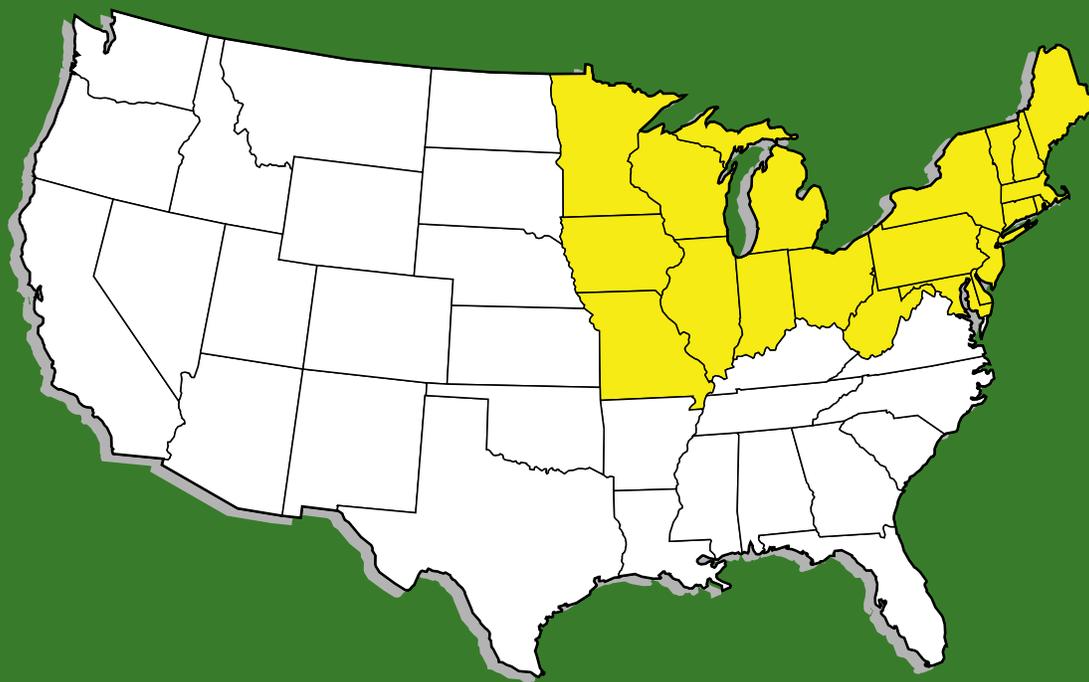


# The Northeastern Area's Objectives and Beliefs Responses Regarding Forests and Grasslands: 2004 Survey Results

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



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## ABSTRACT

The USDA Forest Service revises its Strategic Plan according to the 1993 Government Performance and Results Act. The goals and objectives included in the Strategic Plan are developed from natural resource trend data (Forest and Rangeland Renewable Planning Act) and from public input such as the results from this telephone survey. The purpose of this report is to present results from the second version of this survey (RMRS-GTR-95) for the respondents residing in the Northeastern Area of the United States. A random sample of the American public were 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.

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**Keywords:** beliefs, forests and grasslands management, Northeastern Area, objectives, public involvement process, stakeholder engagement

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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 and is an Assistant Professor at George Mason 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. 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.

**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 Ph.D. in Agricultural and Resource Economics at Colorado State University.

**Donna L. Lybecker** is an Assistant Professor with the Department of Political Science at Idaho State University. She completed a Ph.D. in Political Science at the Colorado State University.

**Brian M. Kent** is a Research Forester 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. 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. in Agricultural Engineering at St. Cyril and Methodius University in Skopje, Macedonia, and a M.S. in Agricultural Economics at Colorado State University.

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# CONTENTS

<b>Executive Summary for Northeastern Area Residents .....</b>	<b>v</b>
<b>Study Synopsis.....</b>	<b>vi</b>
<b>Introduction .....</b>	<b>1</b>
Legal Background.....	1
Study History .....	1
Version 2 VOBA Survey Study Purpose.....	3
<b>Methods .....</b>	<b>4</b>
Survey Design for Version 2.....	4
Sampling Design and Data Collection for Version 2.....	4
Analysis Strategy for Version 2 Residents of the Northeastern Area of the United States .....	5
<b>Results for Residents of the Northeastern Area of the United States .....</b>	<b>6</b>
Corresponding Objective and Belief Statements.....	6
Topical Groupings of Objective/Belief Statements.....	25
Objective and Belief Statements Ordered by Percentage.....	32
<b>References.....</b>	<b>36</b>
<b>Appendix A: Objective and Beliefs Module of the NSRE Telephone Survey.....</b>	<b>37</b>
<b>Appendix B: Supporting Tables—Descriptive Statistics for Northeastern Area Sample.....</b>	<b>39</b>
<b>Appendix C: Supporting Tables—Northeastern Area Objective/Belief Analysis.....</b>	<b>61</b>
<b>Appendix D: Supporting Tables—Northeastern Area/Rest of U.S. Analysis.....</b>	<b>64</b>
<b>Appendix E: Glossary of Terms .....</b>	<b>73</b>
<b>List of Tables</b>	
<b>Table 1.</b> Researcher Defined Objective Statement Categories.....	26
<b>Table 2.</b> Means and Standard Deviations for the Northeastern Area’s Responses to Version 2 Preservation/Conservation Objective and Belief Statements .....	28
<b>Table 3.</b> Means and Standard Deviations for the Northeastern Area’s Responses to Version 2 Information Sharing/Public Involvement Objective and Belief Statements .....	29
<b>Table 4.</b> Means and Standard Deviations for the Northeastern Area’s Responses to Version 2 Economic Development Objective and Belief Statements .....	30
<b>Table 5.</b> Means and Standard Deviations for the Northeastern Area’s Responses to Version 2 Cultural and Traditional Objective and Belief Statements.....	31
<b>Table 6.</b> Means and Standard Deviations for the Northeastern Area’s Responses to Version 2 Access Objective and Belief Statements.....	31
<b>Table 7.</b> Means and Standard Deviations for the Northeastern Area’s Responses to Version 2 Regulatory Issues Objective and Belief Statements.....	32
<b>Table B1.</b> Percents of Responses in Each Response Category for the Northeastern Area’s Responses to Version 2 Objective and Belief Statements .....	40
<b>Table B2.</b> Frequencies of Responses in Each Response Category for the Northeastern Area’s Responses to Version 2 Objective and Belief Statements .....	45
<b>Table B3.</b> Means, Standard Deviations, Sample Sizes, and Skewness for Responses to the Northeastern Area’s Version 2 Objective and Belief Statements .....	50

<b>Table B4.</b> Percents for the Northeastern Area’s Version 2 Preservation/Conservation Objective and Belief Statements .....	55
<b>Table B5.</b> Percents for the Northeastern Area’s Version 2 Information Sharing/Public Involvement Objective and Belief Statements .....	56
<b>Table B6.</b> Percents for the Northeastern Area’s Version 2 Economic Development Objective and Belief Statements .....	57
<b>Table B7.</b> Percents the Northeastern Area’s Version 2 Cultural and Traditional Objective and Belief Statements .....	58
<b>Table B8.</b> Percents for the Northeastern Area’s Version 2 Access Objective and Belief Statements .....	59
<b>Table B9.</b> Percents for the Northeastern Area’s Version 2 Regulatory Issues Objective and Belief Statements .....	60
<b>Table C1.</b> Paired <i>t</i> -test Comparison of Responses to the Northeastern Area’s Version 2 Objective versus Belief Statements.....	61
<b>Table D1.</b> Northeastern/Rest of U.S. Comparison of Responses to the Version 2 Objective Statements.....	65
<b>Table D2.</b> Northeastern/Rest of U.S. Comparison of Responses to the Version 2 Belief Statements .....	69

## List of Figures

<b>Chart 1.</b> Theoretical Model for Study and the Corresponding Measurement Methods .....	2
<b>Figure 1.</b> Importance of Managing Motorized Off-highway Vehicle Use and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	6
<b>Figure 2.</b> Importance of Maintaining Continuous Trail Systems for Motorized Vehicles and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	7
<b>Figure 3.</b> Importance of Maintaining Continuous Trail Systems for Non-motorized Recreation and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area.....	7
<b>Figure 4.</b> Importance of Designating Recreation Trails for Specific Use and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	8
<b>Figure 5.</b> Importance of Developing New Paved Roads and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	9
<b>Figure 6.</b> Importance of Conserving and Protecting Our Water Resources and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	9
<b>Figure 7.</b> Importance of Protecting Ecosystems and Habitats and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	10
<b>Figure 8.</b> Importance of Preserving Wilderness Experiences and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	11
<b>Figure 9.</b> Importance of Preserving Cultural Uses and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area.....	11
<b>Figure 10.</b> Importance of Reducing Loss of Open Space and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	12
<b>Figure 11.</b> Importance of Providing Natural Resources to Support Communities and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	13
<b>Figure 12.</b> Importance of Expanding Energy and Mineral Production and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	13
<b>Figure 13.</b> Importance of Expanding Timber Production and Livestock Grazing and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	14
<b>Figure 14.</b> Importance of Simplifying the Permitting Process and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	15
<b>Figure 15.</b> Importance of Developing National Policies that Guide Natural Resource Development and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area.....	15

<b>Figure 16.</b> Importance of Expanding Commercial Recreation Services and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	16
<b>Figure 17.</b> Importance of Providing Companies with Forest Commodities and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	16
<b>Figure 18.</b> Importance of Developing Volunteer Programs to Maintain Resources and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	17
<b>Figure 19.</b> Importance of Informing Public about Recreation Concerns and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	18
<b>Figure 20.</b> Importance of Informing Public on Environmental Impacts and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	18
<b>Figure 21.</b> Importance of Informing Public on Economic Value and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	19
<b>Figure 22.</b> Importance of Allowing Transfer of Responsibility to Local Community Advisory Boards and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	20
<b>Figure 23.</b> Importance of Using Public Advisory Committees and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	20
<b>Figure 24.</b> Importance of Allowing Diverse Uses and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area.....	21
<b>Figure 25.</b> Importance of Making Management Decisions at a Local Level and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	21
<b>Figure 26.</b> Importance of Collecting Entry Fees and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area.....	22
<b>Figure 27.</b> Importance of Increasing Law Enforcement Efforts and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	23
<b>Figure 28.</b> Importance of Using Management Tools to Reduce Wildfires in General and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	23
<b>Figure 29.</b> Importance of Using Management Tools to Reduce Wildfires Around Communities and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area.....	24
<b>Figure 30.</b> Importance of Reducing Spread of Invasive Species and Level of Agreement with the Corresponding Role of the USDA Forest Service for the Northeastern Area .....	25
<b>Figure 31.</b> VOBA 2 Objectives Ordered by Percentage of Importance.....	34
<b>Figure 32.</b> VOBA 2 Beliefs Ordered by Percentage of Agreement.....	35

# EXECUTIVE SUMMARY FOR NORTHEASTERN AREA RESIDENTS

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. This report presents the results from Version 2 of the VOBA survey for respondents within the Northeastern Area organizational unit of the Forest Service (20 states from Maine to Minnesota to Missouri). 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 three 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. Third, the results are ordered by percentage of respondents rating the objective as important and by percentage of respondents in agreement with the belief.

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 to 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 residents of the Northeastern area are divided in their 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 managing use of motorized off-highway vehicles on forests and grasslands by restricting them to designated roads, trail, and areas 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 submit to Congress a Strategic Plan every 3 years. One of the most critical aspects of strategic planning is identifying the long-term goals and objectives. An essential part of the strategic planning process is that the Government Performance and Results Act 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 also 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. As a result, 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 the 1999/2000 survey were published in Shields, Martin, Martin, and Haefele (2002). The survey was revised and implemented again as part of NSRE in Version 2 of the survey. The results for the national sample on Version 2 of the survey are published in Shelby and others (2008).

This report presents the results from Version 2 of the VOBA survey for respondents within the Northeastern Area organizational unit of the Forest Service (20 states from Maine to Minnesota to Missouri). Version 2 of the VOBA survey 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 on public land.

## *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 were included in Version 2 of the telephone survey. The researchers developed the new objective statements based on input from the original focus group participants, FS Strategic Planning and Resource Assessment staff members, and NSRE staff members. 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 on public land. For the objectives and beliefs statements, respondents indicated their level of approval or agreement on a five-point scale. The objectives items were anchored by 1 = *not at all important* to 5 = *very important*. Beliefs were anchored by 1 = *strongly disagree* to 5 = *strongly agree*.

Version 2 of the survey, which was collected from October 2003 through March 2004 as a module of NSRE, had a sample size of 1,437 within the Northeastern Area and 2,066 for the remainder of the United States (From here on, the remainder of the United States is designated as “Rest of U.S.” and includes the 30 remaining states not included in the Northeastern Area). 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 varies. The overall goal of this matrix sampling design was to control interview time with respondents, yet still collect analytically valuable information. This not only lowers costs, but reduces respondent burden, which should lead to fewer non-responses and a better sample quality. The number of respondents for each statement in the Northeastern Area ranged from 253 to 316. For the “Rest of U.S.,” the number of responses ranged from 369 to 451.

Emphasis in reporting the results is placed on descriptive statistics, such as percents, frequencies, means, and standard deviations. Independent and paired samples *t*-tests were used to statistically examine differences between objective and belief responses of Northeastern Area residents and residents from the “Rest of U.S.”

## ***Results for Northeastern Area Residents***

The results are summarized in three 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, cultural and traditional, access, and regulatory issues. Third, the results are ordered by percentage of respondents rating the objective as important and by percentage of respondents in agreement with the belief.

## ***Corresponding Objective and Belief Statements***

76 percent of respondents stated that *managing motorized off-highway use* was important and 77 percent believed it was an appropriate role of the Forest Service on public lands.

39 percent of respondents stated that *maintaining continuous trail systems for motorized vehicles* was important and 43 percent believe it is an appropriate role of the Forest Service on public lands.

70 percent of respondents stated that *maintaining continuous trail systems for non-motorized recreation* was important and 63 percent believed it was an important role for the Forest Service on public lands.

71 percent of respondents stated that *designating recreation trails for specific use* was important and 71 percent believed it was an important role for the Forest Service on public lands.

27 percent of respondents stated that *developing new paved roads* was important and 35 percent believed it was an important role for the Forest Service on public lands.

91 percent of respondents stated that *conserving and protecting our water resources* was important and 91 percent believed it was an important role for the Forest Service on public lands.

92 percent of respondents stated that *protecting ecosystems and habitats* was important and 89 percent believed it was an important role for the Forest Service on public lands.

80 percent of respondents stated that *preserving wilderness experience* was important and 81 percent believed it was an important role for the Forest Service on public lands.

63 percent of respondents stated that *preserving cultural uses* was important and 59 percent believed it was an important role for the Forest Service on public lands.

70 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 on public lands.

55 percent of respondents stated that *providing natural resources to support communities* was important and 53 percent believed it was an important role for the Forest Service on public lands.

- 40 percent of respondents stated that *expanding energy and mineral production* was important and 31 percent believed it was an important role for the Forest Service on public lands.
- 43 percent of respondents stated that *expanding timber production and livestock grazing* was important and 41 percent believed it was an important role for the Forest Service on public lands.
- 47 percent of respondents stated that *simplifying the permitting process* was important and 57 percent believed it was an important role for the Forest Service on public lands.
- 66 percent of respondents stated that *developing national policies that guide natural resource development* was important and 69 percent believed it was an important role for the Forest Service on public lands.
- 40 percent of respondents stated that *expanding commercial recreation services* was important and 45 percent believed it was an important role for the Forest Service on public lands.
- 54 percent of respondents stated that *providing companies with forest commodities* was important and 52 percent believed it was an important role for the Forest Service on public lands.
- 87 percent of respondents stated that *developing volunteer programs to maintain resources* was important and 81 percent believed it was an important role for the Forest Service on public lands.
- 83 percent of respondents stated that *informing public about recreation concerns* was important and 90 percent believed it was an important role for the Forest Service on public lands.
- 78 percent of respondents stated that *informing public on environmental impacts* was important and 85 percent believed it was an important role for the Forest Service on public lands.
- 70 percent of respondents stated that *informing public on economic value* was important and 63 percent believed it was an important role for the Forest Service on public lands.
- 43 percent of respondents stated that *allowing transfer of responsibility to local community advisory boards* was important and 43 percent believed it was an important role for the Forest Service on public lands.
- 59 percent of respondents stated that *using public advisory committees* was important and 67 percent believed it was an important role for the Forest Service on public lands.
- 74 percent of respondents stated that *allowing diverse uses* was important and 73 percent believed it was an important role for the Forest Service on public lands.
- 62 percent of respondents stated that *making management decisions at a local level* was important and 70 percent believed it was an important role for the Forest Service on public lands.
- 57 percent of respondents stated that *collecting entry fees* was important and 61 percent believed it was an important role for the Forest Service on public lands.
- 69 percent of respondents stated that *increasing law enforcement efforts* was important and 76 percent believed it was an important role for the Forest Service on public lands.
- 73 percent of respondents stated that *using management tools to reduce wildfires in general* was important and 85 percent believed it was an important role for the Forest Service on public lands.
- 62 percent of respondents stated that *using management tools to reduce wildfires around communities* was important and 69 percent believed it was an important role for the Forest Service on public lands.
- 68 percent of respondents stated that *reducing spread of invasive species* was important and 72 percent believed it was an important role for the Forest Service on public lands.

## ***Topical Groupings of Objective/Belief Statements***

*Preservation/conservation.* Protection of ecosystems was seen as an important objective and an appropriate role for the Forest Service on public lands. 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 were each considered important objectives and appropriate roles for the Forest Service on public lands. Objective/belief statements concerning opportunities for public involvement vary in the level of public support, but the public, on average, was either neutral or supportive of statements. Developing volunteer programs to improve or maintain forests and grasslands, for example, received widespread support.

*Economic development.* 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, were also included. The Northeastern Area respondents, on average, were 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, was an important objective and believed to be an appropriate role for the Forest Service on public lands.

*Access.* The Northeastern Area respondents are divided in their 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. Northeastern Area respondents, on average, were supportive of designating existing trails for specific use, but 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 on public lands.

## ***Objective and Belief Statements Ordered by Percentage***

*Objectives.* Northeastern Area respondents rated most of the objective statements in Version 2 to be important (23 of 30 statements). Developing new paved roads was the only objective where greater than 50 percent of Northeastern Area respondents rated the objective as not important.

*Beliefs.* Northeastern Area respondents believed that most of the objective statements reflected appropriate roles of the USDA Forest Service (24 of 30 statements). More respondents disagreed than agreed with two belief statements: developing new paved roads and expanding energy and mineral production.

