the belief (mean = 3.97, s.d. = 1.10) was higher than for

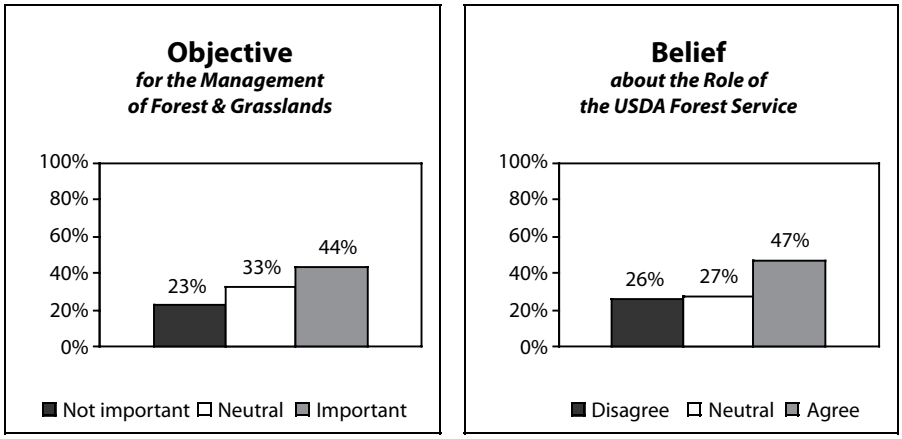


Figure 22. Importance of Allowing Transfer of Responsibility to Local Community Advisory Boards and Level of Agreement with the Corresponding Role of the USDA Forest Service.

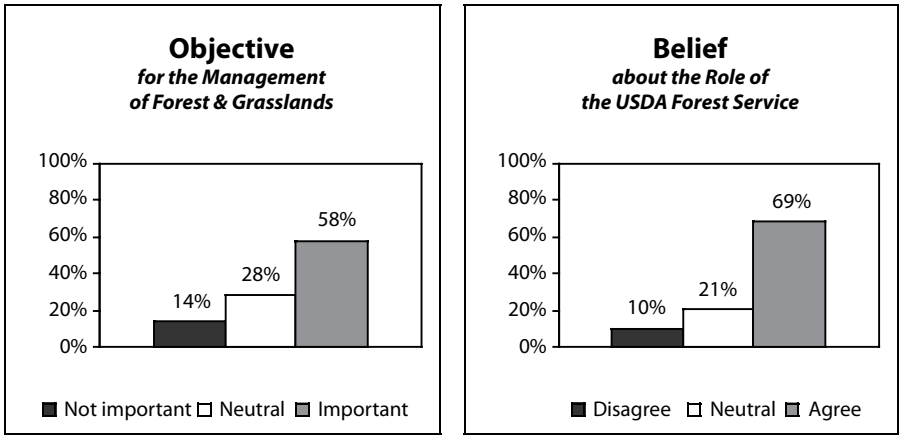


Figure 23. Importance of Using Public Advisory Committees and Level of Agreement with the Corresponding Role of the USDA Forest Service.

the objective (mean = 3.76, s.d. = 1.19) (See Appendix A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant (t = -4.10; $p < .05$; Appendix table B1). In other words, on average, respondents were less likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Allow Diverse Uses

Statement 24, as it appeared in the 2003/2004 survey, was: "Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat." The results illustrated in figure 24 and reported in Appendices A, B, and C are summarized below.

Ten percent of the respondents stated that allowing diverse uses was *not important* (fig. 24). Fewer (7 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (72 percent) and *agreed* with the corresponding belief statement (73 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, the means of the responses for both the objective (mean = 4.03, s.d. = 1.13) and the belief statement (mean = 4.11, s.d. = 1.05) were higher than *neutral* (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Make Management Decisions at Local Level

Statement 25, as it appeared in the 2003/2004 survey, was: "Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level." The results illustrated in figure 25 and reported in Appendices A, B, and C are summarized below.

Fourteen percent of the respondents stated that making management decisions at a local level was *not important* (fig. 25). Likewise, 14 percent of respondents believed that achieving the objective was

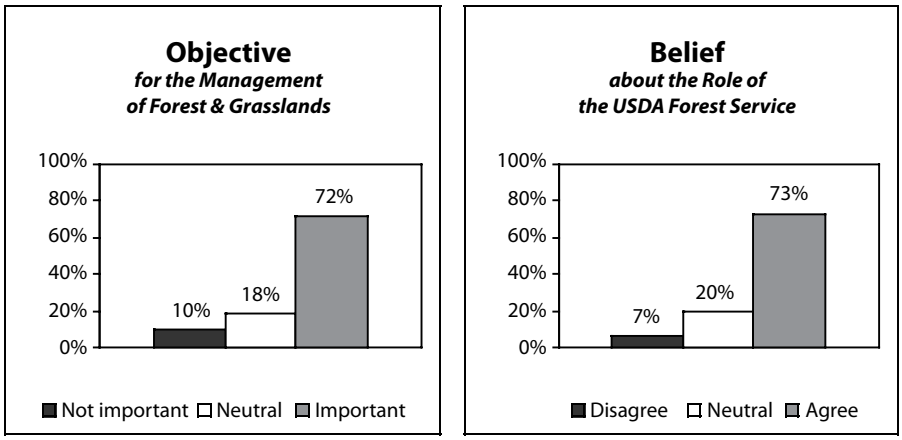


Figure 24. Importance of Allowing Diverse Uses and Level of Agreement with the Corresponding Role of the USDA Forest Service.

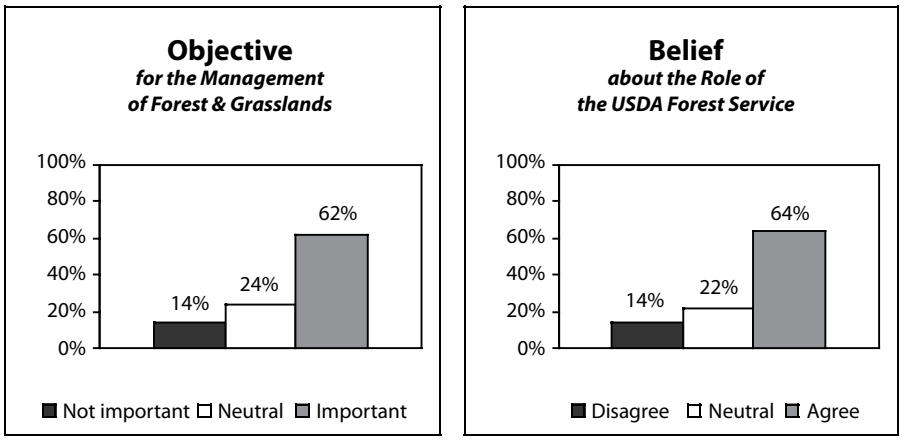


Figure 25. Importance of Making Management Decisions at a Local Level and Level of Agreement with the Corresponding Role of the USDA Forest Service.

not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (62 percent) and *agreed* with the corresponding belief statement (64 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, the means of the responses for both the objective (mean = 3.84, s.d. = 1.20) and the belief statement (mean = 3.84, s.d. = 1.29) were high (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Entry Fees

Statement 26, as it appeared in the 2003/2004 survey, was: "Supporting maintenance of recreational facilities on public land by collecting an entry fee." The results illustrated in figure 26 and reported in Appendices A, B, and C are summarized below

Twenty-one percent of the respondents stated that collecting entry fees was *not important* (fig. 26). Fewer (17 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (52 percent) and *agreed* with the corresponding belief statement (61 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). Note that a greater percent of respondents *agreed* with the belief statement that it was the role of the Forest Service to collect fees than they did that an objective for management of forests and grassland was to collect fees to support the maintenance of recreational facilities on public lands. The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, the means of the responses for both the objective (mean = 3.55, s.d. = 1.31) and the belief statements (mean = 3.72, s.d. = 1.29) were higher than *neutral* (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ($t = -3.47$; $p < .05$; Appendix table B1). In other words, on average, respondents were less likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, there was a statistically significant difference between the means of the responses for both the objective ($t = -2.43$, $p < .05$) and belief ($t = -3.65$, $p < .05$) statement (Appendix tables C1, C2). The objective statement response mean for urban residents (mean = 3.61, s.d = 1.28) is higher than the response mean for rural residents (mean = 3.30, s.d. = 1.41). The same pattern holds for the belief statement for urban (mean = 3.83, s.d. = 1.22) and rural residents (mean = 3.32, s.d. = 1.47).

Increase Law Enforcement Efforts

Statement 27, as it appeared in the 2003/2004 survey, was: "Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources." The results illustrated in figure 27 and reported in Appendices A, B, and C are summarized below.

Thirteen percent of the respondents stated that increasing law enforcement efforts was *not important* (fig. 27). Even fewer (9 percent) believed that achieving the objective was not an appropriate

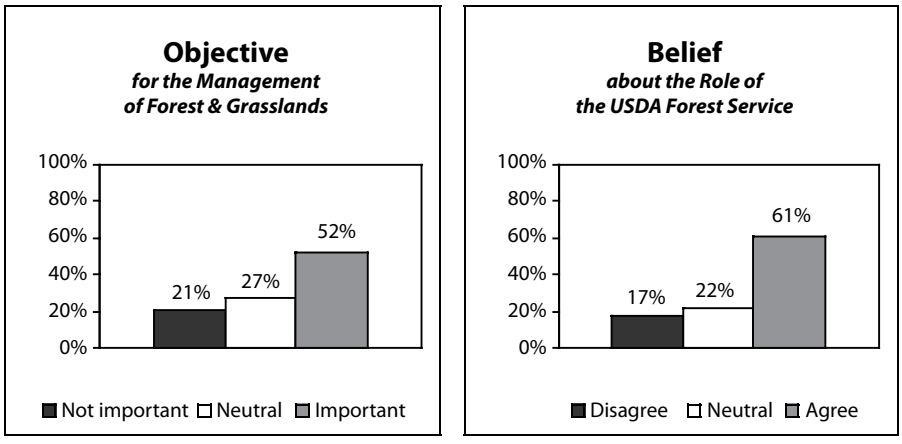


Figure 26. Importance of Collecting Entry Fees and Level of Agreement with the Corresponding Role of the USDA Forest Service.

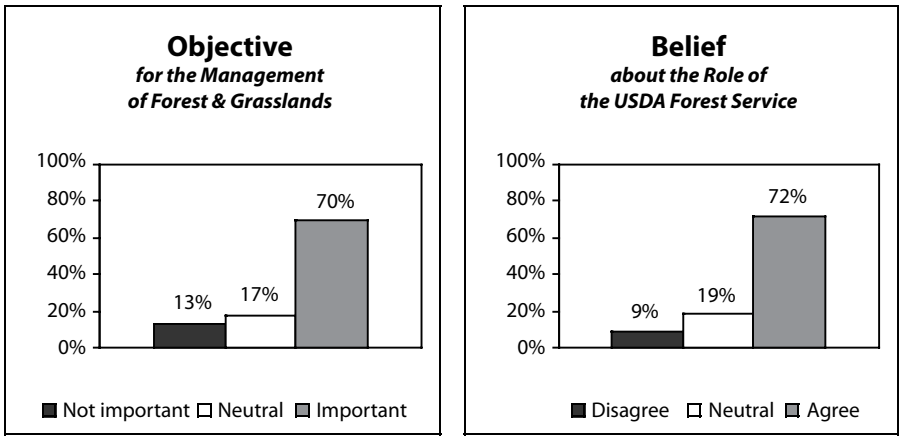


Figure 27. Importance of Increasing Law Enforcement Efforts and Level of Agreement with the Corresponding Role of the USDA Forest Service.

role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (70 percent) and *agreed* with the corresponding belief statement (72 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statement. Overall, the means of the responses for both the objective (mean = 4.01, s.d. = 1.20) and the belief statement (mean = 4.11, s.d. = 1.11) were high (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ($t = -2.19$; $p < .05$; Appendix table B1). In other words, on average, respondents were less likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses for the objective statement were not statistically different (Appendix table C1). The mean of the responses for the belief statement, however, was statistically different ($t = -2.16$, $p < .05$; Appendix table C2). The mean of the responses for urban residents (mean = 4.16, s.d. = 1.07) was higher than the mean of the responses for rural residents (mean = 3.90, s.d. = 1.25). This suggests that more urban residents believe that increasing law enforcement efforts is an appropriate role of the Forest Service.

Use of Management Tools to Reduce Wildfires, in General

Statement 28, as it appeared in the 2003/2004 survey, was: "Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general." The results illustrated in figure 28 and reported in Appendices A, B, and C are summarized below.

Eight percent of the respondents stated that using management tools to reduce wildfires in general was *not important* (fig. 28). Fewer (7 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (73 percent) and *agreed* with the corresponding belief statement (82 percent; See

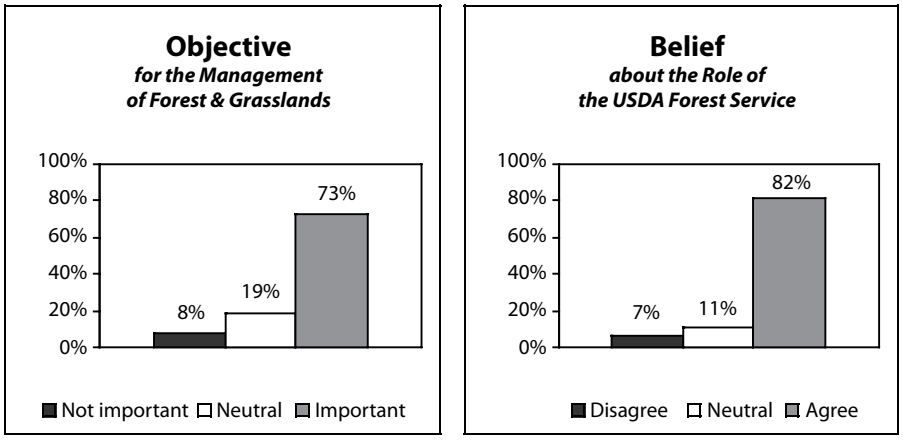


Figure 28. Importance of Using Management Tools to Reduce Wildfires in General and Level of Agreement with the Corresponding Role of the USDA Forest Service.

Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements. Overall, the means of the responses for both the objective (mean = 4.08, s.d. = 1.10) and the belief statement (mean = 4.31, s.d. = 1.04) were high (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses were statistically significant (t = -4.58; $p < .05$; Appendix table B1). In other words, on average, respondents were less likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Use of Management Tools to Reduce Wildfires, around Communities

Statement 29, as it appeared in the 2003/2004 survey, was: "Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities." The results illustrated in figure 29 and reported in Appendices A, B, and C are summarized below.

