

**Final Report
to the
National Commission on
Science for Sustainable Forestry**

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**NCSSF Research Project C2
Existing and Potential Incentives for Practicing Sustainable
Forestry on Non-industrial Private Forest Lands**

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Report Contents

Abstract	1
Introduction.....	3
Study Purpose	4
Summary of Results	6
Findings from the Review of Literature	6
Findings from the Survey of State Management Assistance Foresters.....	7
Findings from the Non-industrial Private Forest Owner Focus Groups	8
Conclusions and Recommendations	9
Approach.....	11
Study Phase 1: Review of Literature	11
Study Phase 2: Survey of State Management Assistance Foresters	11
Study Phase 3: Non-industrial Private Forest Owner Focus Groups.....	11
Study Phase 4: Comparative Analysis of Findings.....	12
Deliverables	13
References.....	14
Appendix A: Lists of Participants.....	20
Appendix B: Links to Project Websites.....	29
Appendix C: List of Publications.....	30
Appendix D: Other Project Outputs	31

Abstract

This study to identify existing and potential incentives for practicing sustainable forestry on non-industrial private forest lands in the U.S. was conducted in four phases. The literature on the tax, cost-share, and other financial incentive programs currently available to non-industrial private forest owners was reviewed, to determine its findings on the effectiveness of various types of programs and their apparent impact on forest owner motivations and practices. Selected management assistance foresters in state forestry organizations nationwide were surveyed, to ask them to name, describe, and evaluate the financial incentive programs offered in their states by federal and state agencies, private entities, and nongovernmental organizations. Focus groups of non-industrial private forest owners were convened in each national region, to learn what types of incentive programs owners prefer, what objectives of ownership the programs help them to meet, and what additional program approaches would appeal to other objectives they have for their land. The findings of the first three study phases were analyzed, to assess the various programs' potential for enhancing the practice of sustainable forestry on non-industrial private lands and to identify program approaches that create disincentives to sustainable forestry.

One conclusion from the study is that federal and state financial incentive programs currently play a limited role in promoting sustainable forestry practices on the nation's non-industrial private forests. This is not because of any structural disconnect between the incentive programs and the practice of sustainable forestry, but rather because the programs play only a minor role in forest owners' decisions regarding the management and use of their land. There were considerable differences between regions with respect to some study findings; with respect to three findings, however, there was a consistent message across the four national regions. First, the highest program priority among forest owners is one-on-one access to a forester or other natural resource professional to "walk the land" with them and discuss their management alternatives. Second, the most effective way to increase the impact of financial incentive programs is to ensure adequate funding and stable program requirements over time. And third, there is a need for some flexibility in financial incentive programs to address regional differences in forest characteristics and owner objectives.

The study findings and conclusions yielded nine recommendations:

- Increase funding and availability of one-on-one technical assistance from both extension foresters and state service foresters.
- Use technical assistance rather than certification to convey sustainability ideas; approach sustainability through owners' long-term stewardship and family legacy objectives.
- Make a written forest management plan a requirement for all incentive programs.
- Design incentive programs to put forest owners in direct contact with a forester or other natural resource professional.
- Design some incentive programs to address regional differences in forest characteristics and forest owner objectives.
- Link incentives directly to stewardship practices instead of general forest management practices.
- Fund cost-share applications according to their expected environmental benefit instead of first-come-first-served.

- Make the requirements for owners to participate in incentive programs more uniform and deliver the programs from a single source in each state.
- Maintain adequate funding and stable program requirements for financial incentives over the long term.

Introduction

In broad terms, this study looks at the compatibility between sustainable forestry practices and the framework of public and private financial incentive programs directed toward non-industrial private forest owners. The core hypothesis is that there may be a disconnect between the kinds of practices these programs encourage and the practices associated with sustainable forestry.

The structure of financial incentive programs for forest owners dates to the 1940s and 50s, and was generally motivated by concern over timber scarcity and recognition that better-managed private forests could provide a larger share of the nation's timber supply. Thus, the programs were designed to help small forest owners be more active timber managers. It would not be surprising if the incentive programs either ignored sustainable forestry practices or were in conflict with them; certainly the fact that sustainable forest management arose a full half-century after the prototype financial incentive programs makes it unrealistic to expect the incentive programs to have anticipated the concept of sustainability. Perhaps more important, however, is the potential philosophical difference behind the two institutions – do financial incentive programs focus on timber production and revenues while sustainable forestry entails an entirely different suite of objectives? And if there is a disconnect between financial incentive programs and sustainable forestry, where does this leave forest owners?