# Introduction

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## *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. As an essential part of the strategic planning process, the Government Performance and Results Act 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*

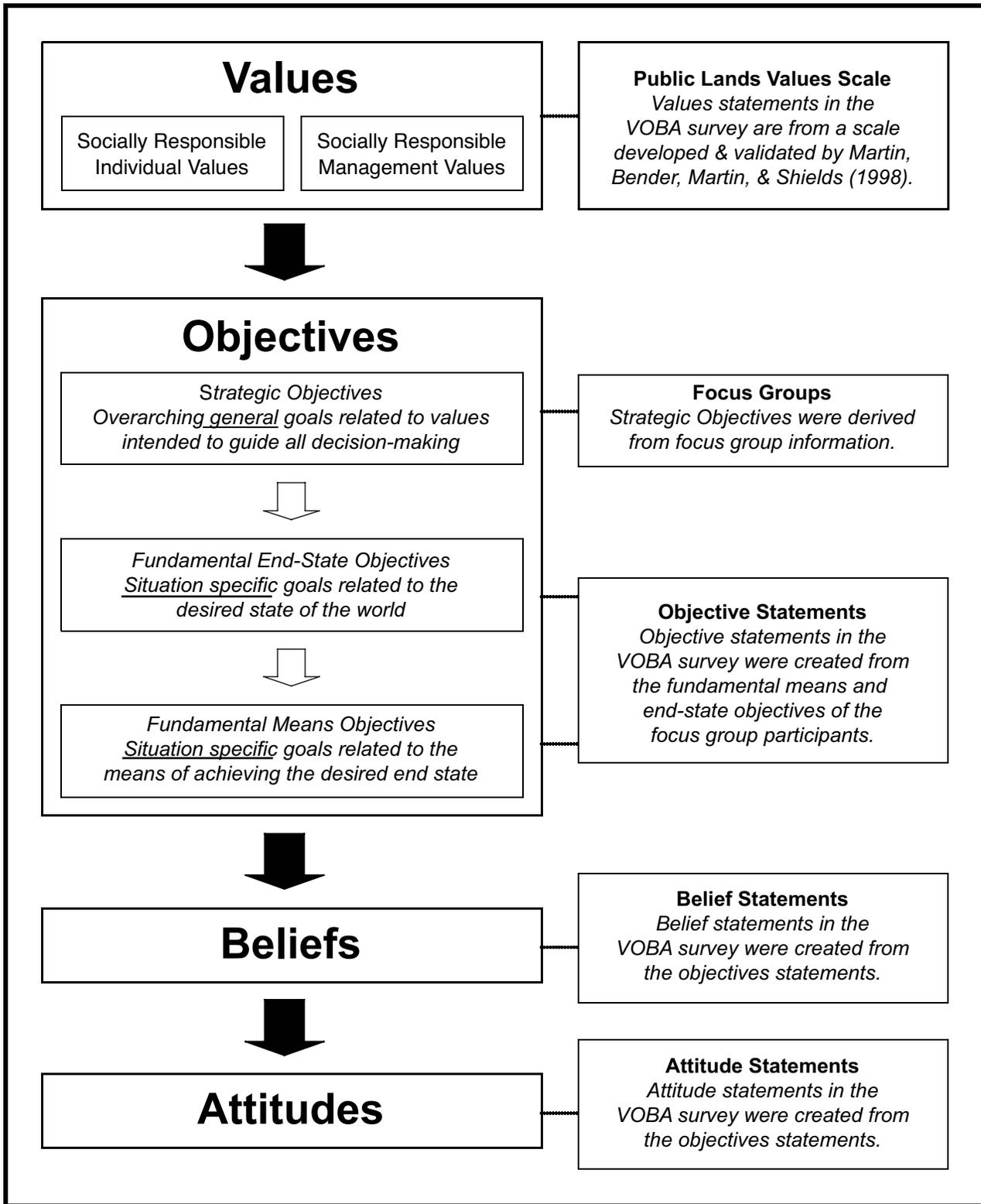
The National Survey of Values, Objectives, Beliefs, and Attitudes (VOBA) is one source of information on the public's views and beliefs that is used to develop the Forest Service's strategic plan. The purpose of the VOBA survey is to collect information about the preferences and goals of the American public regarding the management of forests and grasslands. As a result, 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, and 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 public 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 are applicable at the same broad scale. For example, an objective might be to have more hiking trails. The



**Chart 1.** Theoretical model for study and the corresponding measurement methods.

corresponding belief statement asks whether or not the respondent believes that providing more hiking trails is an appropriate role for the Forest Service on public lands. 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, and 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 and Overdevest (2001) provided a detailed assessment of demographic trends and their relationship 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 on-line (<http://www.srs.fs.usda.gov/trends/NSRE>).

The original VOBA survey instrument was implemented in 1999/2000 in order to assess the public's values, objectives, beliefs, and attitudes in regard to forests and grasslands. The results from the 1999/2000 VOBA survey were published in Shields, Martin, Martin, and Haefele (2002). The survey was revised and implemented again as part of NSRE for Version 2

of the survey. The results for the national sample on Version 2 of the survey were published in Shelby and others (2008). The purpose of this report is to focus on Version 2 results for those respondents residing in the Northeastern Area of the United States (See Haefele, Shields, and Lybecker 2006 for 1999/2000 regional results).

## ***Version 2 VOBA Survey Study Purpose***

This report presents the results from Version 2 of the VOBA survey for respondents residing within the Northeastern Area organizational unit of the Forest Service. The states, which form the Northeastern Area, are equivalent to those in the Region 9 organizational unit and include: Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.

In Version 2 of the VOBA 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

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## ***Survey Design for Version 2***

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 objective statements were added (See Appendix A for complete Version 2 survey). A total of 30 objective statements and 30 corresponding belief statements were included in Version 2 of the telephone survey. Based on input from the original focus group participants, the FS Strategic Planning and Resource Assessment staff members, and NSRE staff, the researchers developed the new objective statements (See statements 10, 17, 22, 28, 29, and 30 in Appendix A). 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 on public lands. Both the objectives and beliefs statements were accompanied by a script used by the telephone interviewers to ensure consistency in their explanations (See Appendix A). For the objectives and beliefs statements, respondents indicated their level of approval or agreement on a five-point scale. The objectives items were anchored by 1 = *not at all important* to 5 = *very important*. Beliefs were 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 for Version 2***

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. OMB guidelines also required that the survey was limited to individuals 16 years of age or older. The VOBA module of the survey was limited to five minutes.

Version 2 of the survey, which was collected from October 2003 through March 2004, as a module of NSRE, has a sample size of 1,437 within the Northeastern Area, and 2,066 for the “Rest of U.S.” (the 30 remaining states not included in the Northeastern Area). As a module of NSRE, the VOBA survey uses a nationwide random sample of telephone numbers facilitated by a computer-aided telephone interviewing system (CATI). This results 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. 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 the respondents were asked the matching belief statements. In this manner, objective/belief statement pairs were randomly selected for each respondent. Due to this sampling design, the number of individual respondents to each objective/belief pair varies. The number of respondents for each statement in the Northeastern Area ranged from 253 to 316, resulting in a confidence level of 95 percent, with confidence intervals ranging from  $\pm 5.51$  percent to  $\pm 6.16$  percent. For the “Rest of U.S.,” the number of responses ranged from 369 to 451 resulting in a confidence level of 95 percent with confidence intervals ranging from  $\pm 4.61$  percent to  $\pm 5.10$  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 lowers costs, but reduces respondent burden, which should lead to fewer non-responses and therefore to a better sample quality.

## ***Analysis Strategy for Version 2 Residents of the Northeastern Area of the United States***

Analysis of VOBA results places primary emphasis on descriptive statistics, such as percents, frequencies, means, and standard deviations. Two statistical analysis strategies were used, however, 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 the Northeastern Area responded differently to a given statement than did individuals residing in the rest of the country. The independent samples *t*-test is a test of statistical significance between two group means. In this case, the mean response of Northeastern Area residents to a given statement is compared with the mean response of the “Rest of U.S.” residents to the same statement. Respondents were classified as a Northeastern Area resident if he/she resided in Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, or Wisconsin. All other respondents were considered “Rest of U.S.” residents.

Paired samples *t*-tests were used to examine whether the objective statement response was statistically significantly different than the matching belief statement response for Northeastern Area 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 zero.
2. The mean of the difference scores across Northeastern Area 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 for Residents of the Northeastern Area of the United States

The results are summarized in three 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, cultural and traditional, access, and regulatory issues. Third, the results are ordered by percentage of respondents rating the objective as important and by percentage of respondents in agreement with the belief. More detailed statistical tables can be found in Appendices B, C, and D

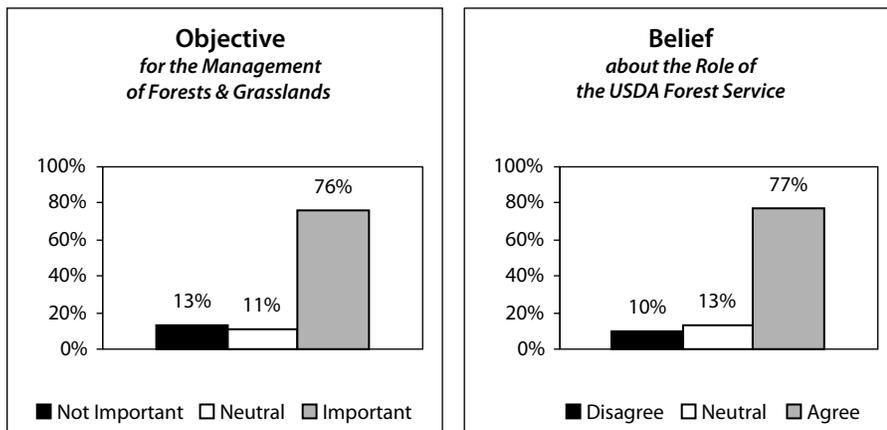
## Corresponding Objective and Belief Statements

### Motorized Off-Highway Vehicle (OHV) Use in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Only 13 percent of Northeastern Area respondents stated that managing motorized off-high vehicles was *not important* (fig. 1). Slightly fewer respondents (10 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (63 percent chose *very important*), and *agreed* with the corresponding belief statement (59 percent chose *strongly agree*; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 4.21, s.d. = 1.23) and the belief statements (mean = 4.20, s.d. = 1.18) was high (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).



**Figure 1.** Importance of managing motorized off-highway vehicle use and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

## Trails for Motorized Vehicles in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Fewer respondents were *neutral* about maintaining continuous trail systems for motorized vehicles than stated that the objective was *not important* or *important*. The responses to the corresponding belief statement were similarly distributed. More respondents stated that the objective was *important* (39 percent) and believed that achieving the objective was an appropriate role for the Forest Service to play on public lands (43 percent) than chose either *not important/disagree* or *neutral* (See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). The sum of the responses rated *not important/disagree* or *neutral* is in both cases greater than 50 percent, and greater than the frequency of responses rated as *important/agree* (Appendix table B2). This distribution of responses resulted in means

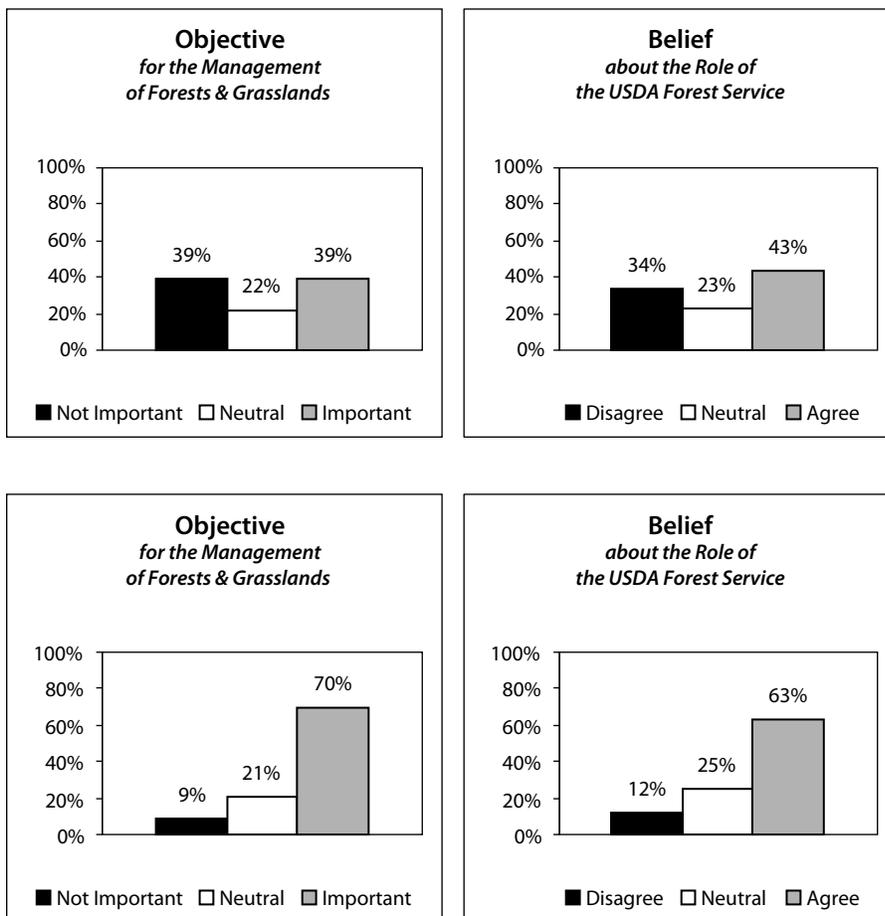
near *neutral* and high standard deviations for both the objective (mean = 3.05, s.d. = 1.50) and the belief statements (mean = 3.15, s.d. = 1.46; Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

## Trails for Non-Motorized Use in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Only 9 percent of Northeastern Area respondents stated that maintaining continuous trail systems for



**Figure 2.** Importance of maintaining continuous trail systems for motorized vehicles and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

**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 for the Northeastern Area.

non-motorized recreation was *not important* (fig. 3). Slightly more respondents (12 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (70 percent) and *agreed* with the corresponding belief statement (63 percent; See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important/agree* is greater than the sum of the responses for *not important/disagree* and *neutral* for both the objective and belief statements (Appendix table B2). Overall, the mean of the responses for both the objective (mean = 4.05, s.d. = 1.10) and the belief statements (mean = 3.90, s.d. = 1.22) was higher than *neutral* (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1 and D2).

### Trails for Specific Use in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Only 12 percent of Northeastern Area respondents stated that designating recreation trails for specific

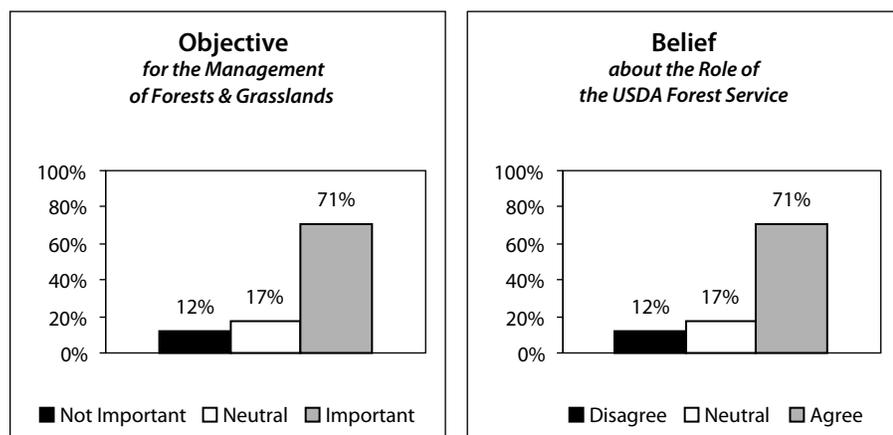
use was *not important* (fig. 4). Likewise, 12 percent of respondents believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (71 percent) and *agreed* with the corresponding belief statement (71 percent; See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important/agree* is greater than the sum of the responses for *not important/disagree* and *neutral* for both the objective and belief statements (Appendix table B2). Overall, the mean of the responses for both the objective (mean = 3.97, s.d. = 1.19) and the belief statements (mean = 3.96, s.d. = 1.18) were higher than *neutral* (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

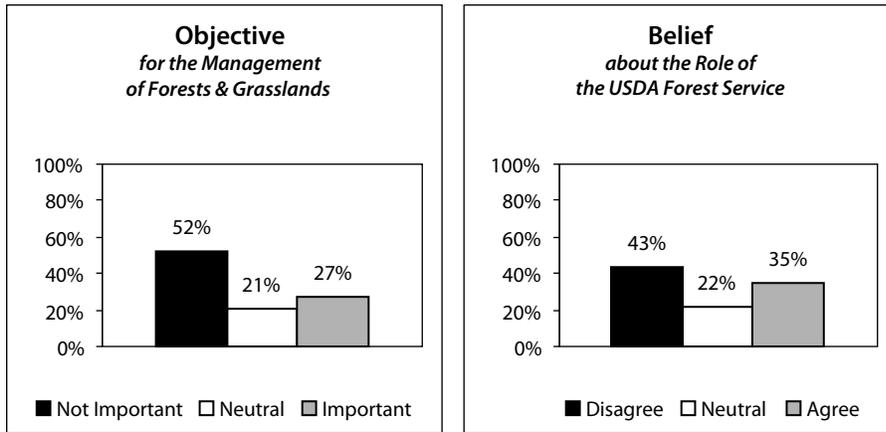
### Developing Paved Roads in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Fewer respondents were *neutral* about developing new paved roads than stated that the objective was either *not important* or *important* (fig. 5). Fifty-two percent of Northeastern Area respondents stated that



**Figure 4.** Importance of designating recreation trails for specific use and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.



**Figure 5.** Importance of developing new paved roads and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

the objective was *not important*, whereas fewer respondents (27 percent) stated that they thought this was an *important* objective (See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). The responses to the corresponding belief statement were similarly distributed; however, 43 percent of respondents believed that developing new paved roads was not an appropriate role for the Forest Service on public lands. Fewer respondents (35 percent) believed that it is an appropriate role. The frequency of responses rated as *not important* is slightly greater than the sum of the responses for *important* and *neutral* for the objective statements (Appendix table B2). There is a lack of skewness for the belief statements. This distribution of responses resulted in means near *neutral* and high standard deviations for both the objective statement (mean = 2.67, s.d. = 1.43) and the belief statement (mean = 2.91, s.d. = 1.46) (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ( $t = -2.64$ ;  $p < .05$ ; Appendix table C1). In other words, on average, individual respondents were less likely to

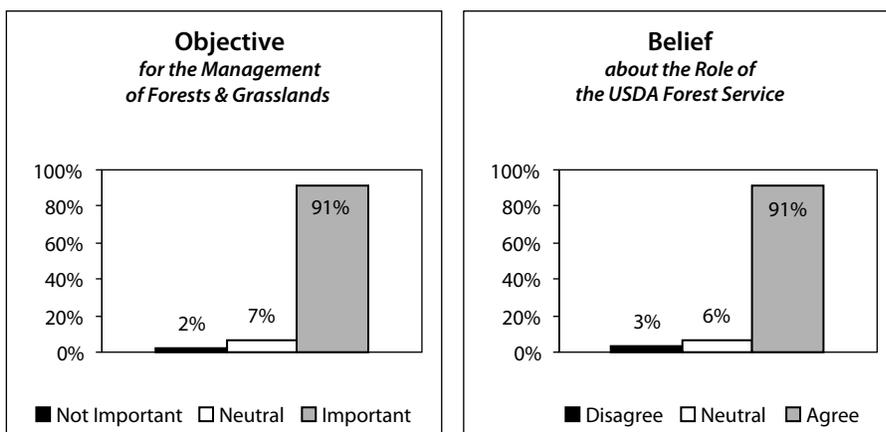
think that the objective was important than they were to believe that achieving the objective was an appropriate role for the Forest Service on public lands.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Protecting Water Resources in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Ninety-one percent of Northeastern Area respondents stated that conserving and protecting our water resources was an *important* objective (fig. 6). Likewise, 91 percent of Northeastern Area respondents believed that the objective was an appropriate



**Figure 6.** Importance of conserving and protecting our water resources and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

role for the Forest Service to play on public lands. The majority of Northeastern Area respondents identified the objective statement to be *important* (78 percent chose *very important*) and *agreed* with the corresponding belief statement (77 percent chose *strongly agree*; See Appendix tables B1 and B2 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 B2). Overall, mean responses were high and standard deviations were low for the objective (mean = 4.65, s.d. = 0.75) and belief statements (mean = 4.65, s.d. = 0.79; Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for the objective or the belief statements (Appendix tables D1, D2).