Nine percent of the respondents stated that using management tools to reduce wildfires around communities was *not important* (fig. 29). Marginally more respondents (10 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (65 percent) and *agreed* with the corresponding belief statement (73 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements. Overall, the means of the responses for both the objective (mean = 3.91, s.d. = 1.11) and the belief statement (mean = 4.03, s.d. = 1.11) were higher than *neutral* (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses were statistically significant (t = -2.63; $p < .05$; Appendix table B1). In other words, on average, respondents were less likely to think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Reducing Invasive Species

Statement 30, as it appeared in the 2003/2004 survey, was: "Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests)." The results illustrated in figure 30 and reported in Appendices A, B, and C are summarized below.

Thirteen percent of the respondents stated that reducing the spread of invasive species was *not important* (fig. 30). A slightly lower percent (11 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play (*disagreed*). The majority of the respondents identified the objective statement as *important* (65 percent) and *agreed* with the corresponding belief statement (69 percent; See Appendix tables A1 and A2 for detailed percents and corresponding frequencies). The

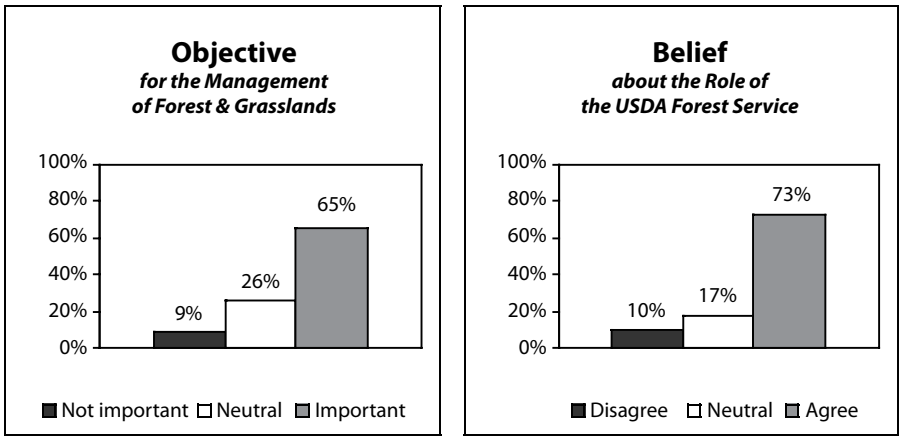


Figure 29. Importance of Using Management Tools to Reduce Wildfires Around Communities and Level of Agreement with the Corresponding Role of the USDA Forest Service.

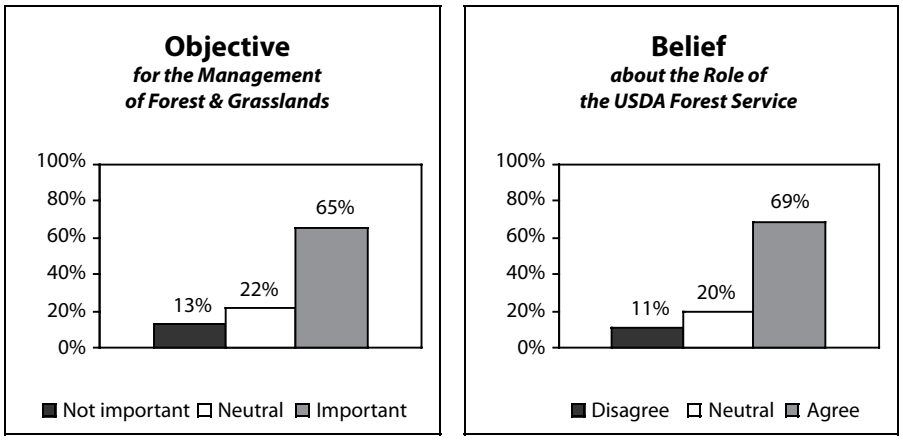


Figure 30. Importance of Reducing Spread of Invasive Species and Level of Agreement with the Corresponding Role of the USDA Forest Service.

frequency of responses rated as *important* is greater than the sum of the responses for *not important* and *neutral* for both the objective and belief statements. Overall, the means of the responses for both the objective (mean = 3.91, s.d. = 1.19) and the belief statement (mean = 4.00, s.d. = 1.18) were higher than *neutral* (Appendix table A3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant.

For urban versus rural residents, the means of the responses were not statistically significantly different for either the objective or the belief statement (Appendix tables C1, C2).

Topical Groupings of Objective/ Belief Statements

This section presents the survey results for the objectives and belief statements grouped according to overarching categories: Preservation/conservation, information sharing/public involvement, economic development and community issues, cultural and traditional, access, and regulatory issues. The objective statements were grouped into these non-exclusive categories by the authors. Table 2 shows the survey statements that have been included in each category. Statement numbers correspond to the numbers in the original survey instrument (see Appendix D). Although it is possible to group the categories differently, the categorization shown in table 2 is seen as useful for discussing similarities and differences among statements for the purpose of this report.

Preservation/Conservation

Preservation/conservation statements addressed how forests and grasslands sustain the health, viability, and productivity of their natural systems. Statements in the VOBA survey referring to preservation/conservation issues such as ecosystems, water resources, grazing, wildlife habitat, wilderness, law enforcement protecting resources, fire, and/or invasive species were included. Although resource management specialists make a distinction between preservation and conservation, the broader American public frequently used the two terms interchangeably. Means and standard deviations for this category are reported in table 3 and percents are reported in Appendix table A4.

All of the preservation/conservation objective statements were considered by the American public to be important (mean range from 3.91 to 4.60) and to be appropriate roles of the Forest Service (mean range from 3.81 to 4.56). These high means support the conclusion that land preservation and conservation are important to the American public. Especially noteworthy was the strong support for conserving and protecting forests and grasslands that are the source of our water resources (objective mean = 4.60, belief mean = 4.56). Protection of ecosystems was also seen as an important objective (mean = 4.50) and an appropriate role for the Forest Service (mean = 4.46). The fact that the belief responses were statistically higher than the objective responses according to paired *t*-test results (see table 2 and Appendix B) on both wildland fire statements suggests that the American public sees reducing the risk of wildfire as a particularly appropriate role for the Forest Service. The same can be said for increasing safety and protecting resources.

Information Sharing/Public Involvement

Statements dealing with information sharing/ public involvement refer to how the public exchanges information about, and participates in, the management of forests and grasslands.

Information sharing statements included informing the public about recreation concerns, potential environmental impacts of all uses, or the economic

Table 3—Means and standard deviations for Version 2 preservation/conservation objective and belief statements [a].

Preservation / conservation statements	Objective		Belief	
	Mean	SD	Mean	SD
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	4.60	0.80	4.56	0.88
7. Protecting ecosystems, and wildlife and fish habitats.	4.50	1.01	4.46	1.02
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	4.22	1.06	4.21	1.08
10. Reducing loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.*	3.99	1.29	3.81	1.35
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.03	1.13	4.11	1.05
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.*	4.01	1.20	4.11	1.11
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.*	4.08	1.10	4.31	1.04
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities. *	3.91	1.11	4.03	1.11
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).	3.91	1.19	4.00	1.18

* Paired *t*-test results (See Appendix B) showed a statistically significant difference between the objective and belief statements.

[a] Objective and belief were measured on a 5-pt. scale (objective, 1 = *not at all important* and 5 = *very important*; belief, 1 = *strongly disagree*, and 5 = *strongly agree*). See Appendices for detailed results. Results are weighted for age, sex, race, urban/rural, and education.

value received by developing our natural resources. Public involvement statements included information regarding volunteer programs, local community advisory boards, public advisory committees, and how to make decisions at the local level. Means and standard deviations for this group are reported in table 4 and percents are reported in Appendix table A5.

Providing information to the public about recreation concerns on forests and grasslands, potential environmental impacts of all uses associated with forests and grasslands, and economic value received from natural resource development were each considered important objectives (mean ≥4.04) and appropriate roles for the Forest Service (mean ≥3.86). Objective/belief statements concerning opportunities for public involvement vary in their level of support. The public, on average, ranged from neutral to supportive for all of statements (means ranged from 3.32 to 4.45). Developing volunteer programs, for example, received widespread support (objective mean = 4.45, belief mean = 4.22), whereas allowing the local community advisory boards to have more responsibility was, on average, closer to neutral (objective mean = 3.35, belief mean = 3.32). In four of the seven members of this category, the objective responses were statistically significantly different from the belief responses according to paired *t*-test results (see table 4 and Appendix B). Moreover, all means were greater than 3.32, which suggests that the American public has strong and positive opinions about information sharing and public involvement with respect to forests and grasslands.

Table 4—Means and standard deviations for Version 2 information sharing/public involvement objective and belief statements [a].

Information sharing/public involvement statements	Objective		Belief	
	Mean	SD	Mean	SD
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).*	4.45	0.95	4.22	1.11
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	4.44	0.93	4.50	0.88
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.*	4.26	1.07	4.38	0.99
21. Informing the public on the economic value received by developing our natural resources.*	4.04	1.14	3.86	1.27
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	3.35	1.23	3.32	1.32
23. Using public advisory committees to advise government agencies on public land management issues.*	3.76	1.19	3.97	1.10
25. Making management decisions concerning the use of forests and grasslands at the local level rather then the national level.	3.84	1.20	3.84	1.29

* Paired *t*-test results (See Appendix B) showed a statistically significant difference between the objective and belief statements.

[a] Objective and belief were measured on a 5-pt. scale (objective, 1 = *not at all important* and 5 = *very important*; belief, 1 = *strongly disagree*, and 5 = *strongly agree*). See Appendices for detailed results. Results are weighted for age, sex, race, urban/rural, and education.

Economic Development and Community Issues

VOBA economic development statements addressed activities on or near forests and grasslands that have an economic component to them (for example, resource extraction and informing the public on the economic value received by developing our natural resources). Means and standard deviations for this group are reported in table 5 and percents are reported in Appendix table A6.

These objective/belief statements addressed extractive uses of public lands (for example, mining, grazing, and timber removals) in addition to development of natural areas. Commercial concerns, such as expanding commercial recreational services and providing companies with forest commodities, are also included. The American public, on average, was neutral to somewhat supportive of these objectives/beliefs (means range from 3.05 to 4.11). The American public was more in favor of resource extraction than resource activity expansion when such activities were placed in the context of adjacent community needs, ecosystem restoration, or multiple uses of forests and grasslands. Based on the paired *t*-test results, the belief responses were statistically significantly less than the objective responses for five of the seven statements (see table 5 and Appendix B). This suggests that the public is less supportive of managing for these activities or expanding resource extraction on forests and grasslands as a role of the Forest Service than they are of extractive activities being conducted overall.

Cultural/Traditional

The VOBA cultural/traditional statements addressed activities on forests and grasslands that were perceived as being traditional in some communities (in other words, diverse uses) or having cultural meaning to participants (in other words, ceremonial). Means and standard deviations for this group are reported in table 6 and percents are reported in Appendix table A7.

Items in this category were consistently considered important and appropriate roles for the Forest Service.

Table 5—Means and standard deviations for Version 2 economic development and community issues objective and belief statements [a].

Economic development statements	Objective		Belief	
	Mean	SD	Mean	SD
11. Providing natural resources from forests and grassland to support communities dependent on grazing, energy production, mining or timber harvesting.*	3.81	1.21	3.50	1.38
12. Expanding energy and mineral production on forests and grasslands.*	3.28	1.37	3.05	1.44
13. Expanding timber production and livestock grazing on forests and grasslands.*	3.41	1.38	3.20	1.47
16. Expanding commercial recreational services on forests and grasslands (for example, guide services or outfitters).*	3.33	1.19	3.45	1.29
17. Providing companies with forest commodities in exchange for assistance in achieving management goals such as ecosystem restoration on public forests and grasslands.	3.65	1.25	3.62	1.23
21. Informing the public on the economic value received by developing our natural resources.*	4.04	1.14	3.86	1.27
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.03	1.13	4.11	1.05

* Paired *t*-test results (See Appendix B) showed a statistically significant difference between the objective and belief statements.

[a] Objective and belief were measured on a 5-pt. scale (objective, 1 = *not at all important* and 5 = *very important*; belief, 1 = *strongly disagree*, and 5 = *strongly agree*). See Appendices for detailed results. Results are weighted for age, sex, race, urban/rural, and education.

Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access was an important objective (mean = 3.91) and an appropriate role for the Forest Service (mean = 3.73). Objective means for preserving the cultural uses of forests and grasslands (mean = 3.91) and providing natural resources from forests and grasslands to support communities (mean = 3.81) were noticeably higher than the corresponding belief means (mean = 3.73; mean = 3.50). Allowing for diverse uses of forests and grasslands was considered an important (mean = 4.03) and appropriate role for the Forest Service (mean = 4.11). According to paired *t*-test results (see table 6 and Appendix B), for both of the statements in the cultural/traditional category, the objective responses were statistically significantly higher than the belief responses. This result suggests that while respondents see cultural/traditional uses as an appropriate land management objective and an appropriate role of the Forest Service, they place less emphasis on cultural/traditional as a management role of the Forest Service.

Access

VOBA access statements addressed various aspects of how the public traverses forests and grasslands. Statements related to access in the VOBA survey referred to developing and maintaining trails, developing new paved roads, managing for motorized and non-motorized recreation, and/or designating separate trails for specific uses. Means and standard deviations for this group are reported in table 7, and percents are reported in Appendix table A8.

The American public was divided in its opinion about the provision of access. This is evidenced by the difference between support for trail development and maintenance for motorized vehicles (objective mean = 3.27, belief mean = 3.32) and non-motorized vehicles (objective mean = 4.02, belief mean = 3.98). Although the public, on average, was neutral concerning developing new paved roads (objective mean = 3.02, belief mean = 3.17), it is noteworthy that this objective had the lowest mean of any objective in Version 2 of the VOBA survey. The fact that the belief responses were statistically significantly higher than the objective

Table 6—Means and standard deviations for Version 2 cultural and traditional objective and belief statements [a].