The research design and results described below attempt to get at these questions by triangulating different kinds of data. First, our goal is to tell a national story, but to understand regional variations as well. That argues for a replicated regional research approach that can be aggregated into a national picture. We want to understand how the people who deliver these programs feel about their effectiveness, but also to contrast that with the views of the non-industrial private forest owners the programs are intended to reach. Furthermore, we want to be able to blend the kinds of rigorous quantitative results that emerge from survey data with the nuanced understanding that emerges from qualitative research.

Study Purpose

The purpose of this study is to identify existing and potential incentives for practicing sustainable forestry on non-industrial private forest lands in the U.S. This overall purpose was broken into four distinct objectives:

- To identify tax, cost-share, and other types of financial incentive programs with the potential to enhance the practice of sustainable forestry on non-industrial private lands;
- To evaluate the relative effectiveness of different types of programs and of different methods of administering similar programs;
- To provide insight into interactions between different types of programs; and
- Through an integrated package of deliverables, to disseminate the study findings to forestry practitioners and policy-makers.

The scope of the study is all financial incentive programs offered by federal and state agencies, private entities, and nongovernmental organizations. It includes program ideas that have only been proposed or implemented on a limited scale as well as established programs. The definition of sustainable forestry used for the study coincides with that given in USDA Forest Service Publication FS-766 *National Report on Sustainable Forests – 2003*, which specifically includes the concept of biodiversity.

In order to address the first three study objectives, the study was conducted in four parts

- A thoroughgoing review of the literature on the tax, cost-share, and other financial incentives currently available to non-industrial private forest owners. Priority was given to recent research, but foundational studies also were identified and summarized. Studies included in the review were analyzed for their conclusions regarding the effectiveness of the various types of incentive programs. Emphasis was placed on identifying the apparent impact of the programs on forest owner motivations and practices.
- A survey of key management assistance foresters in state forestry organizations nationwide. The identified foresters were asked to name and describe the public and private forest incentive programs available in their state and in neighboring states. They also were asked to evaluate the effectiveness of the programs in encouraging sustainable forestry on non-industrial private lands, how forest owners respond to them, and how their administrative efficiency might be improved.
- Focus groups of non-industrial private forest owners. Separate groups of members and non-members of forest owner organizations were convened in each national region. They were asked to discuss the types of incentive programs they prefer, what forest ownership objectives the programs help them to meet, what use of the programs enables them to accomplish, and what additional program approaches would appeal to other ownership objectives they have for their holdings.
- A comparative analysis of the findings in the first three phases of the study. The findings from the first three phases were compiled and summarized, and conclusions and recommendations identified. More rigorous analytical techniques are now being employed for the purpose of

developing refereed publications. This work will yield additional recommendations about how to most effectively structure financial incentive programs.

The fourth study objective, concerning project deliverables, is addressed in a separate section of the report.

Summary of Results

Findings from the Review of Literature

From the time U.S. forest owners were first becoming interested in long-term management, researchers have been suggesting ways to improve the management and sustainability of non-industrial private forest holdings: technical assistance, perhaps leveraged through coordinated management of forest ownerships (Stoddard 1942, Cloud 1966); financial incentives to owners who demonstrate an interest in managing their forest (Folweiler and Vaux 1944); reduced property, estate and inheritance taxes, more favorable tax credits and deductions, more favorable capital gains treatment of timber income, and more cost-sharing of forest management expenses (Fecso and others 1982); incentive programs for non-market forest products, such as wildlife and recreation (Greene and Blatner 1986); assistance to manage forests to maintain and improve standing timber values (Blatner and Greene 1989); and incentives linked to specific stewardship practices, such as reforestation (Greene 1998).