### Protecting Ecosystems and Habitats in the Northeastern Area of the United States

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 B, C, and D are summarized below.

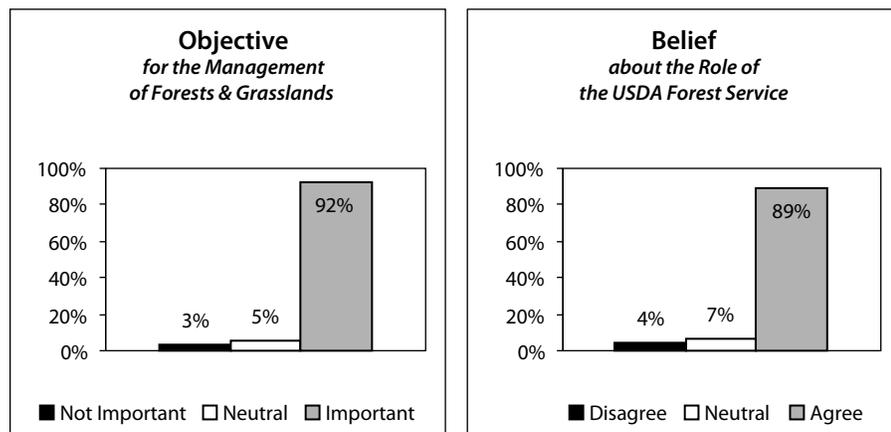
Ninety-two percent of Northeastern Area respondents stated that protecting ecosystems and habitats was an *important* objective (fig. 7). Similarly, 89 percent of Northeastern Area respondents believed that the objective was an appropriate role for the Forest Service to play on public lands. The majority of Northeastern Area respondents identified the objective statement as *important* (76 percent chose *very*

*important*) and *agreed* with the corresponding belief statement (78 percent chose *strongly agree*; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses were high and the standard deviations were low for both the objective (mean = 4.60, s.d. = 0.86) and belief statements (mean = 4.61, s.d. = 0.86; Appendix table B3). 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 ( $p = -0.06$ ; Appendix table C1).

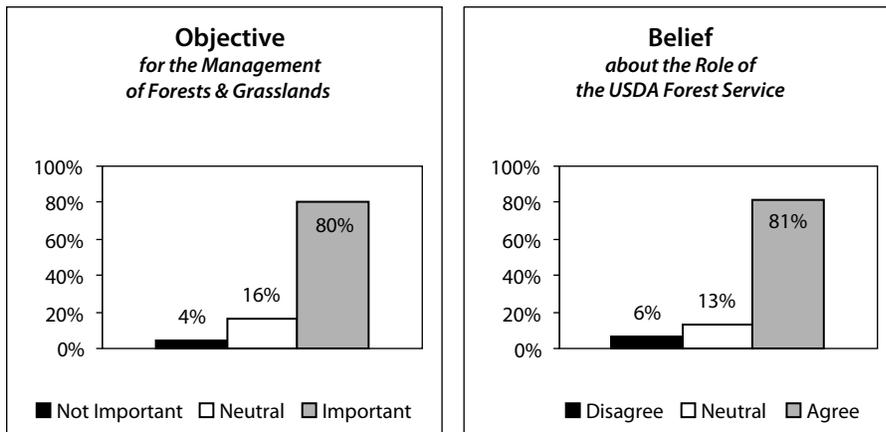
For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses for the objective statement were not statistically significantly different (Appendix table D1). The mean responses for the belief statement, however, were statistically significant ( $t = -2.06, p < .05$ ; Appendix table D2). The mean for Northeastern Area residents (mean = 4.61, s.d. = 0.86) is higher than the mean response by residents of the “Rest of U.S.” (mean = 4.46, s.d. = 1.00). This suggests that compared to the “Rest of U.S.,” more Northeastern Area residents believe that protecting ecosystems and habitats is an appropriate role of the Forest Service on public lands.

### Preserving Wilderness Experiences in the Northeastern Area of the United States

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



**Figure 7.** Importance of protecting ecosystems and habitats and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.



**Figure 8.** Importance of preserving wilderness experiences and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

systems.” The results illustrated in figure 8 and reported in Appendices B, C, and D are summarized below.

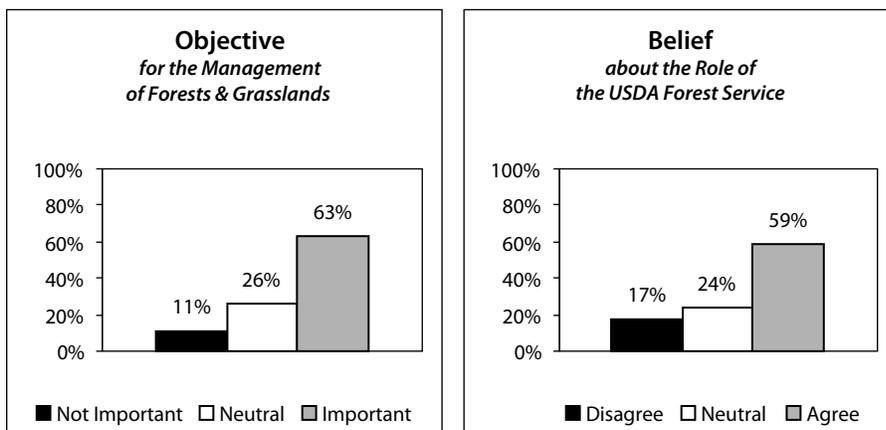
Only 4 percent of Northeastern Area respondents stated that preserving wilderness experiences was *not important* (fig. 8). Marginally more respondents (6 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (57 percent chose *very important*) and *agreed* with the corresponding belief statement (61 percent chose *strongly agree*; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 4.31, s.d. = 0.94) and the belief statements (mean = 4.34, s.d. = 0.99) were high (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Preserving Cultural Uses in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Only 11 percent of Northeastern Area respondents stated that preserving cultural uses was *not important* (fig. 9). More respondents (17 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (63 percent) and *agreed* with the corresponding belief statement



**Figure 9.** Importance of preserving cultural uses and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

(59 percent; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 3.93, s.d. = 1.15) and the belief statements (mean = 3.78, s.d. = 1.26) were higher than *neutral* (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Reducing Loss of Open Space in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Only 14 percent of Northeastern Area respondents stated that reducing loss of open space was *not important* (fig. 10). Slightly more respondents (19 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (70 percent) and *agreed* with the corresponding belief statement (65 percent; See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). The frequency of responses rated as *important* is greater than the sum of the responses

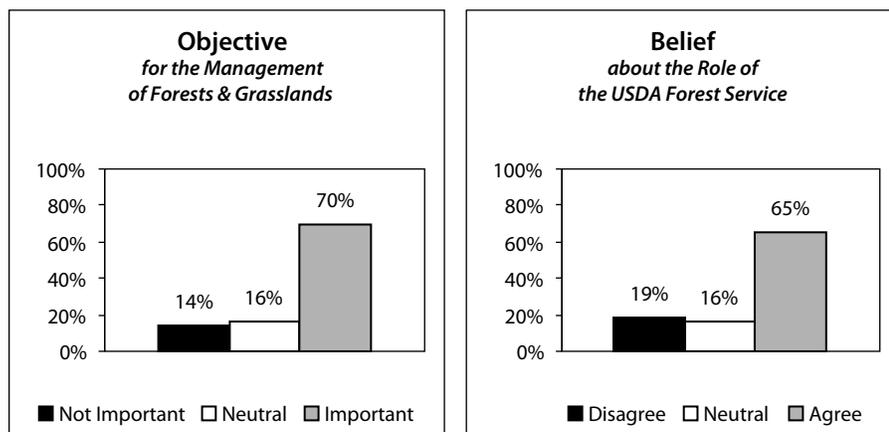
for *not important* and *neutral* for both the objective and belief statements (Appendix table B2). Overall, the mean of the responses for both the objective (mean = 3.99, s.d. = 1.27) and the belief statements (mean = 3.79, s.d. = 1.36) were higher than *neutral* (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ( $t = 2.07$ ;  $p < .05$ ; Appendix table C1). 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 on public lands.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

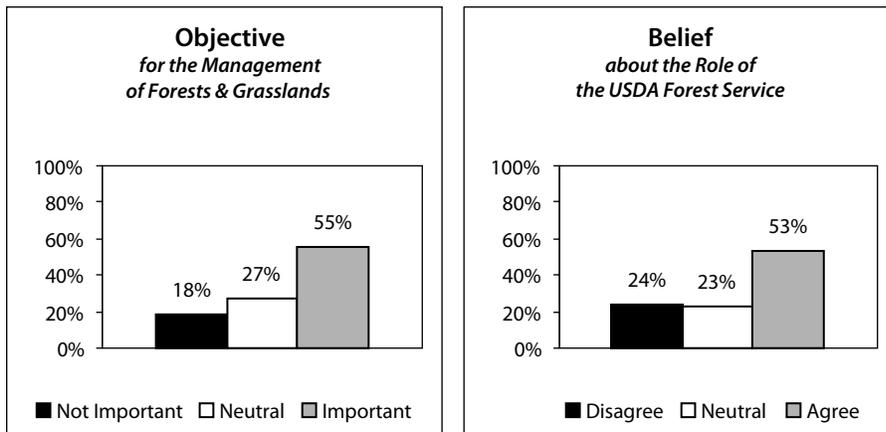
### Providing Natural Resources to Support Communities in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Only 18 percent of Northeastern Area respondents stated that providing natural resources to support communities was *not important* (fig. 11). Slightly more respondents (24 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (55 percent) and *agreed* with the corresponding belief statement (53 percent; See Appendix tables B1 and B2 for



**Figure 10.** Importance of reducing loss of open space and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.



**Figure 11.** Importance of providing natural resources to support communities and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

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 statements (Appendix table B2). Overall, the mean response for the objective statement (mean = 3.60, s.d. = 1.22) was higher than the mean response for the belief statement (mean = 3.45, s.d. = 1.34; Appendix table B3). Nonetheless, in both cases the majority of responses was above *neutral*. A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

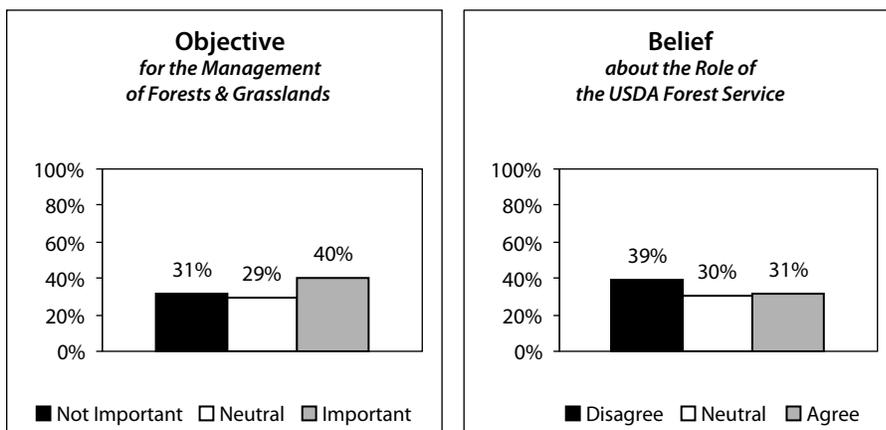
For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses for the belief statement were not statistically significantly different (Appendix table D2). The mean of the responses for the objective statement, however, was statistically significant ( $t = 2.89, p < .05$ ; Appendix table D1). The mean response for Northeastern Area residents (mean = 3.60, s.d. = 1.22) is lower than the mean response for residents of the “Rest of U.S.” (mean = 3.88, s.d. = 1.16). This suggests that less Northeastern Area residents than residents of the

“Rest of U.S.” consider providing natural resources to support communities to be important.

### Expanding Energy and Mineral Production in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Less than 50 percent of Northeastern Area respondents stated that expanding energy and mineral production was an *important* objective (fig. 12). Sixty percent stated that objective was *not important* or *neutral*. The percent of respondents who believe that the objective is an appropriate role of the Forest Service on public lands is 31 percent. A slightly higher percent (39 percent) believe that achieving this objective is not an appropriate role for the Forest Service on public lands (See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). The weak skewness to the higher numeric response for the objective and weak skewness to the lower numeric response for the belief is consistent with the means



**Figure 12.** Importance of expanding energy and mineral production and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

being near *neutral* and the standard deviations being high for both the objective (mean = 3.18, s.d. = 1.32) and belief statements (mean = 2.86, s.d. = 1.42; See Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ( $t = 3.93$ ;  $p < .001$ ; Appendix table C1). 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 on public lands.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Expanding Timber Production and Livestock Grazing in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Less than 50 percent of Northeastern Area respondents stated that expanding timber production and livestock grazing was an *important* objective (fig. 13). Fifty-seven percent stated that the objective was *not important* or *neutral*. The percent of respondents who believe that the objective is an appropriate role of the Forest Service on public lands was 41 percent, while 59 percent believed that achieving this objective is not an appropriate role for the Forest Service on public lands or responded *neutral* (See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). The weak skewness to the higher numeric response for the objective and lack of skewness for

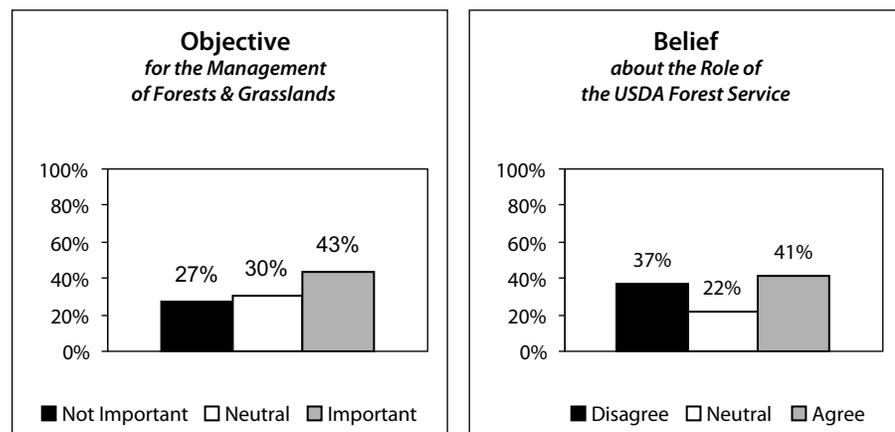
the belief responses is consistent with the means being near *neutral* and the standard deviations being high for both the objective (mean = 3.25, s.d. = 1.38) and the belief statements (mean = 3.06, s.d. = 1.48; See Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ( $t = 2.08$ ;  $p < .05$ ; Appendix table C1). 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 on public lands.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

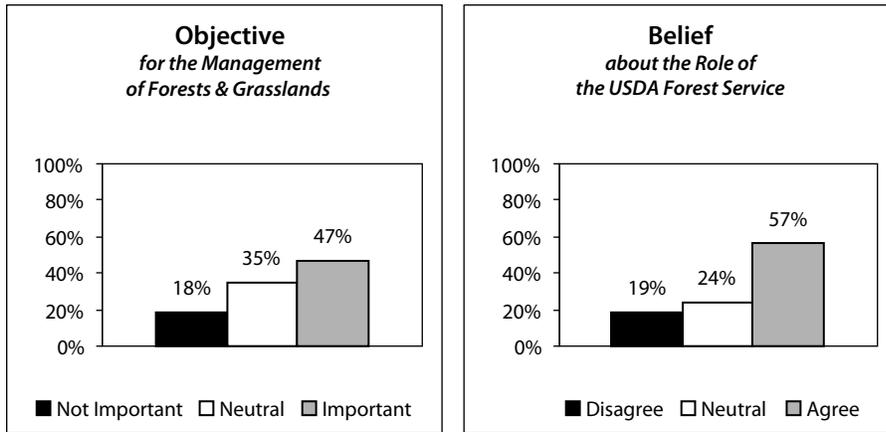
### Simplifying the Permitting Process in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Less than 50 percent of Northeastern Area respondents stated that simplifying the permitting process was an *important* objective (fig. 14). Fifty-three percent stated that the objective was *not important* or *neutral*. The percent of respondents who believe that the objective is an appropriate role of the Forest Service on public lands was 57 percent. Only 19 percent of respondents believe that achieving this objective is not an appropriate role for the Forest Service on public lands (See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). The weak skewness to the higher numeric response for the objective and



**Figure 13.** Importance of expanding timber production and livestock grazing and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.



**Figure 14.** Importance of simplifying the permitting process and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

for the belief responses is consistent with the means being near *neutral* and the standard deviations being high for both the objective statement (mean = 3.43, s.d. = 1.24) and the belief statement (mean = 3.62, s.d. = 1.33; See Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ( $t = -2.18; p < .05$ ; Appendix table C1). In other words, on average, individual 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 on public lands.

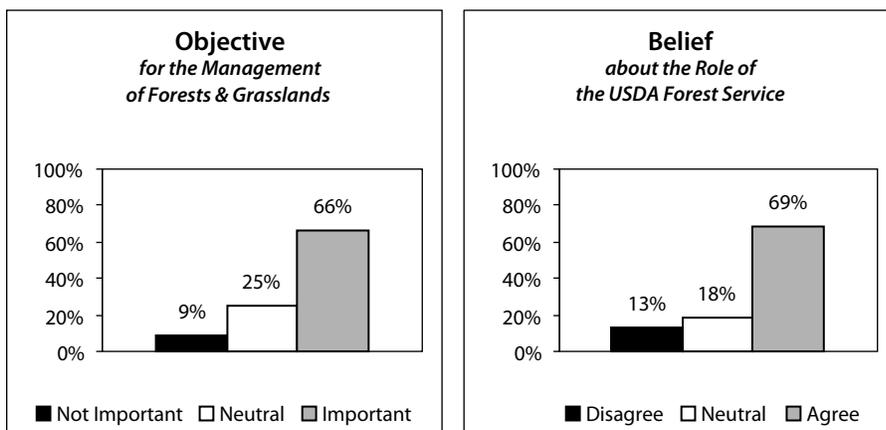
For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Develop National Policies for Natural Resource Development in the Northeastern Area of the United States

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

Only 9 percent of Northeastern Area respondents stated that developing national policies that guide natural resource development was *not important* (fig. 15). Slightly more respondents (13 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagree*). The majority of Northeastern Area respondents identified the objective statement as *important* (66 percent) and *agreed* with the corresponding belief statement (69 percent; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 3.94, s.d. = 1.17) and the belief statements (mean = 3.96, s.d. = 1.21) were higher than *neutral* (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).



**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 for the Northeastern Area.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Expand Commercial Recreation Services in the Northeastern Area of the United States

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 B, C, and D are summarized below.