	Objective		Belief	
Cultural/traditional statements	**Mean**	**SD**	**Mean**	**SD**
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.*	3.91	1.23	3.73	1.34
11. Providing natural resources from forests and grassland to support communities dependent on grazing, energy production, mining or timber harvesting.*	3.81	1.21	3.50	1.38

*Paired *t*-test results (See Appendix B) showed a statistically significant difference between the objective and belief statements.
[a] Objective and belief were measured on a 5-pt. scale (objective, 1 = *not at all important* and 5 = *very important*; belief, 1 = *strongly disagree*, and 5 = *strongly agree*). See Appendices for detailed results. Results are weighted for age, sex, race, urban/rural, and education.

Table 7—Means and standard deviations for Version 2 access objective and belief statements [a].

	Objective		Belief	
Access statements	**Mean**	**SD**	**Mean**	**SD**
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.*	4.01	1.31	4.15	1.21
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	3.27	1.44	3.32	1.47
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing, or horseback riding.	4.02	1.13	3.98	1.20
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	3.89	1.24	3.88	1.24
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.*	3.02	1.51	3.17	1.52

* Paired *t*-test results (See Appendix B) showed a statistically significant difference between the objective and belief statements.
[a] Objective and belief were measured on a 5-pt. scale (objective, 1 = *not at all important* and 5 = *very important*; belief, 1 = *strongly disagree*, and 5 = *strongly agree*). See Appendices for detailed results. Results are weighted for age, sex, race, urban/rural, and education.

Table 8—Means and standard deviations for Version 2 regulatory issues objective and belief statements [a].

	Objective		Belief	
Regulatory issues statements	**Mean**	**SD**	**Mean**	**SD**
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.*	4.01	1.31	4.15	1.21
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	3.89	1.24	3.88	1.24
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.*	3.40	1.32	3.56	1.40
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.90	1.20	3.90	1.19
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.*	3.55	1.31	3.72	1.29
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.*	4.01	1.20	4.11	1.11

* Paired *t*-test results (See Appendix B) showed a statistically significant difference between the objective and belief statements.

[a] Objective and belief were measured on a 5-pt. scale (objective, 1 = *not at all important* and 5 = *very important*; belief, 1 = *strongly disagree*, and 5 = *strongly agree*). See Appendices for detailed results. Results are weighted for age, sex, race, urban/rural, and education.

responses according to paired *t*-test results (see table 7 and Appendix B) suggests that the public believes that if paved roads are to be built, it is an appropriate role of the Forest Service to manage for this objective. In general, the public sees managing access to forests and grasslands as an appropriate agency role.

Regulatory Issues

Statements related to regulatory issues in the VOBA survey referred to land management actions and resource policy development (for example, managing use of motorized off-highway vehicles, designating recreation trails for specific use, simplifying the permitting process, developing national policies, collecting entry fees, or increasing law enforcement). Means and standard deviations for this group are reported in table 8 and percents are reported in Appendix table A9.

Objective/belief statements involving management through regulation consistently resulted in moderate to strong support (means range from 3.40 to 4.15). Notably, increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources was an important objective (mean = 4.01) and an appropriate role of the USDA Forest Service (mean = 4.11). Based on the paired *t*-test results, the belief for two-thirds of the statements in this category were statistically significantly higher than the objective responses, (see table 8 and Appendix B). This suggests that respondents see these regulation actions as appropriately conducted by the Forest Service.

Objective and Belief Statements Ordered by Percentage

In Version 2, the majority of respondents evaluated most of the objective statements (23 of 30 statements) as *important* (fig. 31). The highest percentage of respondents rated the developing new paved roads objective as *not important* (40 percent). The six remaining statements showed less of a consensus. Although it did not achieve a majority, more respondents rated the objective as *important* as rated it as *not important*: developing trail systems for motorized users, expanding energy and mineral production, expanding timber production and livestock grazing, simplifying the permitting process, expanding commercial recreation services, and allowing transfer of responsibility to local community advisory boards.

The majority of respondents believed most of the statements reflected appropriate roles for the USDA Forest Service (24 of 30 statements) (fig. 32). The remaining six statements had a greater percentage of Northeastern Area respondents agreeing than disagreeing with the belief statement: developing new paved roads, developing and maintaining continuous trail systems for motorized vehicles, expanding timber production and livestock grazing, expanding energy and mineral production, expanding commercial recreation services, and allowing transfer of responsibility to local community advisory boards.

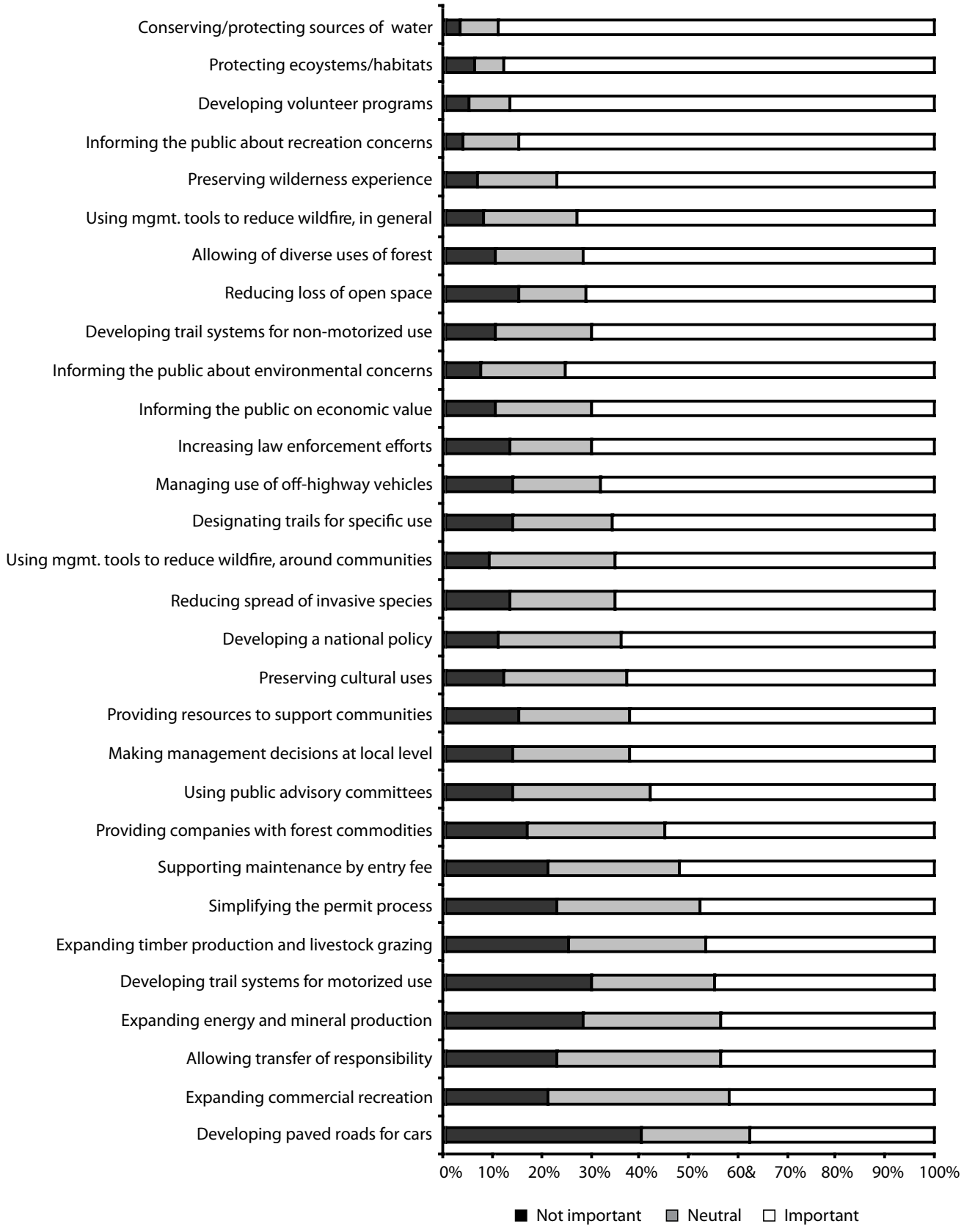


Figure 31. VOBA 2 Objectives Ordered by percentage of Importance.

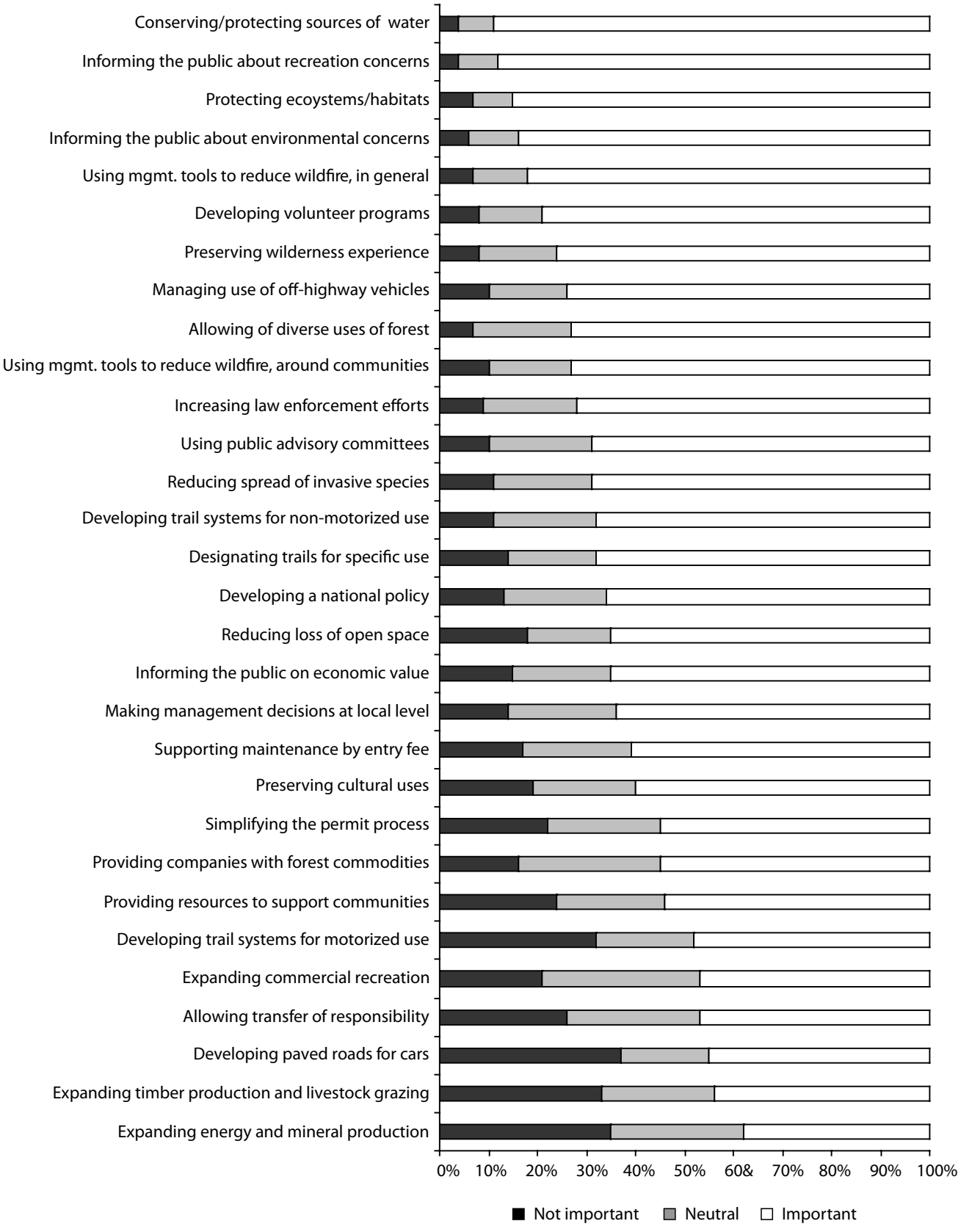


Figure 32. VOBA 2 Beliefs Ordered by percentage of Agreement.

References

Cordell, H. K. 2004. Outdoor recreation for 21st century America. Venture.

Cordell, H. K.; Betz, C. J.; Green, G. T. 2002. Recreation and the environment as cultural dimensions in contemporary American society. Leisure Sciences. 24(1): 13-41.

Cordell, K. C. and C. Overdevest. 2001. Footprints on the land. Sagamore.

Holt, D. and T.M.F. Smith. 1979. Post-stratification. Journal of the Royal Statistical Society. A-142: 33-46.

Martin, I. M.; Bender, H.W.; Martin, W. E.; Shields, D. 1998. The impact of goals on the "values→attitudes→behaviors" framework. Proceedings: Decisions Science Institute. Las Vegas, Nevada: 126-129.

Shields, D. J.; Martin, I. M.; Martin, W. E.; and Haefele, M. A. 2002. Survey results of the American public's values, objectives, beliefs, and attitudes regarding forests and grasslands: A technical document supporting the 2000 USDA Forest Service RPA Assessment. Gen. Tech. Rep. RMRS-GTR-95. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 111p.