Subsequent research has shown that non-industrial private forest owners favor some incentive approaches over others: only a small percentage of owners would consent to coordinated management of their land (Klosowski and others 2001); large fractions of owners are unaware that financial and tax incentive programs exist or don't know what the programs can do for them (Yoho and James 1958 ... Greene and others 2004)¹; many owners who participate in an incentive would have done the supported practice anyway (James and others 1951 ... Baughman 2002), although the incentive enables the owners to treat additional acres (Royer 1987, Bliss and Martin 1990); favorable property tax and capital gains provisions have little effect on forest owner behavior (Stoddard 1961 ... Brockett and Gerhard 1999); and forest property tax programs are only modestly successful in accomplishing their objectives (Hibbard and others 2003).

Three approaches, however, have consistently been found to lead non-industrial private forest owners to apply sustainable forest management practices on their land: technical assistance, cost-shares, and programs – such as the Forest Stewardship Program – that put owners in direct contact with a forester or other natural resource professional. In a foundational study of forest owners in Mississippi, James and others (1951) found that owners prefer technical assistance over financial or tax incentives. In their recent study of policy tools to encourage application of sustainable timber harvesting practices in the United States and Canada, Kilgore and Blinn (2004) also found technical assistance is the most effective way to encourage owners to apply sustainable practices, followed by cost-share programs.

In their study of the Forest Stewardship Program (FSP) Esseks and Moulton (2000) found that getting the required forest management plan provides two-thirds of participating forest owners their first contact with a professional forester. A like fraction begin managing their land for multiple purposes and using practices that are new to them. Their participation in FSP prompted the owners to spend an average of \$2,767 of their own funds for forest management activities, although nearly two-thirds said they would not have made the expenditure if they had not received a cost-share (Esseks and Moulton 2000). Both Greene and Blatner (1986) and Baughman (2002) found that direct contact with a forester or other natural resource professional is associated with owners being forest managers. And Egan and others (2001) cited the aspects of FSP that involve contact with a

¹ Citations with an ellipse list only the first and last of several sources for a finding, to save room.

professional – getting a management plan and technical assistance –as the main things owners like about the program.

Findings from the Survey of State Management Assistance Foresters

Federal Financial Incentive Programs

Selected forest management assistance foresters in each state were asked to describe and rate nine federal incentive programs: the Forest Stewardship Program (FSP), Conservation Reserve Program (CRP), Environmental Quality Incentives Program (EQIP), Forest Land Enhancement Program (FLEP), Forest Legacy Program (FLP), Landowner Incentive Program (LIP), Southern Pine Beetle Prevention and Restoration (SPBPR), Wetlands Reserve Program (WRP), and Wildlife Habitat Incentives Program (WHIP). The characteristics they rated include forest owner awareness of each program, its overall appeal among owners aware of it, its success in encouraging sustainable forest management and enabling owners to meet their objectives of forest ownership, and percentage of program practices remaining in place and enrolled acres remaining in forest over time. The next several paragraphs highlight results of the ratings, on a program-by-program basis.

FSP was among the highest-rated programs overall regarding forest owner awareness of the program, appeal among owners aware of it, encouraging sustainable forest management, enabling owners to meet their objectives of forest ownership, and percentage of enrolled acres remaining in forest over time. Comparing results across the four regions, foresters in the Midwest indicated that a lower percentage of program practices remained in place over time than those in the other regions.

CRP rated third overall in terms of owner awareness of the program. On a regional basis, forester perceptions of the program's appeal among owners aware of it and its success in encouraging sustainable forest management were highest in the South and lowest in the West.

Among the four regions, foresters in the East rated EQIP lowest in terms of appeal among owners aware of the program, encouraging sustainable forest management, and enabling owners to meet their objectives of ownership. Foresters in the Midwest rated the program lowest with respect to program practices remaining in place and enrolled acres remaining in forest over time.

FLEP seemed to be regarded as the “workhorse” of federal forestry incentives, and rated perhaps highest overall of the nine programs. The foresters placed it among the top-rated programs for owner awareness, appeal among owners aware of it, encouraging sustainable forest management, enabling owners to meet their objectives of ownership, and enrolled acres remaining in forest over time. There was little regional variation in the scores assigned to FLEP, except that foresters in the East rated it somewhat lower than those in other regions for helping owners meet their objectives.

FLP was among the programs rated highest overall for encouraging sustainable forest management and enabling owners to meet their objectives of ownership. Management assistance foresters in all four regions gave FLP high marks for program practices remaining in place and enrolled acres remaining in forest over time.