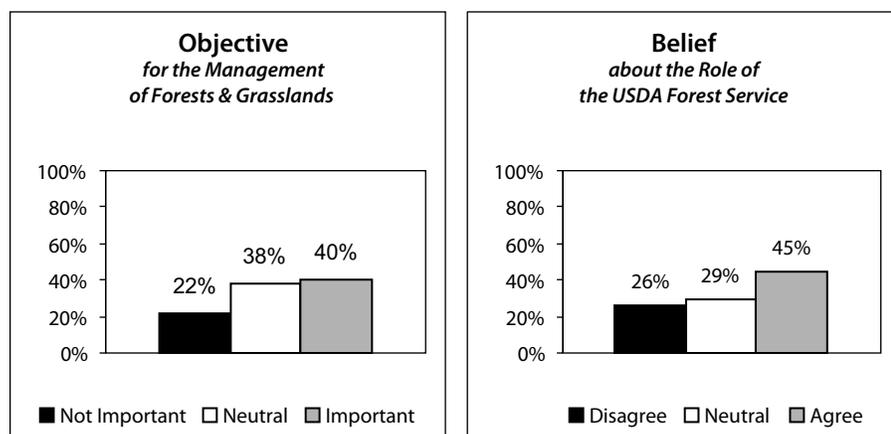
Less than 50 percent of Northeastern Area respondents stated that expanding commercial recreation services was an *important* objective (fig. 16). Sixty percent stated that objective was *not important* or *neutral*. The percent of respondents who believe that the objective is an appropriate role of the Forest Service on public lands was 45 percent, while 55 percent believed that achieving this is not an appropriate role for the Forest Service on public lands or responded *neutral* (See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). The weak skewness

to the higher numeric response for the objective and belief responses is consistent with the means being near *neutral* and the standard deviations being high for both the objective statement (mean = 3.31, s.d. = 1.18) and the belief statement (mean = 3.35, s.d. = 1.33; See Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

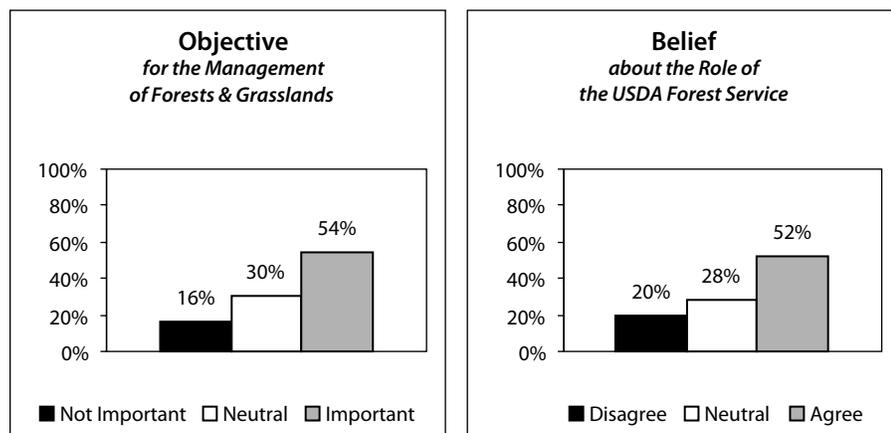
For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Provide Companies with Forest Commodities in the Northeastern Area of the United States

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 B, C, and D are summarized below.



**Figure 16.** Importance of expanding commercial recreation services and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.



**Figure 17.** Importance of providing companies with forest commodities and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

Only 16 percent of Northeastern Area respondents stated that providing companies with forest commodities was *not important* (fig. 17). Slightly more respondents (20 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (54 percent) and *agreed* with the corresponding belief statement (52 percent; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 3.66, s.d. = 1.21) and the belief statements (mean = 3.55, s.d. = 1.28) were higher than *neutral* (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Develop Volunteer Programs for Resource Improvement in the Northeastern Area of the United States

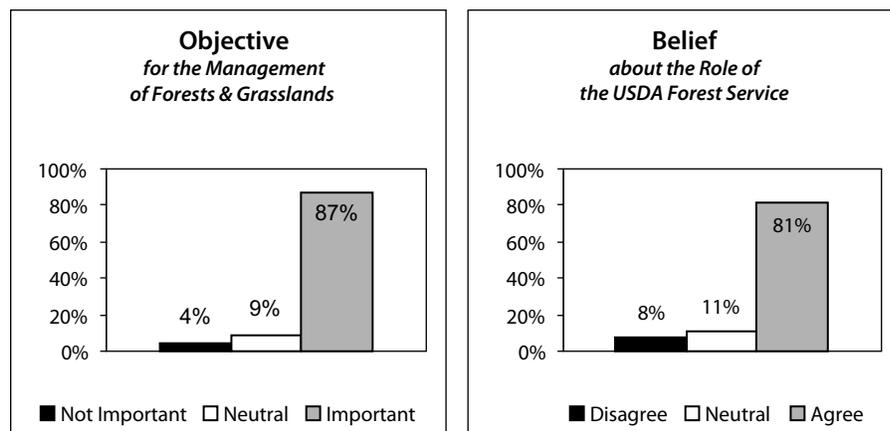
Statement 18, as it appeared in the 2003/2004 survey, was: “Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).” The results illustrated in figure 18 and reported in Appendices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

Eighty-seven percent of Northeastern Area respondents stated that developing volunteer programs to maintain resources was an *important* objective (fig. 18; See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). Fewer respondents (81 percent) believed that the objective was an appropriate role for the Forest Service to play on public lands. The majority of Northeastern Area respondents identified the objective statement as *important* (66 percent chose *very important*) and *agreed* with the corresponding belief statement (56 percent chose *strongly agree*). 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 B2). Overall, mean responses were high and standard deviations were low for the objective (mean = 4.47, s.d. = 0.88) and the belief statements (mean = 4.25, s.d. = 1.06; Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses were statistically significant ( $t = 3.42$ ;  $p < .05$ ; Appendix table C1). 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 on public lands.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Inform the Public about Recreation Concerns in the Northeastern Area of the United States

Statement 19, as it appeared in the 2003/2004 survey, was: “Informing the public about recreation



**Figure 18.** Importance of developing volunteer programs to maintain resources and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

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 B, C, and D are summarized below.

Eighty-three percent of Northeastern Area respondents stated that informing public about recreation concerns was an *important* objective (fig. 19; See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). Slightly more respondents (90 percent) believed that the objective was an appropriate role for the Forest Service to play on public lands. The majority of Northeastern Area respondents identified the objective statement as *important* (64 percent chose *very important*) and *agreed* with the corresponding belief statement (74 percent chose *strongly agree*). 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 B2). Overall, mean responses were high and standard deviations were low for the objective (mean = 4.39, s.d. = 0.96) and the belief statements (mean = 4.61, s.d. = 0.75; Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses were statistically

significant ( $t = -3.86; p < .001$ ; Appendix table C1). In other words, on average, individual 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 on public lands.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Inform the Public about Environmental Impacts in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Seventy-eight percent of Northeastern Area respondents stated that informing the public on environmental impacts was an *important* objective (fig. 20; See Appendix tables B1 and B2 for detailed percents

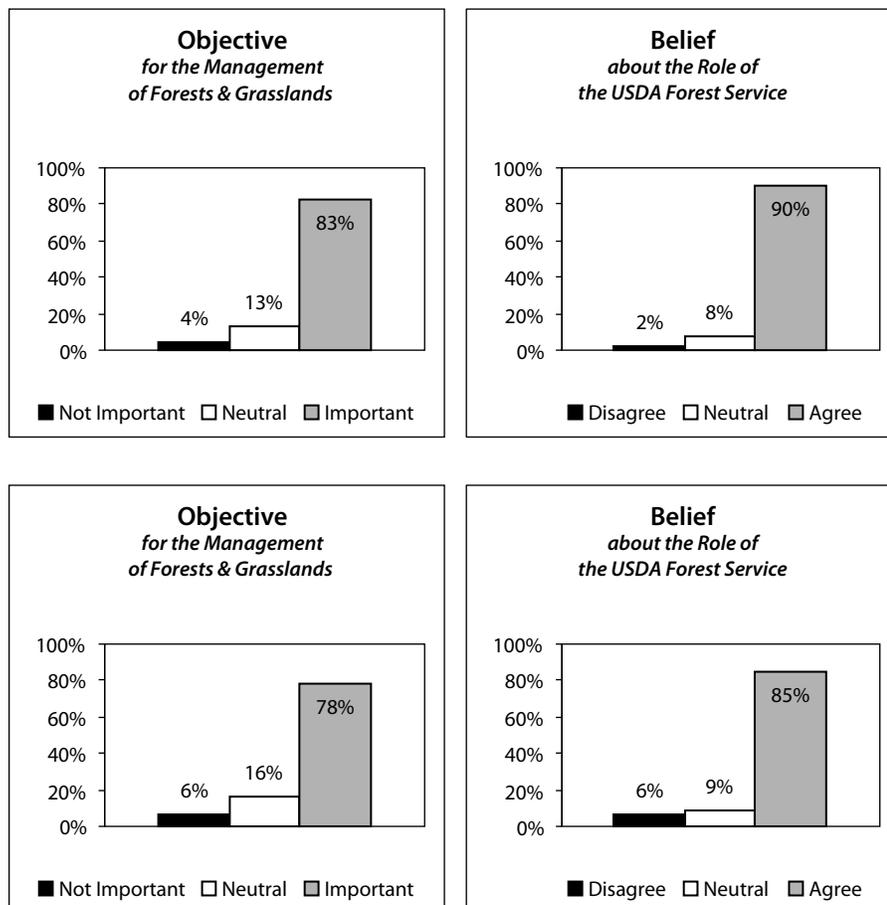


Figure 19. Importance of informing public about recreation concerns and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

Figure 20. Importance of informing public on environmental impacts and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

and corresponding frequencies). Similarly, 85 percent of Northeastern Area respondents believed that the objective was an appropriate role for the Forest Service to play on public lands. The majority of Northeastern Area respondents identified the objective statement as *important* (59 percent chose *very important*) and *agreed* with the corresponding belief statement (60 percent chose *strongly agree*). 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 B2). Overall, mean responses were high and standard deviations were low for the objective (mean = 4.28, s.d. = 1.04) and the belief statements (mean = 4.36, s.d. = 0.98; Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Inform Public on Economic Value in the Northeastern Area of the United States

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 B, C, and D are summarized below.

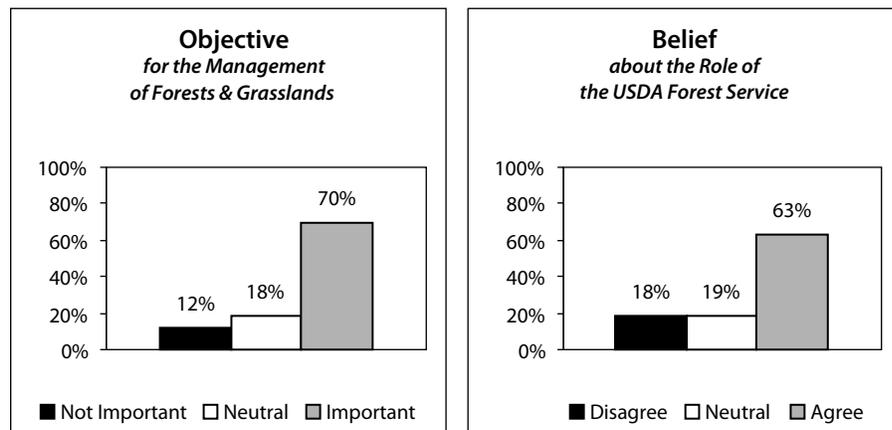
Only 12 percent of Northeastern Area respondents stated that informing public on economic value was *not important* (fig. 21). More respondents (18 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (70 percent) and *agreed* with the corresponding

belief statement (63 percent; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 4.01, s.d. = 1.22) and the belief statements (mean = 3.76, s.d. = 1.31) were higher than *neutral* (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses were statistically significant ( $t = 2.97; p < .05$ ; Appendix table C1). 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 on public lands.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean of the responses for the objective statement was not statistically significantly different (Appendix table D1). The mean of the responses for the belief statement, however, was statistically significant ( $t = 2.81, p < .05$ ; Appendix table D2). The mean for Northeastern Area residents (mean = 3.76, s.d. = 1.31) is lower than the mean response by residents of the “Rest of U.S.” (mean = 4.03, s.d. = 1.20). This suggests that less Northeastern Area residents than residents of the “Rest of U.S.” believe that informing the public on economic value is an appropriate role of the Forest Service on public lands.

### Give Responsibility to Local Community Advisory Boards in the Northeastern Area of the United States

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 21.** Importance of informing public on economic value and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

figure 22 and reported in Appendices B, C, and D are summarized below.

Less than 50 percent of Northeastern Area respondents stated that allowing transfer of responsibility to local community advisory boards was an *important* objective (fig. 22). Fifty-seven percent stated that objective was *not important* or was *neutral*. The percent of respondents who believed that the objective is an appropriate role of the Forest Service on public lands was 43 percent, while 57 percent believed that achieving this is not an appropriate role for the Forest Service on public lands or responded *neutral* (See Appendix tables B1 and B2 for detailed percents and corresponding frequencies). The weak skewness to the higher numeric response for the objective and belief responses are also apparent by the means being near *neutral* and standard deviations being high for both the objective statement (mean = 3.33, s.d. = 1.25) and the belief statement (mean = 3.26, s.d. = 1.28; See Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

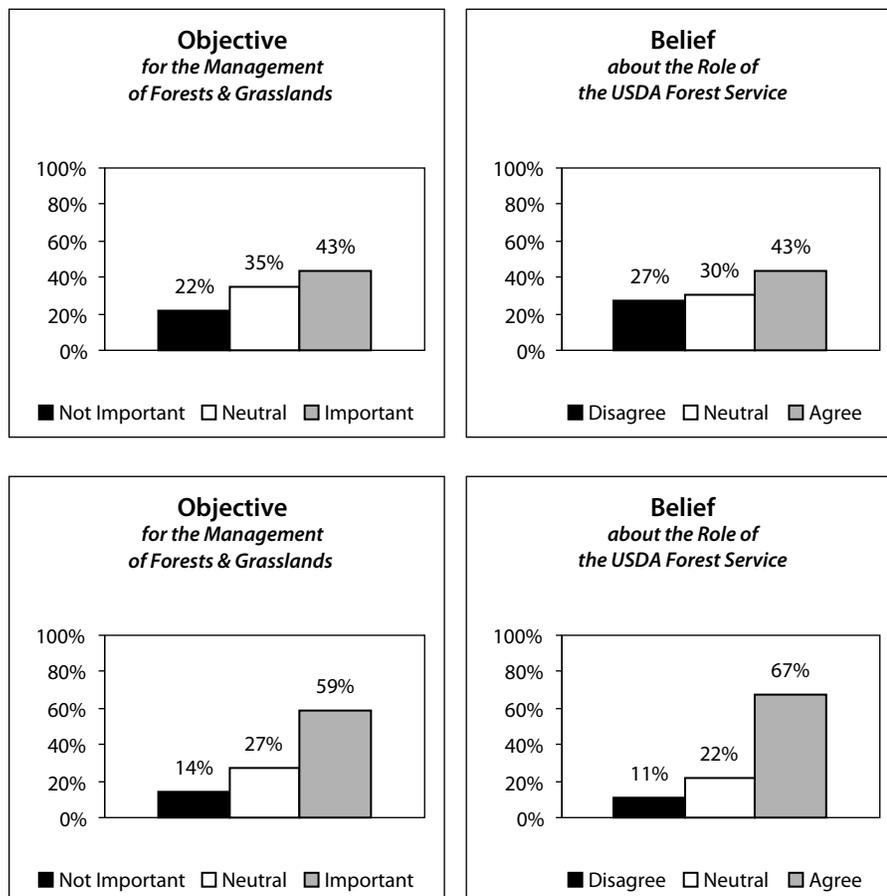
For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either

the objective or the belief statements (Appendix tables D1, D2).

### Use Public Advisory Committees in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Only 14 percent of Northeastern Area respondents stated that using public advisory committees was *not important* (fig. 23). Fewer respondents (11 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). Slightly more than the majority of Northeastern Area respondents identified the objective statement as *important* (59 percent), while greater than the majority of Northeastern Area respondents *agreed* with the corresponding belief statement (67 percent; See Appendix tables B1 and B2 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 = 3.78, s.d. = 1.20) was lower than



**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 for the Northeastern Area.

**Figure 23.** Importance of using public advisory committees and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

for the objective (mean = 3.91, s.d. = 1.13; Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Allow Diverse Uses in the Northeastern Area of the United States

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 B, C, and D are summarized below.

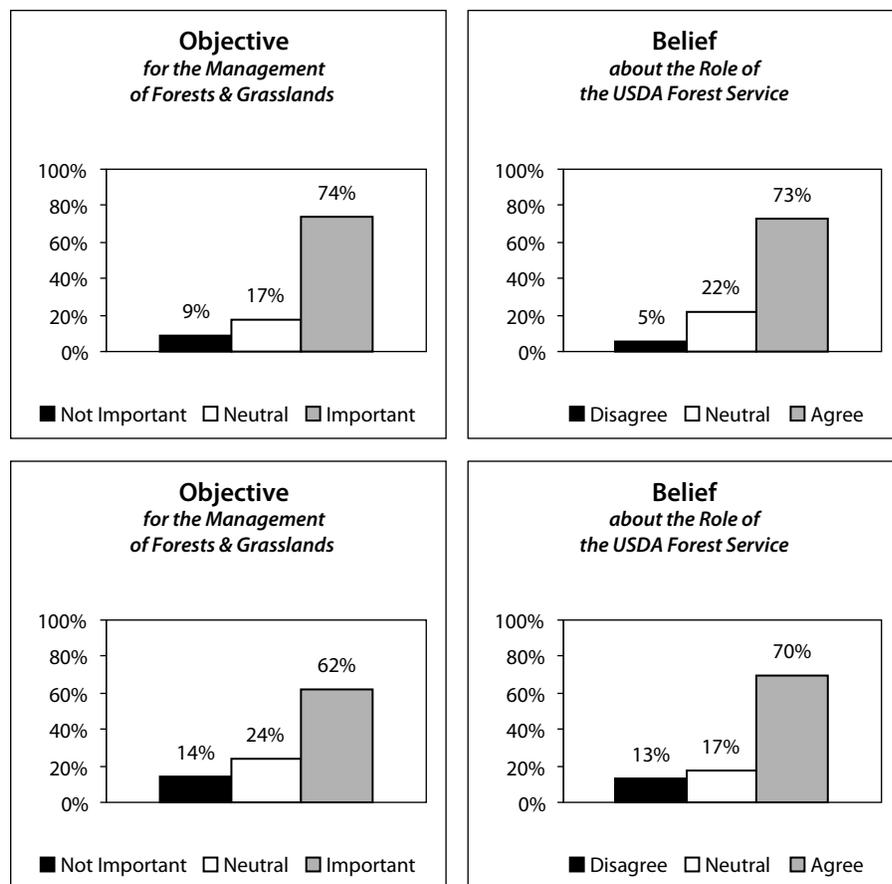
Only 9 percent of Northeastern Area respondents stated that allowing diverse uses was *not important* (fig. 24). Even fewer (5 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (74 percent) and *agreed* with the corresponding belief statement (73 percent; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 4.05, s.d. = 1.05) and the belief statements (mean = 4.14, s.d. = 0.96) were high (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Make Management Decisions at Local Level in the Northeastern Area of the United States

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 B, C, and D are summarized below.



**Figure 24.** Importance of allowing diverse uses and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

**Figure 25.** Importance of making management decisions at a local level and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

Only 14 percent of Northeastern Area respondents stated that making management decisions at a local level was *not important* (fig. 25). Similarly, 13 percent of respondents believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (62 percent) and *agreed* with the corresponding belief statement (70 percent; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 3.82, s.d. = 1.19) and the belief statements (mean = 3.92, s.d. = 1.22) were higher than *neutral* (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean of the responses for the belief statement was not statistically significantly different (Appendix table D2). The mean of the responses for the objective statement, however, was statistically significant ( $t = 2.00, p < .05$ ; Appendix table D1). The mean for Northeastern Area residents (mean = 4.00, s.d. = 1.13) is higher than the mean response by residents of the “Rest of U.S.” (mean = 3.82, s.d. = 1.19).