Appendix A: Supporting Tables—Descriptive Statistics for Entire Sample

Table A1—Percents of responses in each response category for Version 2 objective and belief statements.[a, b]

Statement	**Objectives**[c] for the management of forests and grasslands (percent)					**Beliefs**[d, e] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	8.6	5.3	17.9	13.0	55.3	6.8	3.1	16.5	15.5	58.1
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	17.3	13.1	24.7	16.0	29.1	16.7	14.9	20.3	16.0	32.1
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	4.4	5.5	20.2	24.1	45.8	6.0	5.2	21.4	19.6	47.8
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	7.4	6.2	20.1	22.1	44.2	7.8	6.0	18.4	25.6	42.3
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	22.5	18.2	21.7	10.0	27.7	20.8	16.1	18.2	15.1	29.8
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	1.2	1.5	8.0	14.3	74.9	2.4	1.7	7.3	14.5	74.1

Table A1—Percents of responses in each response category for Version 2 objective and belief statements, continued. [a, b]

Statement	**Objectives**[c] for the management of forests and grasslands (percent)					**Beliefs**[d, e] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7. Protecting ecosystems, and wildlife and fish habitats.	4.3	2.0	6.3	14.6	72.8	4.0	2.6	8.1	14.4	70.9
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	3.7	3.0	15.8	22.4	55.1	3.3	4.7	15.8	20.1	56.1
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	6.2	6.1	25.0	15.7	47.1	9.0	10.4	21.0	17.8	41.8
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	8.3	6.5	14.1	20.2	50.8	10.3	7.9	16.9	20.8	44.1
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	5.6	9.1	22.9	23.7	38.7	13.0	11.0	21.7	21.5	32.7
12. Expanding energy and mineral production on forests and grasslands.	14.4	13.8	27.9	17.3	26.6	21.6	13.3	26.6	15.3	23.3
13. Expanding timber production and livestock grazing on forests and grasslands.	13.1	11.8	28.4	14.3	32.3	19.0	14.4	22.5	15.4	28.7
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	11.9	11.5	28.6	20.5	27.6	13.4	8.8	22.9	18.2	36.7

Table A1—Percents of responses in each response category for Version 2 objective and belief statements, continued. [a, b]

Statement	Objectives[c] for the management of forests and grasslands					Beliefs[d, e] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	6.3 percent	4.9 percent	25.1 percent	20.4 percent	43.3 percent	5.7 percent	6.8 percent	21.4 percent	24.4 percent	41.7 percent
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	8.8 percent	12.3 percent	37.4 percent	20.5 percent	21.1 percent	10.5 percent	10.2 percent	32.0 percent	18.4 percent	28.9 percent
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	6.9 percent	10.4 percent	28.1 percent	19.4 percent	35.1 percent	8.5 percent	7.2 percent	29.4 percent	23.6 percent	31.3 percent
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	3.2 percent	1.7 percent	8.4 percent	20.1 percent	66.6 percent	4.6 percent	4.0 percent	12.8 percent	21.5 percent	57.0 percent
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	2.3 percent	2.0 percent	11.3 percent	18.7 percent	65.7 percent	1.9 percent	2.2 percent	8.2 percent	19.4 percent	68.3 percent
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	4.0 percent	2.8 percent	15.8 percent	18.1 percent	59.4 percent	2.7 percent	3.6 percent	10.4 percent	19.9 percent	63.5 percent

Table A1—Percents of responses in each response category for Version 2 objective and belief statements, continued. [a, b]

Statement	**Objectives**[c] for the management of forests and grasslands (percent)					**Beliefs**[d, e] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
21. Informing the public on the economic value received by developing our natural resources.	4.4	5.7	19.7	21.9	48.3	8.0	6.5	20.1	22.0	43.3
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	9.3	13.4	33.4	20.8	23.2	13.0	13.4	27.1	22.4	24.2
23. Using public advisory committees to advise government agencies on public land management issues.	5.0	9.3	27.9	20.5	37.3	3.7	6.0	21.3	27.0	42.0
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.5	5.9	17.6	26.0	46.0	3.0	4.0	20.4	24.4	48.1
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	5.4	8.2	23.9	22.1	40.4	9.2	4.9	21.8	21.0	43.1
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	9.5	11.8	26.8	18.4	33.5	9.2	7.7	21.7	24.1	37.3
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	4.8	8.6	17.0	20.6	49.0	3.6	5.4	18.5	21.3	51.1
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	3.9	4.6	18.9	24.7	47.9	3.9	2.8	11.3	22.4	59.6

Table A1—Percents of responses in each response category for Version 2 objective and belief statements, continued. [a, b]

Statement	**Objectives**[c] for the management of forests and grasslands (percent)					**Beliefs**[d, e] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	4.2	5.0	26.3	24.5	39.9	4.4	5.5	16.8	28.6	44.6
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests.	5.2	7.5	22.3	21.4	43.7	5.6	5.6	19.5	22.2	47.1

[a]Overall n = 3,503. The number of responses for each individual statement ranged from 642 to 739 resulting in a confidence level of at least 95 percent with a confidence interval of ±4 percent for all objective and belief statements.
[b]Table entries contain percents weighted by age, sex, race, urban/rural, and education. Percents may not total to 100.0 due to rounding.
[c]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.
[d]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused.*
[e]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Table A2—Frequencies of responses in each response category for Version 2 objective and belief statements. [a, b]

Statement	**Objectives**[c] for the management of forests and grasslands					**Beliefs**[d, e] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	52	32	109	80	339	42	19	102	96	359
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	115	89	167	108	196	112	99	136	107	214
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	26	33	121	144	275	36	31	129	119	289
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	42	36	115	126	253	45	35	107	149	246
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	151	122	145	67	185	140	108	122	102	200
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	8	10	52	93	486	15	11	48	94	480

Table A2—Frequencies of responses in each response category for Version 2 objective and belief statements, continued. [a, b]

Statement	**Objectives**[c] for the management of forests and grasslands					**Beliefs**[d, e] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7. Protecting ecosystems, and wildlife and fish habitats.	27	13	40	92	457	25	16	51	91	445
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	24	19	101	143	353	21	30	102	130	363
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	39	38	158	99	297	57	66	132	112	264
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	56	44	95	136	341	70	54	115	142	300
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	35	57	144	148	243	82	69	136	135	206
12. Expanding energy and mineral production on forests and grasslands.	92	87	177	110	169	140	86	173	99	151
13. Expanding timber production and livestock grazing on forests and grasslands.	89	80	193	97	219	131	99	155	106	197
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	75	72	180	129	174	86	57	147	117	236

Table A2—Frequencies of responses in each response category for Version 2 objective and belief statements, continued. [a, b]

Statement	Objectives[c] for the management of forests and grasslands					Beliefs[d, e] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	40	31	158	129	273	36	44	137	156	267
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	53	73	223	122	125	64	62	195	112	176
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	46	69	186	129	233	58	49	199	160	211
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	19	10	51	120	400	28	24	77	130	344
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	14	12	71	117	411	12	14	53	124	438
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	25	17	99	113	371	17	22	64	123	392

Table A2—Frequencies of responses in each response category for Version 2 objective and belief statements, continued. [a, b]

Statement	Objectives[c] for the management of forests and grasslands					Beliefs[d, e] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
21. Informing the public on the economic value received by developing our natural resources.	27	35	123	136	300	49	40	124	136	267
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	54	78	194	121	135	76	78	158	130	141
23. Using public advisory committees to advise government agencies on public land management issues.	32	58	174	128	233	24	38	135	171	266
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	28	37	109	161	285	18	25	124	148	292
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	33	50	146	135	247	57	30	134	129	265
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	63	78	179	123	224	61	51	144	159	247
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	32	57	113	137	326	24	36	123	141	338
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	25	29	121	158	307	25	18	73	146	387

Table A2—Frequencies of responses in each response category for Version 2 objective and belief statements, continued. [a, b]

Statement	**Objectives**[c] for the management of forests and grasslands					**Beliefs**[d, e] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	26	32	164	153	249	28	34	105	179	279
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests.	33	48	143	137	281	36	36	126	144	305

[a]Overall *n* = 3,503. The number of responses for each individual statement ranged from 642 to 739 resulting in a confidence level of at least 95 percent with a confidence interval of ±4 percent for all objective and belief statements.
[b]Table entries contain frequencies weighted by age, sex, race, urban/rural, and education.
[c]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.
[d]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.
[e]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Table A3—Means, standard deviations, sample sizes, and skewness for responses to Version 2 objective and belief statements. [a]

Statement	**Objectives**[b] for the management of forests and grasslands (1 = *not at all important*, 5 = *very important*)				**Beliefs**[c,d] about the role of the USDA Forest Service (1 = *strongly disagree*, 5 = *strongly agree*)			
	Mean[e, f]	Standard deviation[g]	Sample size[h]	Skewness[i]	Mean[e, f]	Standard deviation[g]	Sample size[h]	Skewness[i]
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	4.01	1.31	661	-1.08	4.15	1.21	661	-1.33
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	3.27	1.44	725	-0.24	3.32	1.47	722	-0.27
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	4.02	1.13	656	-0.99	3.98	1.20	653	-0.98
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	3.89	1.24	649	-0.92	3.88	1.24	657	-0.96
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	3.02	1.51	721	0.05	3.17	1.52	718	-0.14
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	4.60	0.80	693	-2.26	4.56	0.88	690	-2.33
7. Protecting ecosystems, and wildlife and fish habitats.	4.50	1.01	698	-2.25	4.46	1.02	697	-2.05

Table A3—Means, standard deviations, sample sizes, and skewness for responses to Version 2 objective and belief statements, continued.[a]

Statement	Objectives[b] for the management of forests and grasslands (1 = *not at all important*, 5 = *very important*)				Beliefs[c,d] about the role of the USDA Forest Service (1 = *strongly disagree*, 5 = *strongly agree*)			
	Mean[e, f]	Standard deviation[g]	Sample size[h]	Skewness[i]	Mean[e, f]	Standard deviation[g]	Sample size[h]	Skewness[i]
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	4.22	1.06	714	-1.37	4.21	1.08	717	-1.29
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	3.91	1.23	677	-0.83	3.73	1.34	675	-0.67
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	3.99	1.29	705	-1.10	3.81	1.35	707	-0.85
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	3.81	1.21	650	-0.72	3.50	1.38	654	-0.49
12. Expanding energy and mineral production on forests and grasslands.	3.28	1.37	679	-0.23	3.05	1.44	686	-0.06
13. Expanding timber production and livestock grazing on forests and grasslands.	3.41	1.38	729	-0.32	3.20	1.47	737	-0.17
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	3.40	1.32	677	-0.36	3.56	1.40	677	-0.55

Table A3—Means, standard deviations, sample sizes, and skewness for responses to Version 2 objective and belief statements, continued.[a]

Statement	**Objectives**[b] for the management of forests and grasslands (1 = *not at all important*, 5 = *very important*)				**Beliefs**[c,d] about the role of the USDA Forest Service (1 = *strongly disagree*, 5 = *strongly agree*)			
	Mean[e]	Standard deviation[f]	Sample size[g]	Skewness[h]	Mean[e]	Standard deviation[f]	Sample size[g]	Skewness[h]
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.90	1.20	696	-0.85	3.90	1.19	702	-0.87
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.33	1.19	654	-0.22	3.45	1.29	663	-0.37
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	3.65	1.25	695	-0.51	3.62	1.23	701	-0.57
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	4.45	0.95	679	-2.02	4.22	1.11	679	-1.45
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	4.44	0.93	711	-1.80	4.50	0.88	718	-2.02
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	4.26	1.07	709	-1.45	4.38	0.99	706	-1.70
21. Informing the public on the economic value received by developing our natural resources.	4.04	1.14	670	-1.02	3.86	1.27	667	-0.89

Table A3—Means, standard deviations, sample sizes, and skewness for responses to Version 2 objective and belief statements, continued.[a]

Statement	**Objectives**[b] for the management of forests and grasslands (1 = *not at all important*, 5 = *very important*)				**Beliefs**[c, d] about the role of the USDA Forest Service (1 = *strongly disagree*, 5 = *strongly agree*)			
	Mean[e]	Standard deviation[f]	Sample size[g]	Skewness[h]	Mean[e]	Standard deviation[f]	Sample size[g]	Skewness[h]
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	3.35	1.23	644	-0.25	3.32	1.32	642	-0.30
23. Using public advisory committees to advise government agencies on public land management issues.	3.76	1.19	698	-0.57	3.97	1.10	706	-0.90
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.03	1.13	689	-1.06	4.11	1.05	686	-1.04
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	3.84	1.20	658	-0.74	3.84	1.29	662	-0.88
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	3.55	1.31	720	-0.44	3.72	1.29	718	-0.74
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	4.01	1.20	701	-0.98	4.11	1.11	698	-1.10
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	4.08	1.10	703	-1.09	4.31	1.04	707	-1.64

Table A3—Means, standard deviations, sample sizes, and skewness for responses to Version 2 objective and belief statements, continued.[a]

Statement	**Objectives**[b] for the management of forests and grasslands (1 = *not at all important*, 5 = *very important*)				**Beliefs**[c,d] about the role of the USDA Forest Service (1 = *strongly disagree*, 5 = *strongly agree*)			
	Mean[e]	Standard deviation[f]	Sample size[g]	Skewness[h]	Mean[e]	Standard deviation[f]	Sample size[g]	Skewness[h]
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	3.91	1.11	666	-0.78	4.03	1.11	663	-1.09
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests.	3.91	1.19	710	-0.83	4.00	1.18	712	-1.02

[a]Overall *n* = 3,503. The number of responses for each individual statement ranged from 642 to 739 resulting in a confidence level of at least 95 percent with a confidence interval of ±4 percent for all objective and belief statements. Means, standard deviations, and skewness are weighted for age, sex, race, urban/rural, and education. Sample sizes are not weighted.

[b]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.

[c]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

[d]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

[e]A mean is a descriptive statistic that is calculated by adding the values for all respondents and then dividing by the total number of respondents, i.e. an average.

[f]A standard deviation is a descriptive statistic that shows the variability of values in a distribution. It is calculated by finding the average amount by which the values deviate from the mean in a distribution.

[g]Sample size is the selected number of respondents used in the analysis. For Version 2 of the survey respondents replied to a random selection of objective statements followed by the corresponding belief statement. Differences in sample size between corresponding objective and belief statements are due to missing data, for example, don't know responses. Sample sizes reported here are not weighted. Responses for each individual statement ranged from 642 to 739 resulting in a confidence level of 95 percent with a confidence interval of ±4 percent for all objective and belief statements.

[h]Skewness is the degree to which values in a distribution are bunched to one side or the other. For a normal distribution skewness is 0. Generally, a value greater then 1 or less than -1 indicates a distribution is skewed to the right or left respectively.