LIP and WRP ranked lowest of the nine programs for owner awareness, although the ratings assigned to them still were quite good. Comparing the results across regions, foresters in the Midwest considered LIP ineffective in nearly all measures surveyed, while foresters in the East considered the program quite effective. Ratings for WRP also were mixed. Foresters in all regions except the South gave the program low ratings for encouraging sustainable forest management, while foresters in all regions except the Midwest rated the program high for enrolled acres remaining in forest over time.

SPBPRP, available only in the South, was among the top-rated programs for enabling owners to meet their objectives of ownership. WHIP was among the lowest-ranked programs in terms of owner awareness and appeal to owners aware of it.

Most of the foresters' suggestions for improving owner participation in the programs centered around increased funding and staffing levels, single-agency delivery, and making program rules more consistent over time. Most of their suggestions for improving administrative efficiency centered around improving program application and delivery processes, and simplifying paperwork and reporting requirements.

State and Other Financial Incentive Programs

The management assistance foresters also were asked to name, describe, and rate financial incentive programs offered to non-industrial private forest owners by their state and by private entities, such as forest industry firms, forest owner associations, or nongovernmental organizations. All 50 states have some type of preferential property tax to protect forest land from being fragmented or converted to other uses. Each state takes its own unique approach, but the foresters rated the programs above average, overall, for forest owner awareness of them and their appeal among owners aware of them. They rated the programs only somewhat successful, however, in encouraging sustainable forest management and enabling owners to meet their objectives of ownership. Many of the foresters did not suggest improvements to their state property tax. Improvements that were suggested centered on program administration and objectives, guidelines, eligibility requirements, and valuation methods.

Several states have their own forest cost-share programs, many of which are funded by forest tax revenues. Some of the programs help fund timber management, while others focus on wildlife, riparian areas, or conservation easements; one is a state-level forest stewardship program. The foresters rated these programs above average overall for encouraging sustainable forest management and enabling owners to meet their objectives of forest ownership. The most frequently mentioned suggestions for improving the programs include increased funding and simplified eligibility requirements, administrative procedures, and contracts.

Forest industry programs account for the majority of financial incentives offered by private entities, although programs by land trusts or conservation organizations also are common. The management assistance foresters rated these programs somewhat lower than federal or state incentive programs in terms of forest owner awareness of them and their appeal among owners aware of them. This may be because of the targeted nature of the programs, which are not of interest to many forest owners. The foresters gave privately-sponsored programs high ratings, however, for program practices remaining in place and enrolled acres remaining in forest over time.

Findings from the Non-industrial Private Forest Owner Focus Groups

Focus groups composed of non-industrial private forest owners were asked to discuss their experience with financial incentive programs, what forest ownership objectives the programs help them to meet, and what additional program approaches would appeal to other objectives they hold.

The participants expressed a high degree of attachment to their forest lands. Some were managing land that had been in their families' hands since the mid-19th century, or lived on roads named for their families. Others had only owned the land for a few years, perhaps as a retirement home site or investment. Despite these differences, there was a broadly shared commitment to long-term stewardship and appropriate management. Land ownership seemed much more tied to self-identity and lifestyle than to financial return, and in some cases there were clear statements that financial

return was not a driver for their management decisions. The exception was in the South, where financial return was more important.

Knowledge and use of incentive programs was quite variable between individuals. The most widely used programs were preferential property tax assessment and capital gains treatment of harvest returns. Knowledge of other incentive programs was substantially lower. Virtually every program had been used by someone, but few had been used by many. A substantial majority of non-forestry association members and a large fraction of association members – as many as half in some regions – did not have a written forest management plan.

The form of incentive that received the greatest support was technical assistance, and it was clearly preferred to financial incentives. Across all eight focus groups there was a recurring sentiment that direct technical assistance – having an extension or service forester to “walk the land” with them – was the most highly valued. Even among highly experienced landowners with substantial holdings, technical assistance was strongly supported. The owners clearly want to “do right” by their land, and sincerely want to know what it requires to do so.

A number of criticisms of incentive programs were voiced: inconsistently administered and implemented – both between programs and over time – too slow and bureaucratic, inadequately funded, takes too long for a service forester to visit, some people receiving cost-share do not fully complete the required activities, etc. These sentiments were shared across the regions, and seemed in some cases to be linked to a broad anti-government sentiment.