### Entry Fees in the Northeastern Area of the United States

Statement 26, as it appeared in the 2003/2004 survey, was: “Supporting maintenance of recreational facilities on public land by collecting an entry fee.”

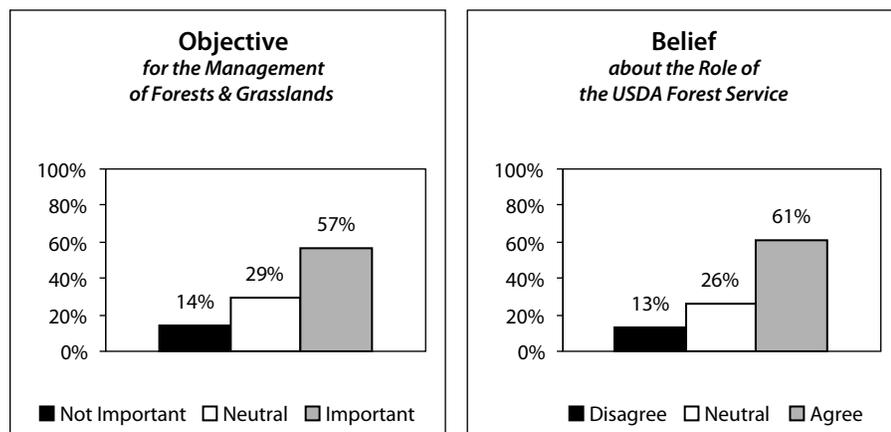
The results illustrated in figure 26 and reported in Appendices B, C, and D are summarized below

Only 14 percent of Northeastern Area respondents stated that collecting entry fees was *not important* (fig. 26). Fewer (13 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (57 percent) and *agreed* with the corresponding belief statement (61 percent; See Appendix tables B1 and B2 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 on public lands to collect fees than with the objective statement. 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 B2). Overall, the mean of the responses for both the objective (mean = 3.69, s.d. = 1.18) and the belief statements (mean = 3.78, s.d. = 1.16) were higher than *neutral* (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

### Increase Law Enforcement Efforts in the Northeastern Area of the United States

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



**Figure 26.** Importance of collecting entry fees and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

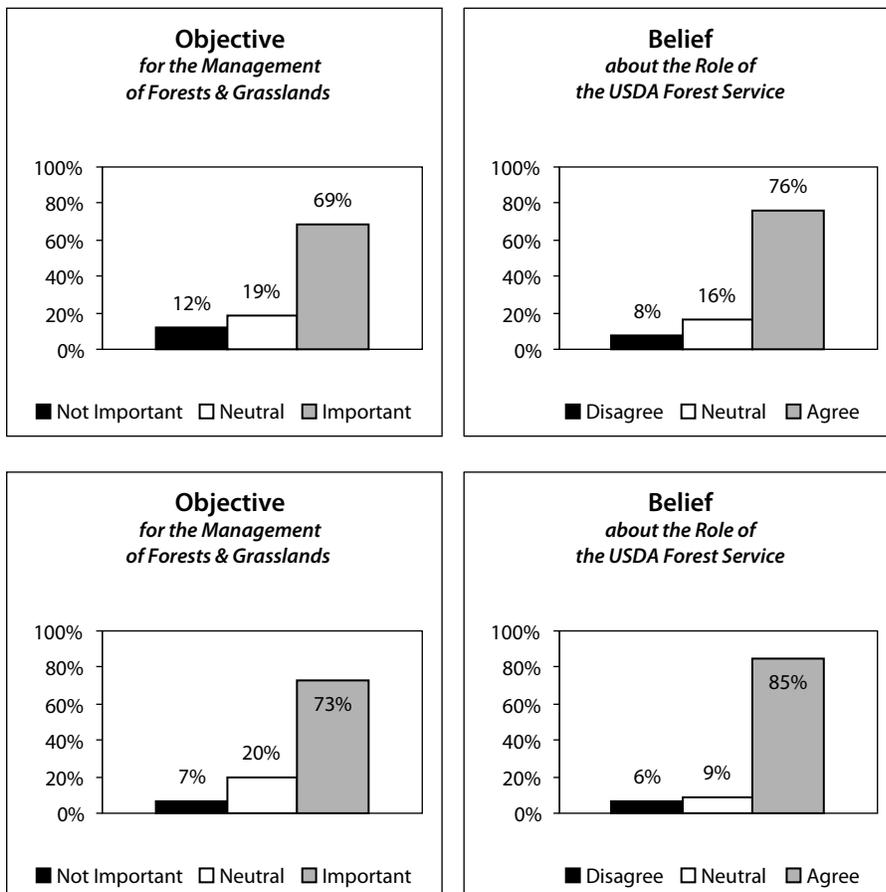
illustrated in figure 27 and reported in Appendices B, C, and D are summarized below.

Only 12 percent of Northeastern Area respondents stated that increasing law enforcement efforts was *not important* (fig. 27). Similarly, 8 percent believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (69 percent) and *agreed* with the corresponding belief statement (76 percent; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 3.99, s.d. = 1.13) and belief statements (mean = 4.15, s.d. = 1.03) were high (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ( $t = -2.47; p < .05$ ; Appendix table C1). In other words, on average, individual 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 on public lands.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean of the responses for the objective statement was not statistically significantly different (Appendix table D1). The mean of the responses for the belief statement, however, was statistically significant ( $t = -1.96, p = .05$ ; Appendix table D2). The mean for Northeastern Area residents (mean = 4.15, s.d. = 1.03) is higher than the mean response by residents of the “Rest of U.S.” (mean = 3.99, s.d. = 1.17). This suggests that more Northeastern Area residents than residents of the “Rest of U.S.” believe that increasing law enforcement efforts is an appropriate role of the Forest Service on public lands.

### Use of Management Tools to Reduce Wildfires, in General, in the Northeastern Area of the United States

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 B, C, and D are summarized below.



**Figure 27.** Importance of increasing law enforcement efforts and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

**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 for the Northeastern Area.

Only 7 percent of Northeastern Area respondents stated that using management tools to reduce wildfires in general was *not important* (fig. 28). Fewer (6 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (73 percent) and *agreed* with the corresponding belief statement (85 percent; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 4.08, s.d. = 1.07) and the belief statements (mean = 4.41, s.d. = 0.99) were high (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ( $t = -5.09$ ;  $p < .001$ ; Appendix table C1). In other words, on average, individual 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 on public lands.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either the objective or the belief statements (Appendix tables D1, D2).

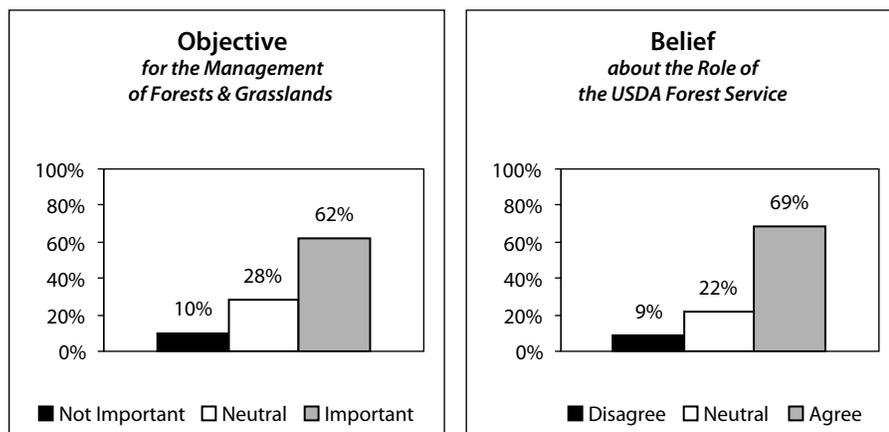
### Use of Management Tools to Reduce Wildfires, Around Communities, in the Northeastern Area of the United States

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

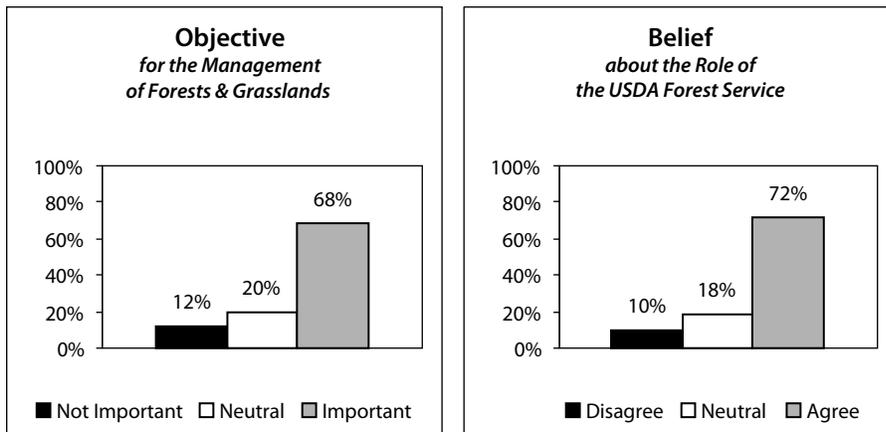
only around communities.” The results illustrated in figure 29 and reported in Appendices B, C, and D are summarized below.

Only 10 percent of Northeastern Area respondents stated that using management tools to reduce wildfires around communities was *not important* (fig. 29). Fewer respondents (9 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (62 percent) and *agreed* with the corresponding belief statement (69 percent; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 3.82, s.d. = 1.12) and the belief statements (mean = 3.98, s.d. = 1.08) were higher than *neutral*. A paired *t*-test showed that the difference between the objective and belief statement responses was statistically significant ( $t = -2.12$ ;  $p < .05$ ; Appendix table C1). In other words, on average, individual 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 on public lands.

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean of the responses for the belief statement was not statistically significantly different (Appendix table D2). The mean of the responses for the objective statement, however, was statistically significant ( $t = 2.64$ ,  $p < .05$ ; Appendix table D1). The mean for Northeastern Area residents (mean = 3.82, s.d. = 1.12) is lower than the mean response by residents of the “Rest of U.S.” (mean = 4.05, s.d. = 1.05). This suggests that less Northeastern Area residents than residents of 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 for the Northeastern Area.



**Figure 30.** Importance of reducing spread of invasive species and level of agreement with the corresponding role of the USDA Forest Service for the Northeastern Area.

“Rest of U.S.” consider using management tools to reduce the risk of catastrophic wildfire around communities to be important.

### Reducing Invasive Species in the Northeastern Area of the United States

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 B, C, and D are summarized below.

Only 12 percent of Northeastern Area respondents stated that reducing the spread of invasive species was *not important* (fig. 30). A slightly lower percent (10 percent) believed that achieving the objective was not an appropriate role for the Forest Service to play on public lands (*disagreed*). The majority of Northeastern Area respondents identified the objective statement as *important* (68 percent) and *agreed* with the corresponding belief statement (72 percent; See Appendix tables B1 and B2 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 B2). Overall, the mean of the responses for both the objective (mean = 3.97, s.d. = 1.21) and the belief statements (mean = 4.04, s.d. = 1.14) were higher than *neutral* (Appendix table B3). A paired *t*-test showed that the difference between the objective and belief statement responses was not statistically significant (Appendix table C1).

For respondents in the Northeastern Area versus respondents in the “Rest of U.S.,” the mean responses were not statistically significantly different for either

the objective or the belief statements (Appendix tables D1, D2).

### Topical Groupings of Objective/Belief Statements

This section presents the survey results for the objective and beliefs statement grouped according to overarching categories: Preservation/conservation, information sharing/public involvement, economic development, 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 1 is seen as useful for discussing similarities and differences among statements for the purpose of this report (see also Shelby and others 2008).

#### Preservation/Conservation

Preservation/conservation statements address how forests and grasslands sustain the health, viability, and productivity of their natural systems. Statements in the VOA 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 uses the two terms interchangeably. Means and standard deviations for Northeastern Area respondents for this category are reported in table 2 and percents are reported in Appendix table B4.

All of the preservation/conservation objective statements were considered by Northeastern Area respondents to be important (mean  $\geq 3.82$ ) and to

**Table 1**—Researcher defined objective statement categories.

Category	Statement
<b>Preservation/Conservation</b>	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).
	<b>Information Sharing/Public Involvement</b>
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 than the national level.	
<b>Economic Development</b>	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.

**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.

**Table 2**—Means and standard deviations for the Northeastern Area’s responses to Version 2 preservation/conservation objective and belief statements. <sup>a</sup>

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.	4.65	0.75	4.64	0.79
7. Protecting ecosystems, and wildlife and fish habitats.	4.60	0.86	4.61	0.86
8. Preserving the ability to have a ‘wilderness’ experience on public lands, through protection and management of areas in designated wilderness systems.	4.31	0.94	4.34	0.99
10. Reducing loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.*	3.99	1.27	3.79	1.36
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.05	1.05	4.14	0.96
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.*	3.99	1.13	4.15	1.03
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.*	4.08	1.07	4.41	0.99
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.*	3.82	1.12	3.98	1.08
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).	3.97	1.21	4.04	1.14

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

<sup>a</sup> Objectives and beliefs were measured on a 5-pt. scale (objectives, 1 = *not at all important* to 5 = *very important*; beliefs, 1 = *strongly disagree* to 5 = *strongly agree*). See Appendices for detailed results.

be appropriate roles of the Forest Service (mean  $\geq$  3.79). These high means support the conclusion that land preservation and conservation are important to Northeastern Area residents. Especially noteworthy is the strong support for conserving and protecting forests and grasslands that are the source of our water resources (objective mean = 4.65, belief mean = 4.64). Protection of ecosystems is also seen as an important objective (mean = 4.60) and an appropriate role for the Forest Service on public lands (mean = 4.61). The fact that the belief responses were statistically higher than the objective responses, according to paired *t*-test results (see table 2, Appendix C) on both wildland fire statements, suggests that Northeastern Area residents see reducing the risk of wildfire as a particularly

appropriate role for the Forest Service on public lands. 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 value received by developing our natural resources. Public involvement statements included volunteer programs, local community advisory boards, public advisory

**Table 3**—Means and standard deviations for the Northeastern Area’s responses to Version 2 information sharing/public involvement objective and belief statements. <sup>a</sup>

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).*	4.47	0.88	4.25	1.06
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.*	4.39	0.96	4.61	0.75
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	4.28	1.04	4.36	0.98
21. Informing the public on the economic value received by developing our natural resources.*	4.01	1.22	3.76	1.31
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	3.33	1.25	3.26	1.28
23. Using public advisory committees to advise government agencies on public land management issues.	3.78	1.20	3.91	1.13
25. Making management decisions concerning the use of forests and grasslands at the local level rather than the national level.	3.82	1.19	3.92	1.22

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

<sup>a</sup> Objectives and beliefs were measured on a 5-pt. scale (objectives, 1 = *not at all important* to 5 = *very important*; beliefs, 1 = *strongly disagree* to 5 = *strongly agree*). See Appendices for detailed results.

committees, and making decisions at the local level. Means and standard deviations for this group of statements for Northeastern Area respondents are reported in table 3, and percents are reported in Appendix table B5.

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 (mean  $\geq 3.33$ ) and appropriate roles for the Forest Service on public lands (mean  $\geq 3.26$ ). Objective/belief statements concerning opportunities for public involvement vary in their level of support, but the public, on average, is either neutral or supportive of all of them (means range from 3.26 to 4.61). Developing volunteer programs, for example, received widespread support (objective mean = 4.47, belief mean = 4.25), whereas allowing the local community advisory boards to have more responsibility was, on average, closer to neutral (objective mean = 3.33, belief mean = 3.26). The objective responses for developing volunteer programs, informing the

public on the economic value of natural resources, and informing the public about recreation concerns are statistically significantly different from the belief responses according to paired *t*-test results (see table 3 and Appendix C). All means are greater than 3.26, which suggests that Northeastern Area respondents have positive opinions about information sharing and public involvement with respect to forests and grasslands.

### Economic Development

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). Means and standard deviations for this group of statements for Northeastern Area respondents are reported in table 4 and percents are reported in Appendix table B6.

These objective/belief statements address extractive uses of public lands (for example, mining, grazing, and timber removals), in addition to addressing

**Table 4**—Means and standard deviations for the Northeastern Area’s responses to Version 2 economic development objective and belief statements. <sup>a</sup>

Economic development statements	Objective		Belief	
	Mean	SD	Mean	SD
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining, or timber harvesting.	3.60	1.22	3.45	1.34
12. Expanding energy and mineral production on forests and grasslands.*	3.18	1.32	2.86	1.42
13. Expanding timber production and livestock grazing on forests and grasslands.*	3.25	1.38	3.06	1.48
16. Expanding commercial recreational services on forests and grasslands (for example, guide services or outfitters).	3.31	1.18	3.35	1.33
17. Providing companies with forest commodities in exchange for assistance in achieving management goals such as ecosystem restoration on public forests and grasslands.	3.66	1.21	3.55	1.28
21. Informing the public on the economic value received by developing our natural resources.*	4.01	1.22	3.76	1.31
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.05	1.05	4.14	0.96

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

<sup>a</sup> Objectives and beliefs were measured on a 5-pt. scale (objectives, 1 = *not at all important* to 5 = *very important*; beliefs, 1 = *strongly disagree* to 5 = *strongly agree*). See Appendices for detailed results.

development of natural areas. Commercial concerns, such as expanding commercial recreational services and providing companies with forest commodities, are also included. Northeastern Area respondents, on average, are neutral to somewhat supportive of these objectives/beliefs (means range from 2.86 to 4.14). Northeastern Area respondents are more in favor of resource extraction when those activities are placed in the context of the needs of communities, ecosystem restoration, or multiple uses of forests and grasslands than they are of expanding such activities in general. The belief responses are statistically significantly less than the objective responses for three of the seven statements based on the paired *t*-test results (see table 4 and Appendix C). This suggests that Northeastern Area residents are less supportive of managing for these activities or expanding resource extraction on forests and grasslands as a role of the Forest Service on public lands than they are of extractive activities being conducted overall.

### Cultural/Traditional

The VOBA cultural/traditional statements address activities on forests and grasslands that are perceived

as being traditional in some communities or having cultural meaning to participants. Means and standard deviations for this group of statements for Northeastern Area respondents are reported in table 5 and percents are reported in Appendix table B7.

Items in this category were considered important and appropriate roles for the Forest Service on public lands. Preserving cultural uses, such as fire wood gathering, herb/berry/plant gathering, and ceremonial access, of forests and grasslands by Native Americans and traditional groups, is an important objective (mean = 3.93) and an appropriate role for the Forest Service on public lands (mean = 3.78). Objective means for preserving the cultural uses of forests and grasslands (mean = 3.93) and providing natural resources from forests and grasslands to support communities (mean = 3.60) are noticeably higher than the corresponding belief means (mean = 3.78; mean = 3.45). However, according to paired *t*-test results (see table 5 and Appendix C), for both of the statements in the cultural/traditional category, the objective responses were not statistically significantly different from the belief responses.

**Table 5**—Means and standard deviations for the Northeastern Area’s responses to Version 2 cultural and traditional objective and belief statements. <sup>a</sup>

Cultural/traditional statements	Objective		Belief	
	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.	3.93	1.15	3.78	1.26
11. Providing natural resources from forests and grassland to support communities dependent on grazing, energy production, mining, or timber harvesting.	3.60	1.22	3.45	1.34

<sup>a</sup> Objectives and beliefs were measured on a 5-pt. scale (objectives, 1 = *not at all important* to 5 = *very important*; beliefs, 1 = *strongly disagree* to 5 = *strongly agree*). See Appendices for detailed results.