Table A4—Percents for Version 2 preservation/conservation objective and belief statements. [a, b]

Preservation/conservation statements	**Objectives**[c] for the management of forests and grasslands (percent)					**Beliefs**[d, e] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	1.2	1.5	8.0	14.3	74.9	6.8	3.1	16.5	14.5	74.1
7. Protecting ecosystems, and wildlife and fish habitats.	4.3	2.0	6.3	14.6	72.8	4.0	2.6	8.1	14.4	70.9
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	3.7	3.0	15.8	22.4	55.1	3.3	4.7	15.8	20.1	56.1
10. Reducing loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	8.3	6.5	14.1	20.2	50.8	10.3	7.9	16.9	20.8	44.1
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.5	5.9	17.6	26.0	46.0	3.0	4.0	20.4	24.4	48.1
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	4.8	8.6	17.0	20.6	49.0	3.6	5.4	18.5	21.3	51.1
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	3.9	4.6	18.9	24.7	47.9	3.9	2.8	11.3	22.4	59.6
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	4.2	5.0	26.3	24.5	39.9	4.4	5.5	16.8	28.6	44.6
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).	5.2	7.5	22.3	21.4	43.7	5.6	5.6	19.5	22.2	47.1

[a]Overall n = 3,503. The number of responses for each individual statement ranged from 642 to 739 resulting in a confidence level of at least 95 percent with a confidence interval of ±4 percent for all objective and belief statements.
[b]Table entries contain percents weighted by age, sex, race, urban/rural, and education. Percents may not total to 100.0 due to rounding.
[c]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.
[d]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.
[e]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Table A5—Percents for Version 2 information sharing/public involvement objective and belief statements. [a, b]

Information sharing / public involvement statements	Objectives[c] for the management of forests and grasslands (percent)					Beliefs[d, e] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	3.2	1.7	8.4	20.1	66.6	4.6	4.0	12.8	21.5	57.0
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	2.3	2.0	11.3	18.7	65.7	1.9	2.2	8.2	19.4	68.3
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	4.0	2.8	15.8	18.1	59.4	2.7	3.6	10.4	19.9	63.5
21. Informing the public on the economic value received by developing our natural resources.	4.4	5.7	19.7	21.9	48.3	8.0	6.5	20.1	22.0	43.3
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	9.3	13.4	33.4	20.8	23.2	13.0	13.4	27.1	22.4	24.2
23. Using public advisory committees to advise government agencies on public land management issues.	5.0	9.3	27.9	20.5	37.3	3.7	6.0	21.3	27.0	42.0
25. Making management decisions concerning the use of forests and grasslands at the local level rather then the national level.	5.4	8.2	23.9	22.1	40.4	9.2	4.9	21.8	21.0	43.1

[a]Overall n = 3,503. The number of responses for each individual statement ranged from 642 to 739 resulting in a confidence level of at least 95 percent with a confidence interval of ±4 percent for all objective and belief statements.
[b]Table entries contain percents weighted by age, sex, race, urban/rural, and education. Percents may not total to 100.0 due to rounding.
[c]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.
[d]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused.*
[e]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Table A6—Percents for Version 2 economic development and community issues objective and belief statements. [a, b]

Economic development / community issues statements	**Objectives**[c] for the management of forests and grasslands (percent)					**Beliefs**[d, e] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	5.6	9.1	22.9	23.7	38.7	13.0	11.0	21.7	21.5	32.7
12. Expanding energy and mineral production on forests and grasslands.	14.4	13.8	27.9	17.3	26.6	21.6	13.3	26.6	15.3	23.3
13. Expanding timber production and livestock grazing on forests and grasslands.	13.1	11.8	28.4	14.3	32.3	19.0	14.4	22.5	15.4	28.7
16. Expanding commercial recreational services on forests and grasslands (for example, guide services or outfitters).	8.8	12.3	37.4	20.5	21.1	10.5	10.2	32.0	18.4	28.9
17. Providing companies with forest commodities in exchange for assistance in achieving management goals such as ecosystem restoration on public forests and grasslands.	6.9	10.4	28.1	19.4	35.1	8.5	7.2	29.4	23.6	31.3
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.5	5.9	17.6	26.0	46.0	3.0	4.0	20.4	24.4	48.1

[a]Overall n = 3,503. The number of responses for each individual statement ranged from 642 to 739 resulting in a confidence level of at least 95 percent with a confidence interval of ±4 percent for all objective and belief statements.
[b]Table entries contain percents weighted by age, sex, race, urban/rural, and education. Percents may not total to 100.0 due to rounding.
[c]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.
[d]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused.*
[e]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Table A7—Percents for Version 2 cultural and traditional objective and belief statements. [a, b]

Cultural/traditional statements	Objectives[c] for the management of forests and grasslands (percent)					Beliefs[d, e] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	6.2	6.1	25.0	15.7	47.1	9.0	10.4	21.0	17.8	41.8
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	5.6	9.1	22.9	23.7	38.7	13.0	11.0	21.7	21.5	32.7

[a]Overall n = 3,503. The number of responses for each individual statement ranged from 642 to 739 resulting in a confidence level of at least 95 percent with a confidence interval of ±4 percent for all objective and belief statements.
[b]Table entries contain percents weighted by age, sex, race, urban/rural, and education. Percents may not total to 100.0 due to rounding.
[c]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.
[d]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused.*
[e]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Table A8—Percents for Version 2 access objective and belief statements. [a, b]

	Objectives[c] for the management of forests and grasslands (percent)					**Beliefs**[d, e] about the role of the USDA Forest Service (percent)				
Access statements	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	8.6	5.3	17.9	13.0	55.3	6.8	3.1	16.5	15.5	58.1
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	17.3	13.1	24.7	16.0	29.1	16.7	14.9	20.3	16.0	32.1
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	4.4	5.5	20.2	24.1	45.8	6.0	5.2	21.4	19.6	47.8
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	7.4	6.2	20.1	22.1	44.2	7.8	6.0	18.4	25.6	42.3
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	22.5	18.2	21.7	10.0	27.7	20.8	16.1	18.2	15.1	29.8

[a]Overall n = 3,503. The number of responses for each individual statement ranged from 642 to 739 resulting in a confidence level of at least 95 percent with a confidence interval of ±4 percent for all objective and belief statements.
[b]Table entries contain percents weighted by age, sex, race, urban/rural, and education. Percents may not total to 100.0 due to rounding.
[c]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.
[d]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.
[e]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Table A9—Percents for Version 2 regulatory issues objective and belief statements. [a, b]

Regulatory issues statements	**Objectives**[c] for the management of forests and grasslands (percent)					**Beliefs**[d, e] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	8.6	5.3	17.9	13.0	55.3	6.8	3.1	16.5	15.5	58.1
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	7.4	6.2	20.1	22.1	44.2	7.8	6.0	18.4	25.6	42.3
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	11.9	11.5	28.6	20.5	27.6	13.4	8.8	22.9	18.2	36.7
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	6.3	4.9	25.1	20.4	43.3	5.7	6.8	21.4	24.4	41.7
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	9.5	11.8	26.8	18.4	33.5	9.2	7.7	21.7	24.1	37.3
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	4.8	8.6	17.0	20.6	49.0	3.6	5.4	18.5	21.3	51.1

[a]Overall n = 3,503. The number of responses for each individual statement ranged from 642 to 739 resulting in a confidence level of at least 95 percent with a confidence interval of ±4 percent for all objective and belief statements.
[b]Table entries contain percents weighted by age, sex, race, urban/rural, and education. Percents may not total to 100.0 due to rounding.
[c]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.
[d]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused.*
[e]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Appendix B: Supporting Tables—Objective/ Belief Analysis

Table B1—Paired *t*-test comparison of responses to Version 2 objective and belief statements. [a, b, c]

Statement	Paired *t*-test[d]					
	Sample size[e]	Mean difference	*SE* of Mean difference	*t*	*p*	Cohen's *d*
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	606	-.15	.06	-2.46	.014*	.11
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	660	-.09	.06	-1.58	.115	.03
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	589	.03	.05	.58	.559	.03
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding.	570	.01	.06	.21	.832	.01
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles	660	-.15	.06	-2.29	.023*	.10
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	644	.03	.04	.81	.420	.05
7. Protecting ecosystems, and wildlife and fish habitats.	625	.04	.05	.87	.385	.04
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	637	.01	.05	.13	.895	.01
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	620	.16	.06	2.89	.005*	.14
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	667	.18	.06	2.90	.004*	.14
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	614	.31	.06	5.48	<.001*	.24
12. Expanding energy and mineral production on forests and grasslands.	622	.26	.06	4.09	<.001*	.16
13. Expanding timber production and livestock grazing on forests and grasslands.	664	.20	.06	3.37	.001*	.15

Table B1—Paired *t*-test comparison of responses to Version 2 objective and belief statements, continued. [a, b, c]

Statement	Paired *t*-test[d]					
	Sample size[e]	Mean difference	*SE* of Mean difference	*t*	*p*	Cohen's *d*
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	619	-.12	.06	-2.13	.033*	.12
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	621	-.01	.06	-0.12	.901	.00
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	589	-.14	.06	-2.53	.012*	.10
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	654	.02	.05	.32	.752	.02
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	599	.23	.05	4.75	<.001*	.22
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	623	-.07	.04	-1.58	.115	.07
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	613	-.12	.05	-2.75	.006*	.12
21. Informing the public on the economic value received by developing our natural resources.	613	.17	.05	3.32	.001*	.15
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	573	.04	.06	.70	.482	.02
23. Using public advisory committees to advise government agencies on public land management issues.	620	-.22	.05	-4.10	<.001*	.18
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	603	-.04	.05	-.75	.456	.07
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	605	-.00	.06	-.05	.960	.00

Table B1—Paired *t*-test comparison of responses to Version 2 objective and belief statements, continued. [a, b, c]

Statement	Paired *t*-test[d] Sample size[e]	Mean difference	*SE* of Mean difference	*t*	*p*	Cohen's *d*
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	657	-.17	.05	-3.47	.001*	.13
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	659	-.10	.05	-2.19	.029*	.09
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	637	-.23	.05	-4.58	<.001*	.21
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	615	-.14	.05	-2.63	.009*	.11
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests.	639	-.10	.05	-1.85	.065	.08

*Result is statistically significant at $p < .05$

[a]All table entries with the exception of sample sizes are weighted for age, sex, race, urban/rural, and education.

[b]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.

[c]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*. In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

[d]A paired samples *t*-test is a test of statistical significance between paired observations (i.e., the objective and the mean for each individual). A difference score is computed for each individual respondent based on their objective and belief responses. The *mean difference* represents the mean of these difference scores across all respondents. The *t* statistic is computed from the mean difference and is the number that is tested. The *p*-value is the probability that differences between objective and belief responses could have been produced by chance. Here $p < .05$ is considered statistically significant. Cohen's *d* is an effect size statistic that is used for a paired *t*-test. A result of 0 is interpreted as no relationship, and 1 is the highest possible result. It is important to note that some objective statements were specific to all forests and grasslands, or all public lands, and the belief statements were specific to the role of the Forest Service. Since the Forest Service is only responsible for National Forests and Grasslands, these results should be interpreted with caution. See Appendix D for more details on differences between the objective and belief sections of the survey.

[e] Sample size is the number of respondents who answered both the objective and belief question. Overall $n = 3{,}503$.

Appendix C: Supporting Tables—Rural/ Urban Analysis

Table C1—Rural/urban comparison of responses to Version 2 objective statements. [a, b, c]

Objective statement for the management of forests and grasslands (1 = *not at all important*, 5 = *very important*)	Place of residence[d]						Independent samples *t*-test[h]		
	Rural			Urban					
	Mean[e]	Standard deviation[f]	Sample size[g]	Mean[e]	Standard deviation[f]	Sample size[g]	*t*-value	*p*-value	r_p
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	4.15	1.20	217	3.98	1.34	444	1.23	.220	.05
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	3.35	1.50	266	3.25	1.42	459	0.76	.448	.03
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	3.98	1.20	235	4.02	1.11	421	-0.36	.720	.02
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	3.93	1.20	242	3.89	1.26	407	0.33	.743	.01
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	2.90	1.53	241	3.05	1.51	480	-1.01	.311	.04
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	4.62	0.82	236	4.60	0.79	457	0.37	.714	.01
7. Protecting ecosystems, and wildlife and fish habitats.	4.42	1.03	238	4.52	1.00	460	-0.97	.331	.04
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	4.10	1.17	270	4.26	1.02	444	-1.59	.112	.07
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	3.83	1.22	244	3.94	1.24	433	-0.89	.376	.04

Table C1—Rural/urban comparison of responses to Version 2 objective statements, continued. [a, b, c]

Objective statement for the management of forests and grasslands (1 = *not at all important*, 5 = *very important*)	Place of residence[d]						Independent samples *t*-test[h]		
	Rural			Urban					
	Mean[e]	Standard deviation[f]	Sample size[g]	Mean[e]	Standard deviation[f]	Sample size[g]	*t*-value	*p*-value	r_p
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	3.91	1.24	243	4.00	1.30	462	-0.71	.480	.03
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	3.79	1.15	218	3.81	1.22	432	-0.19	.846	.01
12. Expanding energy and mineral production on forests and grasslands.	3.37	1.32	239	3.25	1.38	440	0.88	.379	.04
13. Expanding timber production and livestock grazing on forests and grasslands.	3.45	1.39	277	3.40	1.38	452	0.40	.687	.02
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	3.62	1.23	203	3.36	1.33	474	1.94	.053	.08
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.82	1.22	221	3.91	1.20	475	-0.75	.455	.03
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.33	1.23	253	3.33	1.18	401	0.05	.961	.00
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	3.72	1.23	243	3.64	1.25	452	0.69	.490	.03
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	4.49	0.96	240	4.44	0.95	439	0.50	.620	.02

Table C1—Rural/urban comparison of responses to Version 2 objective statements, continued. [a, b, c]

Objective statement for the management of forests and grasslands (1 = *not at all important*, 5 = *very important*)	Place of residence[d]						Independent samples *t*-test[h]		
	Rural			Urban					
	Mean[e]	Standard deviation[f]	Sample size[g]	Mean[e]	Standard deviation[f]	Sample size[g]	*t*-value	*p*-value	r_p
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	4.29	1.04	239	4.47	0.90	472	-1.88	.062	.08
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	4.17	1.10	260	4.29	1.06	449	-1.15	.251	.05
21. Informing the public on the economic value received by developing our natural resources.	4.04	1.26	248	4.04	1.11	422	0.06	.956	.00
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	3.33	1.36	227	3.36	1.20	417	-0.19	.853	.01
23. Using public advisory committees to advise government agencies on public land management issues.	3.73	1.22	236	3.76	1.19	462	-0.26	.798	.01
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.03	1.13	239	4.03	1.13	450	0.01	.991	.00
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	4.01	1.14	233	3.79	1.21	425	1.84	.066	.07
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	3.30	1.41	241	3.61	1.28	479	-2.43	.015*	.09
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	3.92	1.28	227	4.03	1.18	474	-0.84	.399	.03
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	4.03	1.18	258	4.09	1.07	445	-0.58	.562	.02

Table C1—Rural/urban comparison of responses to Version 2 objective statements, continued. [a, b, c]

Objective statement for the management of forests and grasslands (1 = *not at all important*, 5 = *very important*)	Place of residence[d]						Independent samples *t*-test[h]		
	Rural			Urban					
	Mean[e]	Standard deviation[f]	Sample size[g]	Mean[e]	Standard deviation[f]	Sample size[g]	*t*-value	*p*-value	r_p
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	4.02	1.02	235	3.88	1.13	431	1.23	.219	.05
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests.	4.00	1.19	245	3.89	1.19	465	0.94	.345	.04

*Result is statistically significant at $p < .05$

[a]Overall n = 3,503. Overall n for rural residents was n = 1229. Overall n for urban residents was n = 2274. The number of responses for each individual statement for rural residents ranged from 204 to 283 resulting in a confidence level of 95 percent with a confidence interval of at least ±7 percent for all objective and belief statements. For urban residents the number of responses ranged from 401 to 480 resulting in a confidence level of 95 percent with a confidence interval of ±5 percent for all objective and belief statements.

[b]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused.*

[c]All table entries, with the exception of sample sizes, are weighted for age, sex, race, urban/rural, and education.

[d]Respondents were classified according to the criterion used by the United States Bureau of the Census. A respondent residing in a county that included a central city (a city or urban area of 50,000 or more) or at least 50 percent of the population of a central city was considered metropolitan (urban). All other respondents were considered non-metropolitan (rural). See http://www.census.gov for more detailed information on the metropolitan designation.

[e]A mean is a descriptive statistic that is calculated by adding the values for all respondents and then dividing by the total number of respondents, i.e. an average.

[f]A standard deviation is a descriptive statistic that shows the variability of values in a distribution. It is calculated by finding the average amount by which the values deviate from the mean in a distribution.

[g]Sample size is the selected number of respondents used in the analysis. For Version 2 of the survey respondents replied to a random selection of objective statements followed by the corresponding belief statement. Differences in sample size between corresponding objective and belief statements are due to missing data, for example, *don't know* responses.

[h]An independent samples *t*-test is a test of statistical significance between two group means. The *t* statistic is the number that is tested. The *p*-value is the probability that differences in means could have been produced by chance. Here $p < .05$ is considered statistically significant. A point-biserial correlation (r_p) is the appropriate effect size for a dichotomous independent variable (urban versus rural) and an interval / ratio dependent variable (a belief or objective). A result of 0 is interpreted as no relationship, and 1 is the highest possible result.

Table C2—Rural/urban comparison of responses to Version 2 belief statements. [a, b, c, d]

Beliefs about the role of the USDA Forest Service (1 = *strongly disagree*, 5 = *strongly agree*)	Place of residence[e]						Independent samples *t*-test[i]		
	Rural			Urban					
	Mean[f]	Standard deviation[g]	Sample size[h]	Mean[f]	Standard deviation[g]	Sample size[h]	*t* - value	*p*-value	r_p
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	4.08	1.24	214	4.17	1.20	447	-0.72	.475	.03
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	3.32	1.50	264	3.32	1.47	458	0.03	.976	.00
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	3.82	1.37	236	4.02	1.15	417	-1.53	.128	.07
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	3.91	1.29	244	3.88	1.22	413	0.25	.805	.01
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	3.02	1.49	240	3.21	1.53	478	-1.25	.211	.05
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	4.57	0.91	235	4.56	0.88	455	0.15	.883	.01
7. Protecting ecosystems, and wildlife and fish habitats.	4.40	1.03	240	4.47	1.02	457	-0.68	.496	.03
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	4.27	1.12	270	4.19	1.06	447	0.82	.412	.03
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	3.74	1.27	242	3.73	1.36	433	0.12	.903	.01

Table C2—Rural/urban comparison of responses to Version 2 belief statements, continued. [a, b, c, d]

Beliefs about the role of the USDA Forest Service (1 = *strongly disagree*, 5 = *strongly agree*)	Place of residence[e]						Independent samples *t*-test[i]		
	Rural			Urban					
	Mean[f]	Standard deviation[g]	Sample size[h]	Mean[f]	Standard deviation[g]	Sample size[h]	*t* - value	*p*-value	r_p
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	3.85	1.27	241	3.80	1.37	466	0.37	.709	.01
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	3.79	1.33	220	3.43	1.39	434	2.53	.012*	.10
12. Expanding energy and mineral production on forests and grasslands.	3.12	1.47	241	3.04	1.43	445	0.62	.537	.02
13. Expanding timber production and livestock grazing on forests and grasslands.	3.26	1.47	283	3.19	1.48	454	0.59	.558	.02
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	3.60	1.36	204	3.55	1.41	473	0.32	.752	.01
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.91	1.23	227	3.89	1.18	475	0.17	.863	.01
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.46	1.39	257	3.45	1.26	406	0.14	.888	.01
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	3.67	1.21	249	3.60	1.24	452	0.59	.556	.02
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	4.34	1.07	241	4.19	1.12	438	1.33	.185	.05

Table C2—Rural/urban comparison of responses to Version 2 belief statements, continued. [a, b, c, d]

Beliefs about the role of the USDA Forest Service (1 = *strongly disagree*, 5 = *strongly agree*)	Place of residence[e]						Independent samples *t*-test[i]		
	Rural			Urban					
	Mean[f]	Standard deviation[g]	Sample size[h]	Mean[f]	Standard deviation[g]	Sample size[h]	*t* - value	*p*-value	r_p
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	4.48	0.97	241	4.50	0.86	477	-0.24	.809	.01
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	4.32	1.02	261	4.40	0.98	445	-0.81	.416	.03
21. Informing the public on the economic value received by developing our natural resources.	4.05	1.21	246	3.81	1.28	421	1.86	.064	.08
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	3.52	1.35	230	3.26	1.31	412	1.95	.052	.08
23. Using public advisory committees to advise government agencies on public land management issues.	3.90	1.20	240	3.99	1.07	466	-0.82	.412	.03
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.01	1.16	240	4.13	1.02	446	-1.06	.289	.05
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	3.97	1.27	234	3.81	1.29	428	1.26	.208	.05
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	3.32	1.47	242	3.83	1.22	476	-3.65	.000*	.16
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	3.90	1.25	225	4.16	1.07	473	-2.16	.032*	.09
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	4.31	1.03	261	4.31	1.04	446	0.01	.991	.00

Table C2—Rural/urban comparison of responses to Version 2 belief statements, continued. [a, b, c, d]

Beliefs about the role of the USDA Forest Service (1 = *strongly disagree*, 5 = *strongly agree*)	Place of residence[e]						Independent samples *t*-test[i]		
	Rural			Urban					
	Mean[f]	Standard deviation[g]	Sample size[h]	Mean[f]	Standard deviation[g]	Sample size[h]	*t* - value	*p*-value	r_p
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	4.05	1.07	236	4.03	1.12	427	0.14	.890	.01
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests.	3.99	1.19	244	4.00	1.18	468	-0.06	.956	.00

*Result is statistically significant at $p < .05$

[a]Overall $n = 3{,}503$. Overall n for rural residents was $n = 1229$. Overall n for urban residents was $n = 2274$. The number of responses for each individual statement for rural residents ranged from 204 to 283 resulting in a confidence level of 95 percent with a confidence interval of at least ±7 percent for all objective and belief statements. For urban residents the number of responses ranged from 401 to 480 resulting in a confidence level of 95 percent with a confidence interval of ±5 percent for all objective and belief statements.

[b]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

[c]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

[d]All table entries, with the exception of sample sizes, are weighted for age, sex, race, urban/rural, and education.

[e]Respondents were classified according to the criterion used by the United States Bureau of the Census. A respondent residing in a county that included a central city (a city or urban area of 50,000 or more) or at least 50 percent of the population of a central city was considered metropolitan (urban). All other respondents were considered non-metropolitan (rural). See http://www.census.gov for more detailed information on the metropolitan designation.

[f]A mean is a descriptive statistic that is calculated by adding the values for all respondents and then dividing by the total number of respondents, i.e. an average.

[g]A standard deviation is a descriptive statistic that shows the variability of values in a distribution. It is calculated by finding the average amount by which the values deviate from the mean in a distribution.

[h]Sample size is the selected number of respondents used in the analysis. For Version 2 of the survey respondents replied to a random selection of objective statements followed by the corresponding belief statement. Differences in sample size between corresponding objective and belief statements are due to missing data, for example, *don't know* responses.

[i]An independent samples *t*-test is a test of statistical significance between two group means. The *t* statistic is the number that is tested. The *p*-value is the probability that differences in means could have been produced by chance. Here $p < .05$ is considered statistically significant. A point-biserial correlation (r_p) is the appropriate effect size for a dichotomous independent variable (urban versus rural) and an interval / ratio dependent variable (a belief or objective). A result of 0 is interpreted as no relationship, and 1 is the highest possible result.

Table C3—Percents of responses in each response category for Version 2 objective and belief statements for rural residents. [a, b, c]

Statement	**Objectives**[d] for the management of forests and grasslands (percent)					**Beliefs**[e, f] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	5.5	4.7	17.4	14.5	57.9	7.0	4.5	17.1	16.3	55.0
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	17.2	13.5	22.6	10.7	36.0	19.7	9.7	20.6	18.7	31.3
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	6.0	6.0	18.5	22.7	46.8	12.5	3.3	18.7	20.5	45.0
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	6.4	5.6	20.5	23.9	43.6	8.9	6.9	14.0	25.0	45.3
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	29.0	12.6	20.3	15.7	22.5	22.5	16.3	22.5	14.0	24.7
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	1.3	2.3	7.1	11.3	78.0	2.4	2.8	6.4	12.1	76.4

Table C3—Percents of responses in each response category for Version 2 objective and belief statements for rural residents, continued.[a,b,c]

Statement	**Objectives**[d] for the management of forests and grasslands (percent)					**Beliefs**[e, f] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7. Protecting ecosystems, and wildlife and fish habitats.	3.9	3.3	7.2	18.3	67.4	3.9	3.4	7.4	19.1	66.2
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	5.0	4.8	19.0	17.8	53.4	5.1	3.8	9.8	21.3	60.0
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	6.2	5.2	30.1	15.8	42.6	8.6	6.1	26.3	20.7	38.4
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	7.1	6.5	18.8	23.1	44.5	5.9	9.8	23.4	15.5	45.4
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	4.6	8.6	24.6	27.7	34.5	10.5	6.4	18.2	23.3	41.6
12. Expanding energy and mineral production on forests and grasslands.	10.9	14.2	29.4	17.9	27.6	21.6	11.6	26.1	14.6	26.2
13. Expanding timber production and livestock grazing on forests and grasslands.	11.5	14.7	24.8	15.4	33.6	17.5	14.2	22.9	15.1	30.3
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	9.1	6.2	27.6	27.6	29.5	12.4	7.4	22.8	22.9	34.5

Table C3—Percents of responses in each response category for Version 2 objective and belief statements for rural residents, continued.[a,b,c]

Statement	**Objectives**[d] for the management of forests and grasslands (percent)					**Beliefs**[e, f] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	7.4	5.3	24.0	24.8	38.6	6.6	6.3	20.6	22.0	44.4
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	10.7	9.0	39.4	18.4	22.5	14.3	7.3	29.5	15.5	33.4
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	5.6	10.5	28.1	17.6	38.1	7.1	6.9	31.4	20.9	33.7
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	2.6	2.7	8.7	14.9	71.0	3.4	3.5	14.4	13.3	65.5
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	2.9	2.4	18.9	14.8	61.0	4.0	0.2	9.5	16.6	69.8
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	4.8	1.3	21.2	17.7	55.1	2.8	2.9	15.2	17.9	61.2

Table C3—Percents of responses in each response category for Version 2 objective and belief statements for rural residents, continued.[a,b,c]

Statement	**Objectives**[d] for the management of forests and grasslands (percent)					**Beliefs**[e, f] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
21. Informing the public on the economic value received by developing our natural resources.	8.5	3.2	16.2	19.5	52.6	5.0	8.9	13.5	21.6	51.0
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	13.6	12.2	28.9	18.1	27.2	11.8	11.0	22.9	22.6	31.7
23. Using public advisory committees to advise government agencies on public land management issues.	6.9	7.5	27.2	22.2	36.2	6.6	5.9	20.2	25.4	42.0
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	3.5	6.7	21.0	20.5	48.3	4.4	4.7	25.4	16.5	49.0
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	3.9	6.4	21.7	20.6	47.5	8.6	3.9	18.1	21.0	48.4
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	16.8	9.3	29.3	16.4	28.2	19.3	8.2	23.0	19.8	29.7
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	7.8	6.7	17.6	20.9	47.0	7.5	6.3	19.5	22.3	44.4
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	5.0	7.8	13.3	26.5	47.4	3.4	2.3	14.8	18.9	60.7

Table C3—Percents of responses in each response category for Version 2 objective and belief statements for rural residents, continued.[a,b,c]

Statement	**Objectives**[d] for the management of forests and grasslands (percent)					**Beliefs**[e, f] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	2.6	3.0	26.0	26.7	41.7	3.1	5.7	18.9	28.2	44.2
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests.	4.2	9.3	17.4	21.0	48.2	5.7	4.5	23.4	18.1	48.4

[a]Overall *n* = 1229. Overall *n* for rural residents was *n* = 1229. Overall *n* for urban residents was *n* = 2274. The number of responses for each individual statement for rural residents ranged from 204 to 283 resulting in a confidence level of 95 percent with a confidence interval of at least ±7 percent for all objective and belief statements. For urban residents the number of responses ranged from 401 to 480 resulting in a confidence level of 95 percent with a confidence interval of ±5 percent for all objective and belief statements.

[b]Table entries contain percents weighted by age, sex, race, urban/rural, and education. Percents may not total to 100.0 due to rounding.

[c]Respondents were classified according to the criterion used by the United States Bureau of the Census. A respondent residing in a county that included a central city (a city or urban area of 50,000 or more) or at least 50 percent of the population of a central city was considered metropolitan (urban). All other respondents were considered non-metropolitan (rural). See http://www.census.gov for more detailed information on the metropolitan designation.
Statistics for rural residents only are reported here.