### Access

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. Means and standard deviations for this group of statements for Northeastern Area respondents are reported in table 6 and percents are reported in Appendix table B8.

Northeastern Area respondents are divided in their opinion about the provision of access. This is evidenced by the difference between support for trail development and maintenance for motorized vehicles

**Table 6**—Means and standard deviations for the Northeastern Area’s responses to Version 2 access objective and belief statements. <sup>a</sup>

Access statements	Objective		Belief	
	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.	4.21	1.23	4.20	1.18
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	3.05	1.50	3.15	1.46
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.	4.05	1.10	3.90	1.22
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).	3.97	1.19	3.96	1.18
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.*	2.67	1.43	2.91	1.46

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

<sup>a</sup> Objectives and beliefs were measured on a 5-pt. scale (objectives, 1 = *not at all important* to 5 = *very important*; beliefs, 1 = *strongly disagree* to 5 = *strongly agree*). See Appendices for detailed results.

**Table 7**—Means and standard deviations for the Northeastern Area’s responses to Version 2 regulatory issues objective and belief statements. <sup>a</sup>

Regulatory issues statements	Objective		Belief	
	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.	4.21	1.23	4.20	1.18
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).	3.97	1.19	3.96	1.18
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.*	3.43	1.24	3.62	1.33
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.94	1.17	3.96	1.21
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	3.69	1.18	3.78	1.16
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.*	3.99	1.13	4.15	1.03

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

<sup>a</sup> Objectives and beliefs were measured on a 5-pt. scale (objectives, 1 = *not at all important* to 5 = *very important*; beliefs, 1 = *strongly disagree* to 5 = *strongly agree*). See Appendices for detailed results.

(objective mean = 3.05, belief mean = 3.15) and non-motorized vehicles (objective mean = 4.05, belief mean = 3.90). While the Northeastern Area respondents, on average, were approximately neutral concerning developing new paved roads (objective mean = 2.67, belief mean = 2.91), it is noteworthy that this objective has 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 responses according to paired *t*-test results (see table 6 and Appendix B) suggests that Northeastern Area residents believe that if paved roads are to be built, it is an appropriate role of the Forest Service on public lands to manage for this objective. In general, Northeastern Area residents see 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 (in other words, 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 of statements for Northeastern Area respondents are reported in table 7 and percents are reported in Appendix table B9.

Objective/belief statements involving management through regulation consistently resulted in moderate to strong support (means range from 3.43 to 4.20). 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 = 3.99) and an appropriate role of the Forest Service on public lands (mean = 4.15). For the statements in this category, two of the belief responses were statistically significantly different from the objective responses based on the paired *t*-test

results (see table 7 and Appendix C). This suggests that Northeastern Area residents are more supportive of simplifying the permitting process and increasing law enforcement efforts being appropriate roles of the Forest Service than they are of these activities in general.

### ***Objective and Belief Statements Ordered by Percentage***

For most of the objective statements in Version 2 (23 of 30 statements), the majority of Northeastern Area respondents evaluated the statements as *important* (fig. 31). Developing new paved roads was the only objective where greater than 50 percent of Northeastern Area respondents rated the objective as *not important*. The six remaining statements showed less of a consensus. Maintaining continuous trail systems for motorized vehicles resulted in 39 percent of respondents rating the objective as *important* and 39 percent rating it as *not important*. Although not achieving a majority, a few additional statements had

a greater percentage of Northeastern Area respondents rating the objective as *important* than rating it as *not important*: 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 Northeastern Area respondents believed most of the statements reflected appropriate roles of the USDA Forest Service (22 of 30 statements). A greater percentage of Northeastern Area respondents disagreed than agreed that (1) developing new paved roads and (2) expanding energy and mineral production were appropriate roles for the USDA Forest Service (Fig. 32). Four additional statements had a greater percentage of Northeastern Area respondents agreeing with the belief statement than disagreeing: developing and maintaining continuous trail systems for motorized vehicles, expanding timber production and livestock grazing, expanding commercial recreation services, and allowing transfer of responsibility to local community advisory boards.

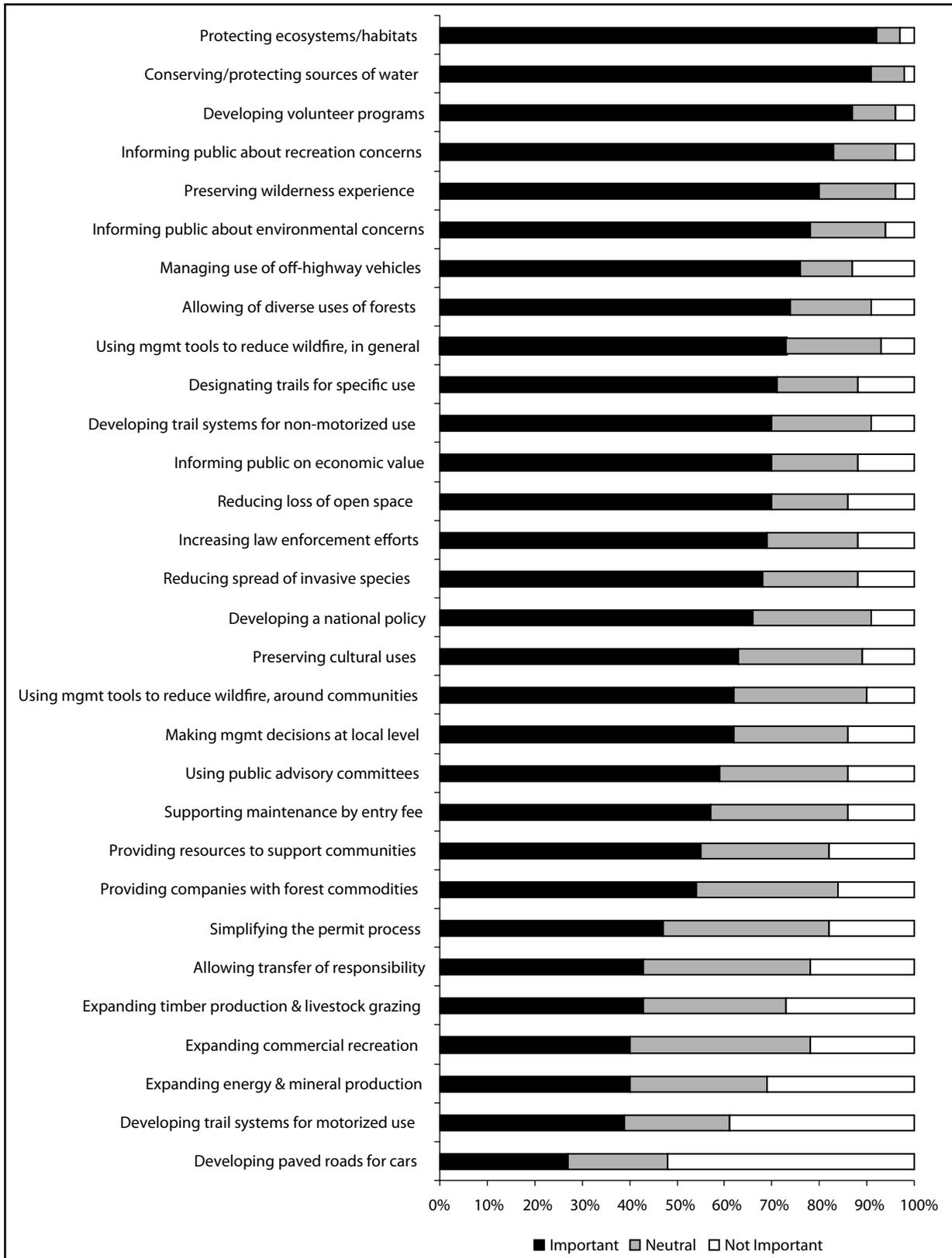


Figure 31. VOBA 2 objectives ordered by percentage of importance.

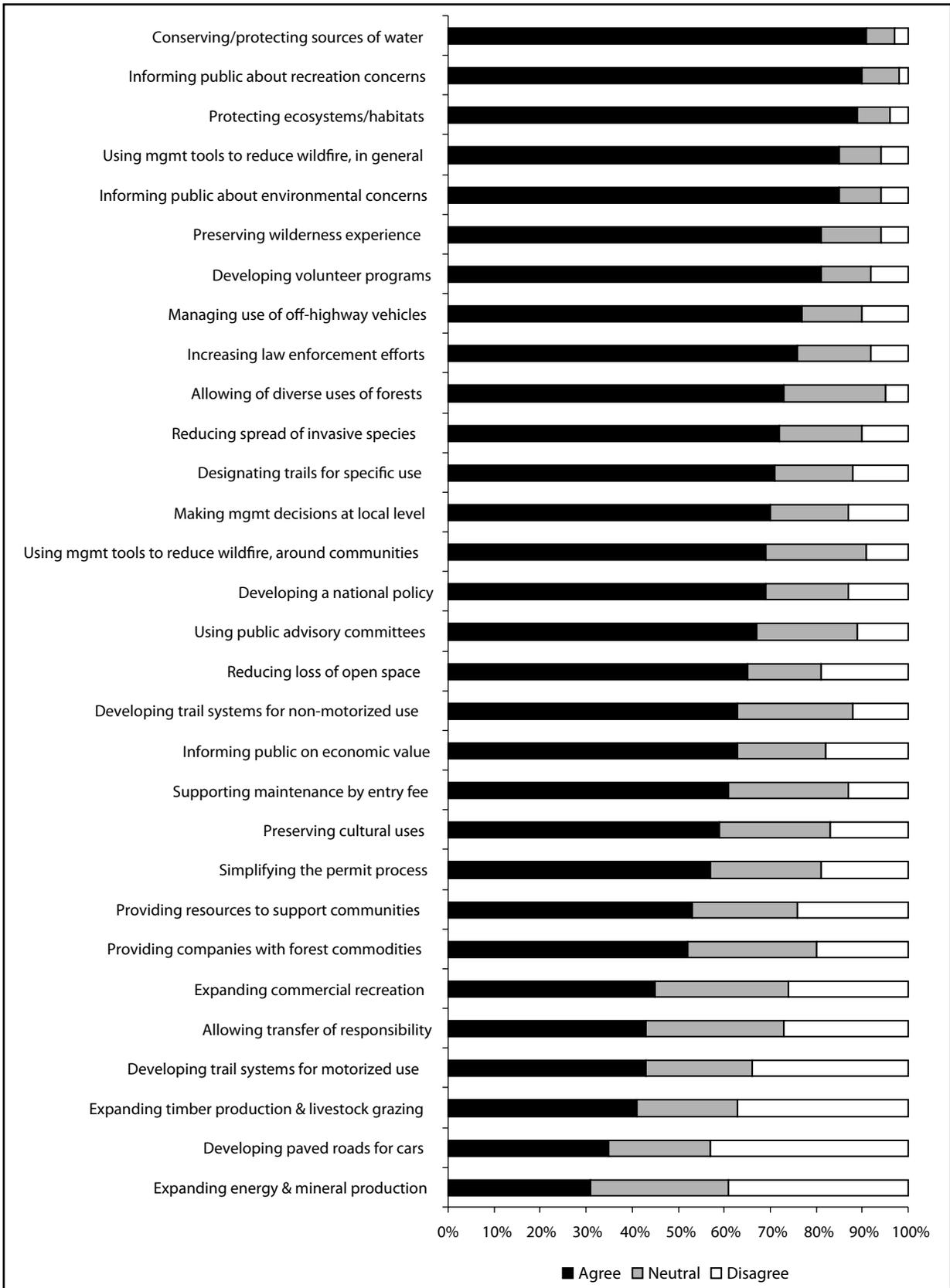


Figure 32. VOBA 2 beliefs ordered by percentage of agreement.

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# Appendix A: Objective and Beliefs Module of the NSRE Telephone Survey

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**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 six 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 six 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 B: Supporting Tables— Descriptive Statistics for Northeastern Area Sample

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**Table B1**—Percents of responses in each response category for the Northeastern Area’s Version 2 objective and belief statements. <sup>a, b</sup>

Statement	Objectives <sup>c</sup> for the management of forests and grasslands (percent)				Beliefs <sup>d, e</sup> about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	Slightly important	Very important	Strongly disagree	Disagree	Neutral	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.	6.0	6.4	11.0	13.5	63.0	6.0	4.3	12.4	59.2
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	22.4	16.1	22.4	12.2	27.0	19.7	14.5	23.0	26.0
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.	3.1	5.9	21.5	21.5	48.0	6.2	5.8	24.8	44.6
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).	5.8	6.6	16.8	25.9	44.9	6.2	5.8	17.0	42.8
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	26.8	25.2	21.2	8.2	18.6	23.1	19.4	22.4	21.7
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	1.1	1.1	7.1	13.1	77.7	1.8	1.1	6.0	77.4

**Table B1—Continued.** <sup>a, b</sup>

Statement	Objectives <sup>c</sup> for the management of forests and grasslands (percent)					Beliefs <sup>d, e</sup> 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.	3.2	0.0	5.4	15.8	75.5	1.8	2.5	6.5	11.6	77.5
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	1.6	2.5	16.1	23.1	56.6	2.5	3.2	12.7	21.0	60.5
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.	3.0	8.5	25.9	18.1	44.4	6.3	10.4	23.8	17.8	41.6
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	7.8	6.1	15.9	19.3	50.8	10.5	8.5	15.9	21.4	43.7
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining, or timber harvesting.	6.7	11.5	26.9	24.5	30.4	12.5	11.3	23.3	24.9	28.0
12. Expanding energy and mineral production on forests and grasslands.	13.0	17.9	28.6	18.7	21.8	25.7	13.0	29.7	13.4	18.2
13. Expanding timber production and livestock grazing on forests and grasslands.	16.3	11.0	29.4	18.1	25.2	22.4	14.7	22.4	15.7	24.8
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	10.9	7.3	34.9	22.2	24.7	11.6	7.2	24.2	22.0	35.0

Table B1—Continued. <sup>a, b</sup>

Statement	Objectives <sup>c</sup> for the management of forests and grasslands (percent)					Beliefs <sup>d, e</sup> 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).	5.9	3.5	25.3	21.1	44.3	6.2	6.2	18.3	23.5	45.7
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	8.2	13.6	37.7	20.2	20.2	12.2	13.4	29.0	18.3	27.1
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	30.2	20.0	33.7	9.1	10.5	27.7	21.8	30.9
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	1.8	1.8	9.6	21.1	65.7	3.9	4.3	10.7	25.3	55.9
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.	3.0	1.3	12.8	19.3	63.6	0.6	1.6	7.4	16.8	73.5
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	3.4	2.4	16.1	19.2	58.9	3.1	3.1	8.8	24.8	60.2

**Table B1—Continued.** <sup>a, b</sup>

Statement	Objectives <sup>c</sup> for the management of forests and grasslands (percent)					Beliefs <sup>d, e</sup> 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.	6.7	5.1	17.8	21.5	48.8	9.1	9.4	18.8	22.5	40.3
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	10.7	11.1	35.6	19.6	23.0	11.4	16.1	29.7	20.9	22.0
23. Using public advisory committees to advise government agencies on public land management issues.	4.8	9.6	27.1	19.6	38.8	4.8	5.8	22.1	28.2	39.1
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	3.0	5.9	17.1	30.9	43.1	1.3	3.3	22.4	26.1	46.9
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	5.2	8.8	23.7	23.3	39.0	7.1	6.3	16.6	27.7	42.3
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	6.0	8.4	28.4	24.7	32.4	5.4	7.1	26.0	26.7	34.8
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	3.4	8.3	19.3	24.1	44.8	1.7	6.6	16.0	26.1	49.5
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.	4.1	2.7	20.5	26.0	46.6	3.1	3.1	8.9	19.5	65.5

Table B1—Continued.<sup>a, b</sup>

Statement	Objectives <sup>c</sup> for the management of forests and grasslands (percent)				Beliefs <sup>d, e</sup> about the role of the USDA Forest Service (percent)					
	Not at all important	Slightly unimportant	Neutral	Very important	Strongly 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.	4.7	5.9	27.7	26.6	35.2	3.1	6.2	21.9	27.3	41.5
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).	6.1	5.7	20.5	20.9	46.8	4.9	5.3	17.8	25.0	47.0

<sup>a</sup>Overall n for the Northeastern Area = 1,437. The number of responses for each individual statement ranged from 253 to 316 resulting in a confidence level of 95% with confidence intervals ranging from  $\pm 5.51\%$  to  $\pm 6.16\%$  for all objective and belief statements.

<sup>b</sup>Table entries contain percents. Percents may not total to 100.0 due to rounding.

<sup>c</sup>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*.

<sup>d</sup>Beliefs were measured on a five point scale 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

<sup>e</sup>In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

**Table B2**—Frequencies of responses in each response category for the Northeastern Area’s Version 2 objective and belief statements. <sup>a, b</sup>

Statement	Objectives <sup>c</sup> for the management of forests and grasslands					Beliefs <sup>d, e</sup> 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.	17	18	31	38	177	17	12	35	51	167
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	68	49	68	37	82	60	44	70	51	79
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	15	55	55	123	16	15	64	48	115
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).	16	18	46	71	123	17	16	47	78	118
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles	82	77	65	25	57	69	58	67	40	65
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	3	3	20	37	220	5	3	17	39	219

Table B2—Continued. <sup>a, b</sup>

Statement	Objectives <sup>c</sup> for the management of forests and grasslands					Beliefs <sup>d, e</sup> 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.	9	0	15	44	278	5	7	18	32	214
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	5	8	51	73	179	8	10	40	66	190
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.	8	23	70	49	120	17	28	64	48	112
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	23	18	47	57	150	31	25	47	63	129
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining, or timber harvesting.	17	29	68	62	77	32	29	60	64	72
12. Expanding energy and mineral production on forests and grasslands.	34	47	75	49	57	69	35	80	36	49
13. Expanding timber production and livestock grazing on forests and grasslands.	46	31	83	51	71	64	42	64	45	71
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	30	20	96	61	68	32	20	67	61	97

**Table B2—Continued.** <sup>a, b</sup>

Statement	Objectives <sup>c</sup> for the management of forests and grasslands					Beliefs <sup>d, e</sup> 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).	17	10	73	61	128	18	18	53	68	132
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	21	35	97	52	52	32	35	76	48	71
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	16	30	86	57	96	26	30	79	62	88
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	5	5	27	59	184	11	12	30	71	157
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.	9	4	39	59	194	2	5	23	52	227
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	10	7	47	56	172	9	9	26	73	177

Table B2—Continued. <sup>a, b</sup>

Statement	Objectives <sup>c</sup> for the management of forests and grasslands					Beliefs <sup>d, e</sup> about the role of the USDA Forest Service				
	Not at all important	Slightly unimportant	Slightly important	Neutral	Very important	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
21. Informing the public on the economic value received by developing our natural resources.	20	15	64	53	145	27	28	56	67	120
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	29	30	53	96	62	31	44	81	57	60
23. Using public advisory committees to advise government agencies on public land management issues.	14	28	57	79	113	14	17	65	83	115
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	9	18	94	52	131	4	10	68	79	142
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	13	22	58	59	97	18	16	42	70	107
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	18	25	74	85	97	16	21	77	79	103
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	10	24	70	56	130	5	19	46	75	142
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.	12	8	76	60	136	9	9	26	57	192

**Table B2—Continued.** <sup>a, b</sup>

Statement	Objectives <sup>c</sup> for the management of forests and grasslands					Beliefs <sup>d, e</sup> 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.	12	15	71	68	90	8	16	57	71	108
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).	16	15	54	55	123	13	14	47	66	124

<sup>a</sup> Overall *n* for the Northeastern Area = 1,437. The number of responses for each individual statement ranged from 253 to 316, resulting in a confidence level of 95% with confidence intervals ranging from ±5.1% to ±6.16% for all objective and belief statements.

<sup>b</sup> Table entries contain frequencies.

<sup>c</sup> 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*.

<sup>d</sup> Beliefs were measured on a five point scale: 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

<sup>e</sup> In the telephone survey script, belief statements were prefaced with “It is a role of the Forest Service to...”

**Table B3**—Means, standard deviations, sample sizes, and skewness for responses to the Northeastern Area’s Version 2 objective and belief statements.<sup>a</sup>

Statement	Objectives <sup>b</sup> for the management of forests and grasslands			Beliefs <sup>c, d</sup> about the role of the USDA Forest Service				
	Mean <sup>e</sup>	Standard deviation <sup>f</sup>	Sample size <sup>g</sup>	Skewness <sup>h</sup>	Mean <sup>e</sup>	Standard deviation <sup>f</sup>	Sample size <sup>g</sup>	Skewness <sup>h</sup>
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.	4.21	1.23	281	-1.42	4.20	1.18	282	-1.44
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	3.05	1.50	304	-0.01	3.15	1.46	304	-0.14
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.	4.05	1.10	256	-0.94	3.90	1.22	258	-0.83
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).	3.97	1.19	274	-1.04	3.96	1.18	276	-1.05
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	2.67	1.43	306	0.43	2.91	1.46	299	0.13
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	4.65	0.75	283	-2.50	4.64	0.79	283	-2.66
7. Protecting ecosystems, and wildlife and fish habitats.	4.60	0.86	278	-2.75	4.61	0.86	276	-2.45

**Table B3—Continued.** <sup>a</sup>

Statement	Objectives <sup>b</sup> for the management of forests and grasslands				Beliefs <sup>c, d</sup> about the role of the USDA Forest Service			
	Mean <sup>e</sup>	Standard deviation <sup>f</sup>	Sample size <sup>g</sup>	Skewness <sup>h</sup>	Mean <sup>e</sup>	Standard deviation <sup>f</sup>	Sample size <sup>g</sup>	Skewness <sup>h</sup>
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	4.31	0.94	316	-1.30	4.34	0.99	314	-1.56
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.	3.93	1.15	270	-0.68	3.78	1.26	269	-0.65
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	1.27	295	-1.08	3.79	1.36	295	-0.84
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining, or timber harvesting.	3.60	1.22	253	-0.49	3.45	1.34	257	-0.47
12. Expanding energy and mineral production on forests and grasslands.	3.18	1.32	262	-0.11	2.86	1.42	269	0.10
13. Expanding timber production and livestock grazing on forests and grasslands.	3.25	1.38	282	-0.25	3.06	1.48	286	-0.06
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	3.43	1.24	275	-0.41	3.62	1.33	277	-0.64

Table B3—Continued. <sup>a</sup>

Statement	Objectives <sup>b</sup> for the management of forests and grasslands			Beliefs <sup>c, d</sup> about the role of the USDA Forest Service				
	Mean <sup>e</sup>	Standard deviation <sup>f</sup>	Sample size <sup>g</sup>	Skewness <sup>h</sup>	Mean <sup>e</sup>	Standard deviation <sup>f</sup>	Sample size <sup>g</sup>	Skewness <sup>h</sup>
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.94	1.17	289	-0.92	3.96	1.21	289	-1.00
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.31	1.18	257	-0.17	3.35	1.33	262	-0.28
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	3.66	1.21	285	-0.46	3.55	1.28	285	-0.48
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	4.47	0.88	280	-1.88	4.25	1.06	281	-1.52
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.	4.39	0.96	305	-1.74	4.61	0.75	309	-2.14
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	4.28	1.04	292	-1.44	4.36	0.98	294	-1.76
21. Informing the public on the economic value received by developing our natural resources.	4.01	1.22	297	-1.09	3.76	1.31	298	-0.76

**Table B3—Continued.** <sup>a</sup>

Statement	Objectives <sup>b</sup> for the management of forests and grasslands				Beliefs <sup>c,d</sup> about the role of the USDA Forest Service			
	Mean <sup>e</sup>	Standard deviation <sup>f</sup>	Sample size <sup>g</sup>	Skewness <sup>h</sup>	Mean <sup>e</sup>	Standard deviation <sup>f</sup>	Sample size <sup>g</sup>	Skewness <sup>h</sup>
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	3.33	1.25	270	-0.26	3.26	1.28	273	-0.19
23. Using public advisory committees to advise government agencies on public land management issues.	3.78	1.20	291	-0.59	3.91	1.13	294	-0.88
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.05	1.05	304	-1.03	4.14	0.96	303	-0.86
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	3.82	1.19	249	-0.71	3.92	1.22	253	-1.01
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	3.69	1.18	299	-0.58	3.78	1.16	296	-0.70
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	3.99	1.13	290	-0.89	4.15	1.03	287	-1.06
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	1.07	292	-1.11	4.41	0.99	293	-1.87

Table B3—Continued. <sup>a</sup>

Statement	Objectives <sup>b</sup> for the management of forests and grasslands			Beliefs <sup>c, d</sup> about the role of the USDA Forest Service			
	Mean <sup>e</sup>	Standard deviation <sup>f</sup>	Sample size <sup>g</sup>	Mean <sup>e</sup>	Standard deviation <sup>f</sup>	Sample size <sup>g</sup>	Skewness <sup>h</sup>
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.	3.82	1.12	256	3.98	1.08	260	-0.86
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).	3.97	1.21	263	4.04	1.14	264	-1.09

<sup>a</sup> Overall n for the Northeastern Area = 1,437. The number of responses for each individual statement ranged from 253 to 316, resulting in a confidence level of 95% with confidence intervals ranging from  $\pm 5.1\%$  to  $\pm 6.16\%$  for all objective and belief statements.

<sup>b</sup> 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*.

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

<sup>d</sup> In the telephone survey script, belief statements were prefaced with "It is a role of the Forest Service to..."

<sup>e</sup> 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.

<sup>f</sup> 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.

<sup>g</sup> 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.

<sup>h</sup> 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 than 1 or less than -1 indicates a distribution is skewed to the right or left, respectively.

**Table B4**—Percents for the Northeastern Area’s Version 2 preservation/conservation objective and belief statements. <sup>a, b</sup>

Preservation/conservation statements	Objectives <sup>c</sup> for the management of forests and grasslands (percent)				Beliefs <sup>d, e</sup> about the role of the USDA Forest Service (percent)			
	Not at all important	Slightly unimportant	Slightly important	Very important	Strongly disagree	Neutral	Disagree	Strongly agree
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	1.1	1.1	13.1	77.7	1.8	6.0	1.1	77.4
7. Protecting ecosystems, and wildlife and fish habitats.	3.2	0.0	15.8	75.5	1.8	6.5	2.5	77.5
8. Preserving the ability to have a ‘wilderness’ experience on public lands, through protection and management of areas in designated wilderness systems.	1.6	2.5	23.1	56.6	2.5	12.7	3.2	60.5
10. Reducing loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	7.8	6.1	19.3	50.8	10.5	15.9	8.5	43.7
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	3.0	5.9	30.9	43.1	1.3	22.4	3.3	46.9
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	3.4	8.3	24.1	44.8	1.7	16.0	6.6	49.5
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.	4.1	2.7	26.0	46.6	3.1	8.9	3.1	65.5
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.	4.7	5.9	26.6	35.2	3.1	21.9	6.2	41.5
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).	6.1	5.7	20.5	46.8	4.9	17.8	5.3	47.0

<sup>a</sup>Overall n for the Northeastern Area = 1,437. The number of responses for each individual statement ranged from 253 to 316, resulting in a confidence level of 95% with confidence intervals ranging from ±5.51% to ±6.16% for all objective and belief statements.

<sup>b</sup>Table entries contain percents. Percents may not total to 100.0 due to rounding.

<sup>c</sup>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*.

<sup>d</sup>Beliefs were measured on a five point scale: 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

<sup>e</sup>In the telephone survey script, belief statements were prefaced with “It is a role of the Forest Service to...”

**Table B5**—Percents for the Northeastern Area’s Version 2 information sharing / public involvement objective and belief statements. <sup>a, b</sup>

Information sharing/public involvement statements	Objectives <sup>c</sup> for the management of forests and grasslands (percent)				Beliefs <sup>d, e</sup> about the role of the USDA Forest Service (percent)					
	Not at all important	Slightly unimportant	Neutral	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).	1.8	1.8	9.6	21.1	65.7	3.9	4.3	10.7	25.3	55.9
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.	3.0	1.3	12.8	19.3	63.6	0.6	1.6	7.4	16.8	73.5
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	3.4	2.4	16.1	19.2	58.9	3.1	3.1	8.8	24.8	60.2
21. Informing the public on the economic value received by developing our natural resources.	6.7	5.1	17.8	21.5	48.8	9.1	9.4	18.8	22.5	40.3
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	10.7	11.1	35.6	19.6	23.0	11.4	16.1	29.7	20.9	22.0
23. Using public advisory committees to advise government agencies on public land management issues.	4.8	9.6	27.1	19.6	38.8	4.8	5.8	22.1	28.2	39.1
25. Making management decisions concerning the use of forests and grasslands at the local level rather than the national level.	5.2	8.8	23.7	23.3	39.0	7.1	6.3	16.6	27.7	42.3

<sup>a</sup> Overall *n* for the Northeastern Area = 1,437. The number of responses for each individual statement ranged from 253 to 316, resulting in a confidence level of 95% with confidence intervals ranging from  $\pm 5.51\%$  to  $\pm 6.16\%$  for all objective and belief statements.

<sup>b</sup> Table entries contain percents. Percents may not total to 100.0 due to rounding.

<sup>c</sup> 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*.

<sup>d</sup> Beliefs were measured on a five point scale: 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

<sup>e</sup> In the telephone survey script, belief statements were prefaced with “It is a role of the Forest Service to...”

**Table B6**—Percents for the Northeastern Area’s Version 2 economic development objective and belief statements. <sup>a, b</sup>

Economic development/community issues statements	Objectives <sup>c</sup> for the management of forests and grasslands (percent)					Beliefs <sup>d, e</sup> 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.	6.7	11.5	26.9	24.5	30.4	12.5	11.3	23.3	24.9	28.0
12. Expanding energy and mineral production on forests and grasslands.	13.0	17.9	28.6	18.7	21.8	25.7	13.0	29.7	13.4	18.2
13. Expanding timber production and livestock grazing on forests and grasslands.	16.3	11.0	29.4	18.1	25.2	22.4	14.7	22.4	15.7	24.8
16. Expanding commercial recreational services on forests and grasslands (for example, guide services or outfitters).	8.2	13.6	37.7	20.2	20.2	12.2	13.4	29.0	18.3	27.1
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	30.2	20.0	33.7	9.1	10.5	27.7	21.8	30.9
21. Informing the public on the economic value received by developing our natural resources.	6.7	5.1	17.8	21.5	48.8	9.1	9.4	18.8	22.5	40.3
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	3.0	5.9	17.1	30.9	43.1	1.3	3.3	22.4	26.1	46.9

<sup>a</sup>Overall n for the Northeastern Area = 1,437. The number of responses for each individual statement ranged from 253 to 316, resulting in a confidence level of 95% with confidence intervals ranging from ±5.51% to ±6.16% for all objective and belief statements.

<sup>b</sup>Table entries contain percents. Percents may not total to 100.0 due to rounding.

<sup>c</sup>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*.

<sup>d</sup>Beliefs were measured on a five point scale: 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

<sup>e</sup>In the telephone survey script, belief statements were prefaced with “It is a role of the Forest Service to...”

**Table B7**—Percents for the Northeastern Area’s Version 2 cultural and traditional objective and belief statements. <sup>a, b</sup>

Cultural/traditional statements	Objectives <sup>c</sup> for the management of forests and grasslands (percent)				Beliefs <sup>d, e</sup> about the role of the USDA Forest Service (percent)					
	Not at all important	Slightly unimportant	Neutral	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.	3.0	8.5	25.9	18.1	44.4	6.3	10.4	23.8	17.8	41.6
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining, or timber harvesting.	6.7	11.5	26.9	24.5	30.4	12.5	11.3	23.3	24.9	28.0

<sup>a</sup> Overall n for the Northeastern Area = 1,437. The number of responses for each individual statement ranged from 253 to 316, resulting in a confidence level of 95% with confidence intervals ranging from ±5.51% to ±6.16% for all objective and belief statements.

<sup>b</sup> Table entries contain percents. Percents may not total to 100.0 due to rounding.

<sup>c</sup> 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*.

<sup>d</sup> Beliefs were measured on a five point scale 1: = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

<sup>e</sup> In the telephone survey script, belief statements were prefaced with “It is a role of the Forest Service to...”

**Table B8**—Percents for the Northeastern Area’s Version 2 access objective and belief statements. <sup>a, b</sup>

Access statements	Objectives <sup>c</sup> for the management of forests and grasslands (percent)				Beliefs <sup>d, e</sup> about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	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.	6.0	6.4	11.0	63.0	6.0	4.3	12.4	18.1	59.2
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	22.4	16.1	22.4	27.0	19.7	14.5	23.0	16.8	26.0
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.	3.1	5.9	21.5	48.0	6.2	5.8	24.8	18.6	44.6
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).	5.8	6.6	16.8	44.9	6.2	5.8	17.0	28.3	42.8
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	26.8	25.2	21.2	18.6	23.1	19.4	22.4	13.4	21.7

<sup>a</sup> Overall n for the Northeastern Area = 1,437. The number of responses for each individual statement ranged from 253 to 316, resulting in a confidence level of 95% with confidence intervals ranging from ±5.51% to ±6.16% for all objective and belief statements.

<sup>b</sup> Table entries contain percents. Percents may not total to 100.0 due to rounding.

<sup>c</sup> 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.

<sup>d</sup> Beliefs were measured on a five point scale: 1 = strongly disagree to 5 = strongly agree, with 8 = don't know, and 9 = refused.

<sup>e</sup> In the telephone survey script, belief statements were prefaced with “It is a role of the Forest Service to...”

**Table B9**—Percents for the Northeastern Area’s Version 2 regulatory issues objective and belief statements. <sup>a, b</sup>

Regulatory issues statements	Objectives <sup>c</sup> for the management of forests and grasslands (percent)				Beliefs <sup>d, e</sup> about the role of the USDA Forest Service (percent)				
	Not at all important	Slightly unimportant	Neutral	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.	6.0	6.4	11.0	63.0	6.0	4.3	12.4	18.1	59.2
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).	5.8	6.6	16.8	44.9	6.2	5.8	17.0	28.3	42.8
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	10.9	7.3	34.9	24.7	11.6	7.2	24.2	22.0	35.0
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	5.9	3.5	25.3	44.3	6.2	6.2	18.3	23.5	45.7
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	6.0	8.4	28.4	32.4	5.4	7.1	26.0	26.7	34.8
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	3.4	8.3	19.3	44.8	1.7	6.6	16.0	26.1	49.5

<sup>a</sup> Overall n for the Northeastern Area = 1,437. The number of responses for each individual statement ranged from 253 to 316, resulting in a confidence level of 95% with confidence intervals ranging from  $\pm 5.1\%$  to  $\pm 6.16\%$  for all objective and belief statements.

<sup>b</sup> Table entries contain percents. Percents may not total to 100.0 due to rounding.

<sup>c</sup> 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*.

<sup>d</sup> Beliefs were measured on a five point scale: 1 = *strongly disagree* to 5 = *strongly agree*, with 8 = *don't know*, and 9 = *refused*.

<sup>e</sup> In the telephone survey script, belief statements were prefaced with “It is a role of the Forest Service to...”

# Appendix C: Supporting Tables— Northeastern Area Objective/Belief Analysis

**Table C1**—Paired t-test comparison of responses to the Northeastern Area’s Version 2 objective and belief statements. <sup>a, b</sup>

Statement	Paired t-test <sup>c</sup>					
	Sample size <sup>d</sup>	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.	281	0.01	.08	0.14	.892	0.01
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	301	-0.10	.09	-1.15	.252	-0.07
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.	255	0.16	.09	1.82	.070	0.14
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).	273	0.02	.09	0.23	.821	0.02
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	296	-0.25	.10	-2.64	.009*	-0.17
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	281	0.00	.06	0.06	.949	0.00
7. Protecting ecosystems, and wildlife and fish habitats.	276	0.00	.06	-0.06	.952	-0.01
8. Preserving the ability to have a ‘wilderness’ experience on public lands, through protection and management of areas in designated wilderness systems.	313	-0.03	.06	-0.51	.613	-0.04
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.	266	0.14	.08	1.91	.057	0.12
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	291	0.19	.09	2.07	.040*	0.14

**Table C1—Continued.** <sup>a, b</sup>

Statement	Paired t-test <sup>c</sup>					Cohen's d
	Sample size <sup>d</sup>	Mean difference	SE of Mean difference	t	p	
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining, or timber harvesting.	247	0.13	0.09	1.48	.139	0.10
12. Expanding energy and mineral production on forests and grasslands.	258	0.36	0.09	3.93	<.001**	0.26
13. Expanding timber production and livestock grazing on forests and grasslands.	278	0.21	0.10	2.08	.038*	0.15
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	270	-0.18	0.08	-2.18	.030*	-0.14
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	284	-0.01	0.09	-1.20	.906	-0.01
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	250	-0.04	0.09	-0.41	.695	-0.02
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	278	0.11	0.08	1.37	.172	0.08
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	280	0.22	0.07	3.42	.001*	0.22
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.	304	-0.22	0.06	-3.86	<.001**	-0.25
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	291	-0.10	0.06	-1.50	.135	-0.10
21. Informing the public on the economic value received by developing our natural resources.	294	0.22	0.07	2.97	.003*	0.17
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	266	0.08	0.09	0.87	.387	0.06

**Table C1—Continued.** <sup>a, b</sup>

Statement	Paired t-test <sup>c</sup>					Cohen's d
	Sample size <sup>d</sup>	Mean difference	SE of Mean difference	t	p	
23. Using public advisory committees to advise government agencies on public land management issues.	288	-0.13	.07	-1.96	.051	-0.11
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	300	-0.07	.07	-1.13	.259	-0.07
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	247	-0.09	.09	-0.96	.339	-0.07
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	294	-0.11	.07	-1.54	.126	-0.09
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	287	-0.16	.07	-2.47	.014*	-0.15
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.	289	-0.33	.07	-5.09	<.001**	-0.32
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.	254	-0.16	.08	-2.12	.035*	-0.15
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).	260	-0.05	.08	-0.59	.558	-0.03

\*Result is statistically significant at  $p < .05$ ; \*\*Result is statistically significant at  $p < .001$

<sup>a</sup> 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*.

<sup>b</sup> 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..."

<sup>c</sup> A paired samples *t*-test is a test of statistical significance between paired observations (in other words, 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.

<sup>d</sup> Sample size is the number of respondents who answered both the objective and belief question. Overall, for the Northeastern Area,  $n = 1,437$ . The number of responses for each set objective/belief statements ranged from 247 to 313, resulting in a confidence level of 95% with the confidence intervals ranging from  $\pm 5.54$  to  $\pm 6.24\%$  for all objective and belief statement pairs.