[d]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused.*

[e]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

[f]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Table C4—Frequencies of responses in each response category for Version 2 objective and belief statements for rural residents. [a, b, c]

Statement	**Objectives**[d] for the management of forests and grasslands					**Beliefs**[e, f] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	7	6	21	17	68	8	5	20	19	63
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	25	20	33	16	53	28	14	29	27	45
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	8	8	24	29	61	16	4	24	27	59
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	8	7	27	32	57	12	9	19	34	61
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	38	16	26	20	29	30	22	30	18	33
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	2	3	9	14	99	3	3	8	15	95

Table C4—Frequencies of responses in each response category for Version 2 objective and belief statements for rural residents, continued.[a,b,c]

Statement	Objectives[d] for the management of forests and grasslands					Beliefs[e,f] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7. Protecting ecosystems, and wildlife and fish habitats.	5	4	9	24	88	5	4	10	25	88
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	8	8	30	28	85	8	6	16	34	96
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	9	7	43	22	60	12	9	38	30	55
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	9	9	25	30	58	8	13	30	20	59
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	5	10	28	31	39	12	7	21	27	48
12. Expanding energy and mineral production on forests and grasslands.	14	19	38	23	36	30	16	36	20	36
13. Expanding timber production and livestock grazing on forests and grasslands.	17	22	37	23	50	28	22	36	24	48
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	10	7	31	31	33	14	8	26	26	40

Table C4—Frequencies of responses in each response category for Version 2 objective and belief statements for rural residents, continued.[a,b,c]

Statement	**Objectives**[d] for the management of forests and grasslands					**Beliefs**[e, f] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	8	6	27	28	43	8	7	24	26	52
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	15	12	54	25	31	20	10	41	22	47
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	8	14	38	24	52	10	10	45	30	48
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	3	3	11	19	88	4	5	18	17	84
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	4	3	24	19	78	5	0	12	22	91
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	7	2	30	25	78	4	4	21	25	86

Table C4—Frequencies of responses in each response category for Version 2 objective and belief statements for rural residents, continued.[a,b,c]

Statement	Objectives[d] for the management of forests and grasslands					Beliefs[e, f] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
21. Informing the public on the economic value received by developing our natural resources.	11	4	21	25	67	6	11	17	27	64
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	17	15	36	23	34	15	14	29	29	40
23. Using public advisory committees to advise government agencies on public land management issues.	9	9	34	28	45	8	8	26	33	54
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4	8	27	26	61	6	6	32	21	62
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	5	8	27	26	60	11	5	23	27	61
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	22	12	39	22	37	26	11	31	26	40
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	10	8	22	26	59	9	8	24	28	55
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	7	11	19	38	68	5	3	22	28	89

Table C4—Frequencies of responses in each response category for Version 2 objective and belief statements for rural residents, continued.[a,b,c]

Statement	**Objectives**[d] for the management of forests and grasslands					**Beliefs**[e, f] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	3	4	32	33	52	4	7	24	36	56
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests.	5	12	23	27	63	7	6	31	24	63

[a]Overall *n* = 1229. Overall *n* for rural residents was *n* = 1229. Overall *n* for urban residents was *n* = 2274. The number of responses for each individual statement for rural residents ranged from 204 to 283 resulting in a confidence level of 95 percent with a confidence interval of at least ±7 percent for all objective and belief statements. For urban residents the number of responses ranged from 401 to 480 resulting in a confidence level of 95 percent with a confidence interval of ±5 percent for all objective and belief statements.

[b]Table entries contain frequencies weighted by age, sex, race, urban/rural, and education.

[c]Respondents were classified according to the criterion used by the United States Bureau of the Census. A respondent residing in a county that included a central city (a city or urban area of 50,000 or more) or at least 50 percent of the population of a central city was considered metropolitan (urban). All other respondents were considered non-metropolitan (rural). See http://www.census.gov for more detailed information on the metropolitan designation.
Statistics for rural residents only are reported here.

[d]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused.*

[e]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

[f]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Table C5—Percents of responses in each response category for Version 2 objective and belief statements for urban residents. [a, b, c]

Statement	**Objectives**[d] for the management of forests and grasslands (percent)					**Beliefs**[e, f] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	9.3	5.4	17.9	12.6	54.7	6.8	2.8	16.3	15.3	58.9
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	17.0	13.0	25.3	17.5	27.1	15.9	16.3	20.2	15.2	32.3
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	3.9	5.4	20.6	24.5	45.6	4.2	5.7	22.1	19.4	48.5
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	7.7	6.4	20.0	21.5	44.4	7.4	5.8	19.7	25.8	41.3
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	20.9	19.5	22.0	8.6	28.9	20.4	16.1	17.1	15.4	31.1
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	1.2	1.4	8.3	15.1	74.1	2.4	1.5	7.6	15.0	73.6

Table C5—Percents of responses in each response category for Version 2 objective and belief statements for urban residents, continued.[a,b,c]

Statement	**Objectives**[d] for the management of forests and grasslands (percent)					**Beliefs**[e, f] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7. Protecting ecosystems, and wildlife and fish habitats.	4.4	1.7	6.1	13.6	74.3	4.0	2.4	8.3	13.2	72.2
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	3.3	2.4	14.7	23.9	55.7	2.7	4.9	17.8	19.7	54.9
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	6.2	6.3	23.5	15.7	48.3	9.1	11.7	19.4	17.0	42.8
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	8.6	6.6	13.0	19.5	52.3	11.3	7.5	15.4	22.1	43.8
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	5.8	9.2	22.5	22.8	39.7	13.6	12.1	22.5	21.1	30.7
12. Expanding energy and mineral production on forests and grasslands.	15.4	13.6	27.5	17.1	26.4	21.6	13.7	26.7	15.5	22.5
13. Expanding timber production and livestock grazing on forests and grasslands.	13.6	11.0	29.5	14.0	31.9	19.5	14.4	22.4	15.5	28.2
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	12.5	12.6	28.8	18.9	27.1	13.7	9.1	22.9	17.1	37.2

Table C5—Percents of responses in each response category for Version 2 objective and belief statements for urban residents, continued.[a,b,c]

Statement	Objectives[d] for the management of forests and grasslands (percent)					Beliefs[e, f] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	6.1	4.8	25.3	19.5	44.4	5.5	6.9	21.5	25.0	41.1
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	8.3	13.2	36.8	21.1	20.6	9.3	11.0	32.7	19.3	27.6
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	7.3	10.4	28.0	19.9	34.4	8.9	7.3	28.9	24.3	30.6
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	3.3	1.5	8.4	21.4	65.5	4.9	4.2	12.4	23.7	54.8
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	2.1	1.9	9.4	19.6	67.0	1.4	2.7	7.9	20.1	67.9
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	3.7	3.2	14.2	18.2	60.7	2.7	3.8	8.9	20.5	64.1

Table C5—Percents of responses in each response category for Version 2 objective and belief statements for urban residents, continued.[a,b,c]

Statement	**Objectives**[d] for the management of forests and grasslands (percent)					**Beliefs**[e, f] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
21. Informing the public on the economic value received by developing our natural resources.	3.3	6.3	20.7	22.5	47.2	8.8	5.9	21.9	22.1	41.3
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	8.1	13.7	34.6	21.6	22.0	13.3	14.0	28.3	22.3	22.1
23. Using public advisory committees to advise government agencies on public land management issues.	4.6	9.7	28.0	20.1	37.6	3.0	6.1	21.6	27.4	42.0
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.7	5.7	16.7	27.4	45.4	2.6	3.9	19.1	26.4	47.9
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	5.8	8.6	24.5	22.5	38.6	9.4	5.2	22.7	21.0	41.8
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	7.7	12.4	26.2	18.9	34.8	6.7	7.5	21.4	25.2	39.2
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	4.0	9.0	16.8	20.6	49.5	2.7	5.2	18.3	21.1	52.7
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	3.6	3.6	20.5	24.2	48.0	4.0	2.9	10.3	23.5	59.3

Table C5—Percents of responses in each response category for Version 2 objective and belief statements for urban residents, continued.[a,b,c]

Statement	Objectives[d] for the management of forests and grasslands (percent)					Beliefs[e, f] about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	4.6	5.6	26.4	24.0	39.5	4.8	5.4	16.3	28.7	44.7
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests.	5.4	7.0	23.5	21.4	42.6	5.6	5.9	18.5	23.2	46.8

[a]Overall $n = 2274$. Overall n for rural residents was $n = 1229$. Overall n for urban residents was $n = 2274$. The number of responses for each individual statement for rural residents ranged from 204 to 283 resulting in a confidence level of 95 percent with a confidence interval of at least ±7 percent for all objective and belief statements. For urban residents the number of responses ranged from 401 to 480 resulting in a confidence level of 95 percent with a confidence interval of ±5 percent for all objective and belief statements.

[b]Table entries contain percents weighted by age, sex, race, urban/rural, and education. Percents may not total to 100.0 due to rounding.

[c]Respondents were classified according to the criterion used by the United States Bureau of the Census. A respondent residing in a county that included a central city (a city or urban area of 50,000 or more) or at least 50 percent of the population of a central city was considered metropolitan (urban). All other respondents were considered non-metropolitan (rural). See http://www.census.gov for more detailed information on the metropolitan designation. Statistics for urban residents only are reported here.

[d]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused*.

[e]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

[f]In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

Table C6—Frequencies of responses in each response category for Version 2 objective and belief statements for urban residents. [a, b, c]

Statement	**Objectives**[d] for the management of forests and grasslands					**Beliefs**[e, f] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes, or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.	46	27	89	62	270	34	14	82	77	296
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	90	69	134	92	144	83	86	106	80	169
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.	18	25	97	115	214	20	27	105	92	230
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).	34	28	88	95	195	33	26	88	115	184
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	113	105	119	46	156	110	87	92	83	168
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	6	7	43	79	387	12	8	40	79	385

Table C6—Frequencies of responses in each response category for Version 2 objective and belief statements for urban residents, continued. [a,b,c]

Statement	Objectives[d] for the management of forests and grasslands					Beliefs[e,f] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7. Protecting ecosystems, and wildlife and fish habitats.	22	8	30	68	369	20	12	41	65	357
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	16	11	71	115	268	13	24	87	96	267
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.	30	31	115	77	237	44	57	95	83	209
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	47	35	70	105	282	62	41	85	122	241
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.	30	47	116	117	204	70	62	115	108	157
12. Expanding energy and mineral production on forests and grasslands.	77	69	138	86	133	111	70	137	79	115
13. Expanding timber production and livestock grazing on forests and grasslands.	72	58	156	74	169	103	76	119	82	150
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	65	65	149	98	141	72	48	121	90	197

Table C6—Frequencies of responses in each response category for Version 2 objective and belief statements for urban residents, continued. [a,b,c]

Statement	**Objectives**[d] for the management of forests and grasslands					**Beliefs**[e, f] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	31	25	131	101	230	29	36	113	131	215
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	38	61	169	97	94	44	52	153	91	129
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	38	55	148	105	182	48	39	154	130	163
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	16	7	40	102	311	23	20	59	113	260
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.	11	9	47	98	333	7	14	41	103	347
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	18	15	69	88	293	13	18	43	98	306

Table C6—Frequencies of responses in each response category for Version 2 objective and belief statements for urban residents, continued. [a,b,c]

Statement	Objectives[d] for the management of forests and grasslands					Beliefs[e, f] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
21. Informing the public on the economic value received by developing our natural resources.	16	31	102	111	232	43	29	107	109	203
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	37	63	158	98	101	61	64	128	101	101
23. Using public advisory committees to advise government agencies on public land management issues.	23	49	140	100	188	15	31	109	138	212
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	23	28	82	135	224	13	19	92	127	230
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	28	42	119	109	188	46	25	111	102	204
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	41	66	140	101	186	36	40	113	133	207
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	22	49	91	111	267	15	28	98	114	283
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.	18	18	102	120	239	20	15	52	118	298

Table C6—Frequencies of responses in each response category for Version 2 objective and belief statements for urban residents, continued. [a,b,c]

Statement	Objectives[d] for the management of forests and grasslands					Beliefs[e, f] about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.	23	28	132	120	197	24	27	81	143	223
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests.	28	36	120	110	218	29	30	96	120	242

[a]Overall *n* = 2274. Overall *n* for rural residents was *n* = 1229. Overall *n* for urban residents was *n* = 2274. The number of responses for each individual statement for rural residents ranged from 204 to 283 resulting in a confidence level of 95 percent with a confidence interval of at least ±7 percent for all objective and belief statements. For urban residents the number of responses ranged from 401 to 480 resulting in a confidence level of 95 percent with a confidence interval of ±5 percent for all objective and belief statements.

[b]Table entries contain frequencies weighted by age, sex, race, urban/rural, and education.

[c]Respondents were classified according to the criterion used by the United States Bureau of the Census. A respondent residing in a county that included a central city (a city or urban area of 50,000 or more) or at least 50 percent of the population of a central city was considered metropolitan (urban). All other respondents were considered non-metropolitan (rural). See http://www.census.gov for more detailed information on the metropolitan designation.
Statistics for urban residents only are reported here.

[d]Objectives were measured on a five point scale 1 = *not at all important* to 5 = *very important*, with 8 = *don't know*, and 9 = *refused.*

[e]Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

[f]In the telephone survey script, belief statements were prefaced with “It is a role of the Forest Service to...”

Appendix D: Objective and Beliefs Module of the NSRE Telephone Survey

OMB Control Number: 0596-0127

Objective Statements Script for Telephone Interviews:

"We are interested in your opinions concerning management objectives for public and private forests and grasslands. These lands have many uses including motorized and non-motorized recreation, preservation, grazing, wildlife habitat, mining, timber harvesting and so on. I will read 6 statements describing possible management objectives for you to rate on a scale of one to five, with one meaning the objective is not at all important and five meaning it is very important."

Belief Statements Script for Telephone Interviews:

"We are also interested in your opinions about the role the Forest Service should play in achieving alternative management objectives on National Forests and Grasslands. I will read you a series of 6 statements about the role of the Forest Service for you to rate on a scale of one to five. One means you strongly disagree that it is the role of the Forest Service and five means that you strongly agree that it is the role of the Forest Service."

Read "It is a role of the Forest Service to..." followed by one of the six objective statements previously read. Repeat for each objectives statement.

Statements

1. Managing use of motorized off-highway vehicles (for example, snowmobiles, dirt bikes or all-terrain vehicles) on forests and grasslands by restricting them to designated roads, trails and areas.
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.
3. Developing and maintaining continuous trail systems that cross both public and private land for non-motorized recreation such as hiking, cross-country skiing or horseback riding.
4. Designating some existing recreation trails for specific use (for example, creating separate trails for snowmobiling and cross-country skiing, or for mountain biking and horseback riding).
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.

6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.
7. Protecting ecosystems, and wildlife and fish habitats.
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.
9. Preserving the cultural uses of forests and grasslands by Native Americans and traditional groups, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access.
10. Reducing loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining or timber harvesting.
12. Expanding energy and mineral production on forests and grasslands.
13. Expanding timber production and livestock grazing on forests and grasslands.
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).
16. Expanding commercial recreational services on forests and grasslands (for example, guide services or outfitters).
17. Providing companies with forest commodities in exchange for assistance in achieving management goals such as ecosystem restoration on public forests and grasslands.
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).
19. Informing the public about recreation concerns on forests and grasslands such as safety, respect for other visitors and wildlife, and minimization of impacts from recreational use.
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.
21. Informing the public on the economic value received by developing our natural resources.
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.
23. Using public advisory committees to advise government agencies on public land management issues.
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.