# **Appendix D: Supporting Tables— Northeastern Area/Rest of U.S. Analysis**

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**Table D1**—Northeastern/Rest of U.S.” comparison of responses to the Version 2 objective statements. a, b

Objective statement for the management of forests and grasslands	Geographic Area of United States						Independent samples t-test <sup>f</sup>		
	Northeastern Area			Rest of U.S.			t-value	p-value	r <sub>p</sub>
	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>			
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.	4.21	1.23	281	4.08	1.24	380	-1.35	.177	.05
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	3.05	1.50	304	3.18	1.47	421	1.10	.270	.04
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.	4.05	1.10	256	3.92	1.20	400	-1.42	.155	.06
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).	3.97	1.19	274	3.80	1.30	375	-1.75	.080	.07
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles.	2.67	1.43	306	2.84	1.47	415	1.57	.117	.06
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	4.65	0.75	283	4.62	0.80	410	-0.57	.572	.02
7. Protecting ecosystems, and wildlife and fish habitats.	4.60	0.86	278	4.48	0.98	420	-1.79	.074	.07
8. Preserving the ability to have a ‘wilderness’ experience on public lands, through protection and management of areas in designated wilderness systems.	4.31	0.94	316	4.17	1.14	398	-1.79	.075	.07

**Table D1**—Northeastern/Rest of U.S. comparison of responses to the Version 2 objective statements, continued. <sup>a, b</sup>

Objective statement for the management of forests and grasslands	Geographic Area of United States						Independent samples t-test <sup>f</sup>		
	Northeastern Area			Rest of U.S.					
	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>		t-value	p-value
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.	3.93	1.15	270	3.85	1.30	407	-0.80	.424	.03
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	1.27	295	4.00	1.32	410	0.04	.965	.00
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining, or timber harvesting.	3.60	1.22	253	3.88	1.16	397	2.89	.004*	.11
12. Expanding energy and mineral production on forests and grasslands.	3.18	1.32	262	3.14	1.42	417	-0.38	.701	.02
13. Expanding timber production and livestock grazing on forests and grasslands.	3.25	1.38	282	3.35	1.39	447	0.96	.339	.04
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	3.43	1.24	275	3.42	1.34	402	-0.03	.980	.00
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.94	1.17	289	3.94	1.20	407	-0.07	.947	.00
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.31	1.18	257	3.22	1.24	397	-0.93	.352	.04

**Table D1—Continued.** <sup>a, b</sup>

Objective statement for the management of forests and grasslands	Geographic Area of United States						Independent samples t-test <sup>f</sup>		
	Northeastern Area			Rest of U.S.			t-value	p-value	r <sub>p</sub>
	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>			
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	3.66	1.21	285	3.60	1.24	410	-0.65	.519	.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).	4.47	0.88	280	4.42	0.99	399	-0.68	.495	.03
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.	4.39	0.96	305	4.46	0.93	406	0.94	.349	.04
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	4.28	1.04	292	4.26	1.02	417	-0.20	.839	.01
21. Informing the public on the economic value received by developing our natural resources.	4.01	1.22	297	4.10	1.13	373	1.05	.296	.04
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	3.33	1.25	270	3.35	1.27	374	0.21	.837	.01
23. Using public advisory committees to advise government agencies on public land management issues.	3.78	1.20	291	3.81	1.15	407	0.34	.732	.01

**Table D1—Continued.** <sup>a, b</sup>

Objective statement for the management of forests and grasslands	Geographic Area of United States						Independent samples t-test <sup>f</sup>		
	Northeastern Area			Rest of U.S.					
	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>		t-value	p-value
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.05	1.05	304	4.07	1.13	385	0.18	.860	.01
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	3.82	1.19	249	4.00	1.13	409	2.00	.046*	.08
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	3.69	1.18	299	3.56	1.34	421	-1.42	.156	.05
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	3.99	1.13	290	3.86	1.26	411	-1.43	.155	.05
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	1.07	292	4.04	1.13	411	-0.45	.650	.02
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.	3.82	1.12	256	4.05	1.05	410	2.64	.009*	.10
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).	3.97	1.21	263	3.94	1.15	447	-0.26	.793	.01

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

<sup>a</sup>Overall  $n$  for Northeastern Area residents was  $n = 1,437$ . Overall  $n$  for Rest of U.S. residents was  $n = 2,066$ . The number of responses for each individual statement for Northeastern Area residents ranged from 253 to 316, resulting in a confidence level of 95% with confidence intervals ranging from  $\pm 5.51\%$  to  $\pm 6.16\%$  for all objective and belief statements. For Rest of U.S. residents the number of responses ranged from 369 to 451 resulting in a confidence level of 95% with confidence intervals ranging from  $\pm 4.61\%$  to  $\pm 5.10\%$  for all objective and belief statements.

<sup>b</sup>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*.

<sup>c</sup>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, in other words, an average.

<sup>d</sup>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.

<sup>e</sup>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.

<sup>f</sup>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 (Northeastern Area versus Rest of U.S.), and an interval/ratio dependent variable (a belief or objective). A result of zero is interpreted as no relationship, and one is the highest possible result.

**Table D2**—Northeastern/Rest of U.S. comparison of responses to the Version 2 belief statements. <sup>a, b</sup>

	Geographic Area of United States						Independent samples <i>t</i> -test <sup>f</sup>		
	Northeastern Area			Rest of U.S.					
	Mean <sup>e</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>	Mean <sup>e</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>		<i>t</i> -value	<i>p</i> -value
<b>Beliefs about the role of the USDA Forest Service</b>									
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.	4.20	1.18	282	4.26	1.15	379	0.59	.556	.02
2. Developing and maintaining continuous trail systems that cross both public and private land for motorized vehicles such as snowmobiles or ATVs.	3.15	1.46	304	3.23	1.49	418	0.78	.437	.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.	3.90	1.22	258	3.91	1.26	395	0.11	.912	.00
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).	3.96	1.18	276	3.87	1.27	381	-0.86	.392	.03
5. Developing new paved roads on forests and grasslands for access by cars and recreational vehicles	2.91	1.46	299	3.01	1.50	419	0.90	.367	.03
6. Conserving and protecting forests and grasslands that are the source of our water resources, such as streams, lakes, and watershed areas.	4.64	0.79	283	4.59	0.88	407	-0.80	.423	.03
7. Protecting ecosystems, and wildlife and fish habitats.	4.61	0.86	276	4.46	1.00	421	-2.06	.040*	.08
8. Preserving the ability to have a 'wilderness' experience on public lands, through protection and management of areas in designated wilderness systems.	4.34	0.99	314	4.22	1.06	403	-1.50	.133	.06

Table D2—Continued. <sup>a, b</sup>

Beliefs about the role of the USDA Forest Service	Geographic Area of United States								Independent samples t-test <sup>f</sup>		
	Northeastern Area				Rest of U.S.						
	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>	Sample size <sup>e</sup>	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>	Sample size <sup>e</sup>	t-value	p-value	r <sub>p</sub>
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.	3.78	1.26	269	269	3.71	1.37	406	406	-0.68	.495	.03
10. Reducing the loss of open space and wildlife habitat due to conversion of forests and grasslands to residential areas or other development.	3.79	1.36	295	295	3.78	1.36	412	412	-0.11	.911	.00
11. Providing natural resources from forests and grasslands to support communities dependent on grazing, energy production, mining, or timber harvesting.	3.45	1.34	257	257	3.46	1.39	397	397	0.08	.939	.00
12. Expanding energy and mineral production on forests and grasslands.	2.86	1.42	269	269	2.83	1.47	417	417	-0.18	.856	.01
13. Expanding timber production and livestock grazing on forests and grasslands.	3.06	1.48	286	286	3.18	1.45	451	451	1.05	.296	.04
14. Simplifying the permitting process for some established uses of forests and grasslands such as grazing, logging, mining, and commercial recreation.	3.62	1.33	277	277	3.41	1.42	400	400	-1.91	.056	.07
15. Developing national policies that guide natural resource development of all kinds (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.96	1.21	289	289	3.85	1.20	413	413	-1.21	.225	.05
16. Expanding commercial recreation services on forests and grasslands (for example, by specifying sustainable levels of extraction, and regulating environmental impacts).	3.35	1.33	262	262	3.40	1.33	401	401	0.49	.626	.02

**Table D2—Continued.** <sup>a, b</sup>

Beliefs about the role of the USDA Forest Service	Geographic Area of United States						Independent samples <i>t</i> -test <sup>f</sup>		
	Northeastern Area			Rest of U.S.					
	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>		<i>t</i> -value	<i>p</i> -value
17. Providing companies with forest commodities in exchange for assistance in achieving management goals, such as ecosystem restoration on public forests and grasslands.	3.55	1.28	285	3.53	1.27	416	-0.19	.850	.01
18. Developing volunteer programs to improve or maintain forests and grasslands (for example, planting trees, improving water quality, or maintaining trails and recreation sites).	4.25	1.06	281	4.31	1.05	398	0.70	.486	.03
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.	4.61	0.75	309	4.49	0.91	409	-1.85	.065	.07
20. Informing the public on the potential environmental impacts of all uses associated with forests and grasslands.	4.36	0.98	294	4.42	0.95	412	0.74	.458	.03
21. Informing the public on the economic value received by developing our natural resources.	3.76	1.31	298	4.03	1.20	369	2.81	.005*	.11
22. Allowing the transfer of responsibility for managing public lands to members of a local community advisory board.	3.26	1.28	273	3.27	1.34	369	0.13	.897	.01
23. Using public advisory committees to advise government agencies on public land management issues.	3.91	1.13	294	3.96	1.09	412	0.59	.557	.02
24. Allowing for diverse uses of forests and grasslands such as grazing, recreation, and wildlife habitat.	4.14	0.96	303	4.06	1.14	383	-0.94	.345	.04

Table D2—Continued. <sup>a, b</sup>

Beliefs about the role of the USDA Forest Service	Geographic Area of United States						Independent samples <i>t</i> -test <sup>f</sup>		
	Northeastern Area			Rest of U.S.			<i>t</i> -value	<i>p</i> -value	<i>r<sub>p</sub></i>
	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>	Mean <sup>c</sup>	Standard deviation <sup>d</sup>	Sample size <sup>e</sup>			
25. Making management decisions concerning the use of forests and grasslands at the local level rather than at the national level.	3.92	1.22	253	3.82	1.30	409	-1.00	.316	.04
26. Supporting maintenance of recreational facilities on public land by collecting an entry fee.	3.78	1.16	296	3.63	1.37	422	-1.59	.111	.06
27. Increasing law enforcement efforts by public land agencies on public lands in order to increase safety of visitors and protect resources.	4.15	1.03	287	3.99	1.17	411	-1.96	.050*	.07
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.	4.41	0.99	293	4.27	1.07	414	-1.77	.078	.07
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.	3.98	1.08	260	4.02	1.14	403	0.50	.620	.02
30. Reducing the spread of invasive species across forests and grasslands (for example, invasive weeds, nonnative fish, or exotic insect and disease pests).	4.04	1.14	264	4.05	1.11	448	0.13	.898	.01

\*Result is statistically significant at  $p \leq .05$

<sup>a</sup>Overall *n* for Northeastern Area residents was  $n = 1,437$ . Overall *n* for Rest of U.S. residents was  $n = 2,066$ . The number of responses for each individual statement for Northeastern Area residents ranged from 253 to 316 resulting in a confidence level of 95% with confidence intervals ranging from  $\pm 5.51\%$  to  $\pm 6.16\%$  for all objective and belief statements. For Rest of U.S. residents the number of responses ranged from 369 to 451, resulting in a confidence level of 95% with confidence intervals ranging from  $\pm 4.61\%$  to  $\pm 5.10\%$  for all objective and belief statements.

<sup>b</sup>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..."

<sup>c</sup>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, in other words, an average.

<sup>d</sup>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.

<sup>e</sup>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.

<sup>f</sup>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  $p \leq .05$  is considered statistically significant. A point-biserial correlation (*r<sub>p</sub>*) is the appropriate effect size for a dichotomous independent variable (Northeastern Area versus Rest of U.S.), and an interval/ratio dependent variable (a belief or objective). A result of zero is interpreted as no relationship, and one is the highest possible result.

# Appendix E: Glossary of Terms

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<b>Access statements</b>	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.
<b>Advisory board</b>	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.
<b>ATV</b>	All-terrain vehicle
<b>Attitude</b>	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.
<b>Belief</b>	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.
<b>Cohen's d</b>	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.
<b>Commercial recreation services</b>	Recreational opportunities (for example, outfitters, ski resorts) provided by for-profit companies.
<b>Confidence interval</b>	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 $\pm 5$ , the true value for the population should be within the interval of 10 to 20 percent.
<b>Confidence level</b>	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% 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 $\pm 4$ percent (confidence interval).
<b>Continuous trail systems</b>	Interconnected trails that form long trail systems as opposed to unconnected, separately accessed trail segments.
<b>Cultural/traditional</b>	The VOBA cultural and traditional statements address activities statements on forests and grasslands that are perceived as being traditional in some communities or having cultural meaning to participants.
<b>Cultural uses</b>	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.

<b>Demographics</b>	Demographics are population characteristics. The VOBA survey measured age, sex, place of residence (rural versus urban), race, ethnicity, and level of education.
<b>Descriptive statistics</b>	Statistics such as mean, standard deviation, and percent that generally describe quantitative information as opposed to statistics used to make inferences.
<b>Diverse uses</b>	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).
<b>Economic development statements</b>	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).
<b>Economic value</b>	A flow of income produced by a national resource over a period of time.
<b>Ecosystem</b>	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.
<b>Extraction</b>	Removal of commodity resources from forests and grasslands (for example, timber or oil).
<b>Focus groups</b>	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.
<b>Forest</b>	Land covered by a dense growth of trees. May include private forests, industrial forests, or national forests.
<b>Forest commodity</b>	A product or service that can be subject for trade (for example, timber, wood pulp, and wood products).
<b>Frequencies</b>	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).
<b>Fundamental end-state objectives</b>	In the context of VOBA, a situation specific goal related to the desired conditions of forests and grasslands.
<b>Fundamental means objectives</b>	In the context of VOBA, a situation specific goal related to the management actions taken on forests and grasslands.
<b>Government Performance &amp; Results Act of 1993</b>	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.”
<b>Habitat</b>	An area where a plant or animal naturally lives.
<b>Independent samples <i>t</i>-test</b>	A test of statistical significance between two group means. The <i>t</i> statistic is the number that is tested. The <i>p</i> -value is the probability that differences in means could have been produced by chance. For this report, $p < .05$ is considered statistically significant.
<b>Information sharing/ public involvement statements</b>	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.

<b>Invasive species</b>	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.
<b>Matrix sampling</b>	A method for survey administration where a subset of questions are asked of each respondent in random order.
<b>Mean</b>	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.
<b>Motorized off-highway vehicles</b>	A category of power driven vehicles including, but not limited to, all-terrain vehicles, snowmobiles, sports utility vehicles (SUVs), and dirt bikes.
<b>Motorized recreation</b>	Recreation activities that involve the use of on- or off-highway motorized vehicles.
<b>National Forests and Grasslands</b>	Public lands under the administration of the USDA Forest Service.
<b>National Survey on Recreation and the Environment</b>	A recurring survey conducted by the USDA Forest Service and the National Oceanic and Atmospheric Association. See <a href="http://www.srs.fs.usda.gov/recreation/Nsre/nsre2.html">http://www.srs.fs.usda.gov/recreation/Nsre/nsre2.html</a> for more information.
<b>Natural resource</b>	A feature of the natural environment that is of value.
<b>Non-motorized recreation</b>	Recreation opportunities that do not involve use of motorized vehicles (for example, hiking, horseback riding).
<b>Northeastern Area</b>	An organizational unit of the USDA Forest Service that includes the following states: Connecticut, Delaware, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, West Virginia, and Wisconsin.
<b>NSRE</b>	National Survey on Recreation and the Environment
<b>Objective</b>	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.
<b>Objective hierarchy</b>	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.
<b>Open space</b>	Uninhabited and undeveloped public or private land.
<b>Paired <i>t</i>-test</b>	A paired samples <i>t</i> -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 <i>t</i> statistic is computed from the mean difference and is the number that is tested. The <i>p</i> -value is the probability that differences between objective and belief responses could have been produced by chance. Here, $p < .05$ is considered statistically significant.
<b>Pearson's <i>r</i></b>	"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.
<b>Percent</b>	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.

<b>Permitting process</b>	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).
<b>Preference</b>	To like a particular choice or option better than another.
<b>Prescribed fire</b>	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.
<b>Preservation/conservation statements</b>	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.
<b>Public advisory committee</b>	Reviews project proposals and makes recommendations to the federal government (for example, the Secretary of the Interior) on spending the county designated funds. 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.
<b>Public lands</b>	Lands owned or held in trust by federal, state, regional, county, or municipal governments.
<b>Public Land Values Scale</b>	A set of 25 statements that concern environmental and resource issues for public lands. Responses provide information about an individuals environmental values.
<b>Recreation</b>	The extremely broad category of activities that relate to leisure pursuits (for example, travel, hunting, camping, and fishing).
<b>Regulatory issues statements</b>	Statements related to regulatory issues in the VOBA survey referred to land management actions and resource policy development (in other words, 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).
<b>Restoration</b>	Returning an ecosystem or habitat to a desired ecological condition.
<b>Rural</b>	A classification by the U.S. Bureau of the Census. All respondents not classified as metropolitan (urban). See <a href="http://www.census.gov">http://www.census.gov</a> for more detailed information on metropolitan designations.
<b>Sampling design</b>	The method used for selecting a sample from a population, which 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.
<b>Sample size</b>	The selected number of respondents used in the analysis.
<b>Scale</b>	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.
<b>Script</b>	Text given to survey interviewers that facilitates their explaining the survey in a consistent way to all respondents. See Appendix D for the VOBA survey and script.
<b>Skewed distribution</b>	See skewness.
<b>Skewness</b>	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.

<b>Socially responsible individual value</b>	A dimension of the Public Land Value Scale having to do with the actions of the individual related to public lands.
<b>Socially responsible management value</b>	A dimension of the Public Lands Values Scale having to do with the actions of public land management agencies related to public lands.
<b>Stakeholder</b>	For the VOBA survey, an individual or group that has interest in, or is impacted by, the management of National Forests and Grasslands.
<b>Standard deviation</b>	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.
<b>Stewardship</b>	In the context of VOBA, stewardship refers to the land management actions intended to achieve pre-specified objectives.
<b>Strategic level objective</b>	An overarching general goal related to values intended to guide all decision-making.
<b>Strategic plan</b>	See USDA Forest Service Strategic Plan.
<b>Strategic planning process</b>	See USDA Forest Service Strategic Plan.
<b>Survey instrument</b>	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.
<b>Sustainability</b>	The ability of social or ecological systems to recover from external shocks and maintain health and functioning over time.
<b>Timber harvesting</b>	The act of cutting trees for profit.
<b>Timber production</b>	The result of timber harvesting.
<b>Traditional group</b>	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).
<b>Tree thinning</b>	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.
<b>Urban</b>	A classification 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 metropolitan (urban). See <a href="http://www.census.gov">http://www.census.gov</a> for more detailed information on metropolitan designations.
<b>USDA Forest Service Strategic Plan</b>	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 through 2008. See Government Performance and Results Act.
<b>Value</b>	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.
<b>VOBA</b>	The National Survey of Values, Objectives, Beliefs, and Attitudes conducted as a module of NSRE.
<b>Wilderness experience</b>	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.
<b>Wildfire</b>	For the VOBA survey, wildfire is defined as an uncontrolled fire on forests and grasslands.





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.

**Station Headquarters**

Rocky Mountain Research Station  
 240 W Prospect Road  
 Fort Collins, CO 80526  
 (970) 498-1100

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