25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.
28. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires across forests and grasslands in general.
29. Using management tools such as prescribed fires and tree thinning in order to reduce the risk of catastrophic wildfires on forests and grasslands, but only around communities.
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).

Appendix E: Glossary of Terms

Access statements VOBA access statements address various aspects of how the public traverses forests and grasslands. Statements related to access in the VOBA survey referred to developing and maintaining trails, developing new paved roads, managing for motorized and non-motorized recreation, and/or designating separate trails for specific uses.

Advisory board A body of local and national stakeholder representatives whose goal it is to advise a federal agency on local, regional, or national issues as a part of community based planning. For example, advisory boards are currently in use with the Bureau of Land Management. A lay definition would be public input involving a committee of citizens.

ATV All-Terrain Vehicle

Attitude In the context of the VOBA research, an attitude refers to the degree to which a respondent feels that the USDA Forest Service is fulfilling his or her objectives.

Belief In the context of the VOBA research, a belief refers to the degree to which a respondent agrees that a particular statement is an appropriate role for the USDA Forest Service.

Cohen's *d* An effect size statistic indicating the difference between two means. Used to estimate the magnitude of the difference between two groups. A result of 0 is interpreted as no relationship, and 1 is the highest possible result.

Commercial services Recreational opportunities (for example, outfitters, ski resorts) **recreation** provided by for-profit companies.

Confidence interval A range of values with a known probability (confidence level) of including the true value for a population. For example, for a sample value of 15 percent with a confidence interval of ± 5, the value for the population should be within the interval of 10 percent to 20 percent.

Confidence level The chosen percentage of values (typically 95 percent) that would fall within a certain range determined by the confidence interval. For example, for urban residents in the VOBA survey, approximately 5 percent responded that reducing the spread of invasive species across forests and grasslands was not at all important. This could be qualified by saying that the researchers were 95 percent certain (confidence level) that the result was predictive of the true population value within ± 4 percent (confidence interval).

Continuous trail systems Interconnected trails that form long trail systems as opposed to unconnected, separately accessed trail segments.

Cultural/traditional statements The VOBA cultural and traditional statements address activities on forests and grasslands that are perceived as being traditional in some communities or having cultural meaning to participants.

Cultural uses In the VOBA survey, cultural uses refers to activities pursued on forests and grasslands that are perceived by the participants as having cultural meaning and /or being part of their traditional activities, for example, firewood gathering, herb/berry/plant gathering, and ceremonial access.

Demographics Demographics are population characteristics. The VOBA survey measured age, sex, place of residence (rural versus urban), race, ethnicity, and level of education.

Descriptive statistics Statistics such as mean, standard deviation, and percent that generally describe quantitative information, as opposed to statistics used to make inferences.

Diverse uses In the VOBA survey, diverse uses refers to allowing multiple uses of forests and grasslands (for example, motorized and non-motorized recreation, livestock grazing, mining, oil and gas extraction, timber removal, and wildlife habitat).

Economic development statements VOBA economic development statements address activities on or near forests and grasslands that have an economic component to them (for example, resource extraction, and informing the public on the economic value received by developing our natural resources).

Economic value A flow of income produced by a national resource over a period of time.

Ecosystem A community of biological organisms in a specific area and the chemical-physical factors that influence the organisms that are present. The biological organisms and chemical-physical factors function together in a complementary relationship through the transfer and circulation of energy and matter.

Extraction Removal of commodity resources from forests and grasslands (for example, timber or oil).

Focus groups For the VOBA research, a focus group involved a group of people with similar backgrounds and experiences who participated in an open-ended group interview conducted on a specific topic that is of particular interest to them.

Forest Land covered by a dense growth of trees. May include private forests, industrial forests, or national forests.

Forest commodity A product or service that can be subject for trade (for example, timber, wood pulp and wood products).

Frequencies The number of times a particular response option occurs (for example, the number of respondents who strongly agreed to a particular statement in the VOBA survey).

Fundamental end-state objectives In the context of VOBA, a situation specific goal related to the desired conditions of forests and grasslands.

Fundamental means objectives In the context of VOBA, a situation specific goal related to the management actions taken on forests and grasslands.

Government Performance and Results Act of 1993 GPRA was passed by the Senate June 23, 2003 "to provide for the establishment of strategic planning and performance measures in the Federal Government, and for other purposes."

Habitat An area where a plant or animal naturally lives.

Independent samples *t*-test A test of statistical significance between two group means. The *t* statistic is the number that is tested. The *p*-value is the probability that differences in means could have been produced by chance. For this report, $p < .05$ is considered statistically significant.

Information sharing/public involvement statements Statements dealing with information sharing/public involvement refer to how the public exchanges information about and participates in the management of forests and grasslands. Information sharing statements include informing the public about recreation concerns, potential environmental impacts of all uses, or the economic value received by developing our natural resources. Public involvement statements include volunteer programs, local community advisory boards, public advisory committees, and making decisions at the local level.

Invasive species Living organisms that are not native to a particular ecosystem, have the potential to rapidly occupy areas, and require specialized management action. Invasive species are likely to cause economic or environmental harm or harm to human health.

Matrix sampling A method for survey administration where a subset of questions are asked of each respondent in random order.

Mean A descriptive statistic that is calculated by adding the values for all respondents and then dividing by the total number of respondents. In other words, an average.

Motorized off-highway vehicles A category of power driven vehicles including, but not limited to, all-terrain vehicles, snowmobiles, sports utility vehicles (SUV's), and dirt bikes.

Motorized recreation Recreation activities that involve the use of on- or off-highway motorized vehicles.

National Forests and Grasslands Public lands under the administration of the USDA Forest Service.

National Survey on Recreation and the Environment A recurring survey conducted by the USDA Forest Service and the National Oceanic and Atmospheric Association. See http://www.srs.fs.usda.gov/recreation/Nsre/nsre2.html for more information.

Natural resource A feature of the natural environment that is of value.

Non-motorized recreation Recreation opportunities that do not involve use of motorized vehicles (for example, hiking, horseback riding).

NSRE National Survey on Recreation and the Environment

Objective Something toward which effort is directed; an aim or end of action. With respect to the VOBA, respondents' goals related to forests and grassland conditions or land management actions that they find acceptable.

Objective hierarchy The process of structuring objectives based on the focus group's goals for the management of forests and grasslands from the very abstract strategic level to the more focused or applied means level (See Keeney 1992 for more information). The objective statements reflect the objectives espoused by the members of over 80 focus group and individual interviews conducted around the United States between September 1999 and June 2000.

Open space Uninhabited and undeveloped public or private land.

Paired *t*-test A paired samples *t*-test is a test of statistical significance between paired observations (for example, the objective and the mean for each individual). A difference score is computed for each individual respondent based on their objective and belief responses. The mean difference represents the mean of these difference scores across all respondents. The *t* statistic is computed from the mean difference and is the number that is tested. The *p*-value is the probability that differences between objective and belief responses could have been produced by chance. Here $p < .05$ is considered statistically significant.

Pearson's *r* (Pearson's product moment correlation coefficient) is an effect size statistic showing the degree of linear relationship between two variables. A result of 0 is interpreted as no relationship, and 1 is the highest possible result.

Percent A part of a whole that has been divided into 100 parts. For, example, if 10 out of 200 people responded *strongly agree* to a specific question, 5 percent of people responded *strongly agree.*

Permitting process The formal procedure through which an individual or group of individuals may apply for the right to undertake a regulated activity on public land (for example, grazing permit, hiking permit).

Post-stratification weighting NSRE provided post-stratification weights that were applied to the VOBA survey results in order to adjust sample proportions to reflect the population. Therefore, the VOBA data is corrected for the under- and over-representation of demographic based on U.S. Census data (for example, age, sex, race, urban/rural, and education).

Preference To like a particular choice or option better than another.

Prescribed fire Fires set intentionally in wildland areas under prescribed conditions and circumstances. Prescribed fires can rejuvenate forage for livestock and wildlife or prepare sites for natural regeneration of trees.

Preservation/conservation statements Preservation/conservation statements address how forest and grasslands sustain the health, viability, and productivity of their natural systems. Statements in the VOBA survey refer to preservation/conservation issues such as ecosystems, water resources, grazing, wildlife habitat, wilderness, law enforcement protecting resources, fire, and/or invasive species.

Public advisory committee Reviews project proposals and makes recommendations on spending the county designated funds to the federal government (for example, the Secretary of the Interior). Committee members represent a wide variety of stakeholder groups. See Section 205 of the Secure Rural Schools and Community Self Determination Act of 2000 – Public Law 106-393 for more information. A lay definition would be public input involving a committee of citizens.

Public lands Lands owned or held in trust by federal, state, regional, county, or municipal governments.

Public Land Values Scale A set of 25 statements that concern environmental and resource issues for public lands responses that provide information about an individuals environmental values.

Recreation The extremely broad category of activities that relate to leisure pursuits (for example, travel, hunting, camping, and fishing).

Regulatory issues statements Statements related to regulatory issues in the VOBA survey referred to land management actions and resource policy development (for example, managing use of motorized off-highway vehicles, designating recreation trails for specific use, simplifying the permitting process, developing national policies, collecting entry fees, or increasing law enforcement).

Restoration Returning an ecosystem or habitat to a desired ecological condition.

Rural A classification by the United States Bureau of the Census. All respondents not classified as metropolitan (urban). See http://www.census.gov for more detailed information on metropolitan designations.

Sampling design The method used for selecting a sample from a population that is representative of that population for the purpose of making inferences to the population with acceptable levels of confidence. In the case of VOBA, the purpose of the sampling design is to ensure that the set of respondents is representative of the American public.

Sample size The selected number of respondents used in the analysis.

Scale A set of numbers used to provide response options to a survey question. For example, 1 means *strongly disagree* and 5 means *strongly agree* on a scale of 1 to 5.

Script Text given to survey interviewers that facilitates explaining the survey in a consistent way to all respondents. See Appendix D for the VOBA survey and script.

Skewed distribution See skewness.

Skewness The degree to which values in a distribution are asymmetrical around its mean. For a normal distribution skewness is 0. Generally, a value greater than 1 or less than -1 indicates a distribution is skewed to the right or left respectively.

Socially responsible A dimension of the Public Land Values Scale having to do with the **individual value** actions of the individual related to public lands.

Socially responsible A dimension of the Public Lands Values Scale having to do with **management value** the actions of public land management agencies related to public lands.

Stakeholder For the VOBA survey, an individual or group that has interest in or is impacted by the management of National Forests and Grasslands.

Standard deviation A descriptive statistic that shows the variability of values in a distribution. The average amount that the values deviate from the mean in a distribution.

Stewardship In the context of VOBA, stewardship refers to the land management actions intended to achieve pre-specified objectives.

Strategic level objective An overarching general goal related to values intended to guide all decision-making.

Strategic plan See USDA Forest Service Strategic Plan.

Strategic planning process See USDA Forest Service Strategic Plan.

Survey instrument A tool used to collect data for analysis (see Appendix D for the VOBA survey instrument). Typically, it is a list of questions and instructions used to collect data from a sample of respondents.

Sustainability The ability of social or ecological systems to recover from external shocks and maintain health and functioning over time.

Timber harvesting The act of cutting trees for profit.

Timber production The result of timber harvesting.

Traditional group In the context of VOBA, a group of public land stakeholders who have a tradition of engaging in a specific activity on forests and grasslands (for example, Native Americans who have traditionally collected materials from the forests).

Tree thinning For the VOBA survey, tree thinning refers to removal of some trees to reduce the amount of fuel available to wildfires and in so doing reduces the negative impacts of wildfire.

Urban A classification by the United States Bureau of the Census. A respondent residing in a county that included a central city (a city or urban area of 50,000 or more) or at least 50 percent of the population of a central city was considered metropolitan (urban). See http://www.census.gov for more detailed information on metropolitan designations.

USDA Forest Service Strategic Plan As a federal agency, the USDA Forest Service is required to submit to Congress a Strategic Plan that presents the long-term goals and objectives of the agency. The current USDA Forest Service Strategic Plan has been completed for fiscal years 2004-2008. See Government Performance and Results Act.

Value For the VOBA survey, an enduring personal belief (with respect to the environment on public land) that forms the basis for objectives. See Public Land Values Scale.

VOBA The National Survey of Values, Objectives, Beliefs, and Attitudes conducted as a module of NSRE.

Weighted mean An average of the values of a set of statements to each of which is accorded a weight indicative of its frequency or relative importance. For the VOBA survey, means are weighted for demographic variables (for example, age, sex, level of education, ethnicity, race, and place of residence).

Wilderness experience For the VOBA survey, wilderness experience is defined as the type of experience an individual has when visiting an area within the National Wilderness Preservation System. Congress designates these areas as wilderness under the authority of the Wilderness Act of 1964. A lay definition may include this type of experience on any forest or grassland irrespective of its official designation.

Wildfire For the VOBA survey, wildfire is defined as an uncontrolled fire on forests and grasslands.

Publishing Services Staff

Managing Editor · Lane Eskew
Page Composition & Printing · Nancy Chadwick
Editorial Assistant · Loa Collins
Contract Editor · Kristi Coughlon
Page Composition & Printing · Connie Lemos
Distribution · Richard Schneider
Online Publications & Graphics · Suzy Stephens

The Rocky Mountain Research Station develops scientific information and technology to improve management, protection, and use of the forests and rangelands. Research is designed to meet the needs of the National Forest managers, Federal and State agencies, public and private organizations, academic institutions, industry, and individuals. Studies accelerate solutions to problems involving ecosystems, range, forests, water, recreation, fire, resource inventory, land reclamation, community sustainability, forest engineering technology, multiple use economics, wildlife and fish habitat, and forest insects and diseases. Studies are conducted cooperatively, and applications may be found worldwide.

Research Locations

Flagstaff, Arizona	Reno, Nevada
Fort Collins, Colorado*	Albuquerque, New Mexico
Boise, Idaho	Rapid City, South Dakota
Moscow, Idaho	Logan, Utah
Bozeman, Montana	Ogden, Utah
Missoula, Montana	Provo, Utah

*Station Headquarters, Natural Resources Research Center, 2150 Centre Avenue, Building A, Fort Collins, CO 80526.

Federal Recycling Program  Printed on Recycled Paper

The American Public's Objectives and Beliefs Regarding Forests and Grasslands: 2004 Survey Results

General Technical Report
RMRS-GTR-210