Sustainable forestry resonates with owners at a conceptual level, but the specific tactics being used to promote sustainability do not have much traction. Because of the long-term orientation that the owners expressed, sustainable forestry readily appeals to them, although they are likely to describe it in terms much more like sustained yield. But certification – a primary mechanism designed to support sustainable forestry – has not made significant inroads among them. Except for those who were certified through their participation in the Tree Farm program, virtually no owners had pursued certification or expressed much knowledge about or interest in it. In some cases, there were statements that certification is an attempt by others (environmentalists were cited in the South and timber companies in the West) to control the management of private forest land.

If sustainable forestry is going to make inroads among non-industrial private forest owners, the key will be the extension and service foresters who provide information to them. These owners are not swayed by arguments that “certified timber gets an x -percent market premium” because rate of return is not the primary focus of their ownership. Rather it will be necessary to frame sustainable forestry as representing values that already motivate their landownership, and to have technical assistance foresters who are able to explain to them how to pursue sustainable forestry through their management practices.

Conclusions and Recommendations

Conclusions

The review of literature, survey of state management assistance foresters, and focus groups of non-industrial private forest owners yielded three conclusions:

- Federal and state financial incentive programs currently play a limited role in promoting sustainable forestry practices on the nation’s non-industrial private forests. There is no structural disconnect between the incentive programs and the practice of sustainable forestry. Forest owners sincerely desire to practice sustainable forestry and the incentive programs

promote application of sustainable forestry practices. The programs, however, play only a minor role in the owners' decisions regarding management and use of their forest land.

- There were considerable differences between the regions with respect to some study findings. Findings that differed from region to region include forest owner objectives and interests, consistency between the owner objectives and the available financial incentive programs, how the programs are administered, and how owners perceive the programs' effectiveness and appeal.
- With respect to other findings, however, there was a consistent message across all four national regions. Three findings were key. First, the highest program priority among forest owners is one-on-one access to a forester or other natural resource professional to walk their land with them and discuss their management alternatives. Second, there is a need for some flexibility in financial incentive programs to address regional differences in forest characteristics and owner objectives. And third, the most effective way to increase the impact of financial incentives would be to ensure adequate funding and stable program requirements over time.

Recommendations

The study findings and conclusions yielded nine program recommendations:

- Increase funding and availability of one-on-one technical assistance from both extension foresters and state service foresters.
- Use technical assistance rather than certification to convey sustainability ideas; approach sustainability through owners' long-term stewardship and family legacy objectives.
- Make a written forest management plan a requirement for all incentive programs.
- Design incentive programs to put forest owners in direct contact with a forester or other natural resource professional.
- Design some incentive programs to address regional differences in forest characteristics and forest owner objectives.
- Link incentives directly to stewardship practices instead of general forest management practices.
- Fund cost-share applications according to their expected environmental benefit instead of first-come-first-served.
- Make the requirements for owners to participate in incentive programs more uniform and deliver the programs from a single source in each state.
- Maintain adequate funding and stable program requirements for financial incentives over the long term.

Approach

As noted in the Study Purpose section, the study was conducted in four phases:

Study Phase 1: Review of Literature

Publications for the literature review phase of the study were identified through searches of databases including the University of Minnesota *Social Sciences in Forestry* website and CABI Publishing's *Forestry Abstracts*, as well as the literature reviews and publications resulting from the team members' own research. Both foundational and recent studies were identified. The studies were analyzed for inferences about the effectiveness of the various types of incentive programs and their apparent impact on forest owner motivations and practices.

Study Phase 2: Survey of State Management Assistance Foresters

This phase consisted of a survey of key management assistance foresters in state forestry organizations nationwide, to name, describe, and evaluate the public and private forest incentive programs available in each state. The appropriate management assistance forester in each state to receive the survey was identified using a networking approach. Each team member was assigned 10 states. Beginning with local contacts, each member identified the management assistance forester to receive the survey in their own state and neighboring states. Using recommendations from these contacts, they worked outward until survey recipients were identified in all 50 states.

The survey questionnaire was designed so that each recipient was asked to name and describe the public and private financial incentive programs available to non-industrial private forest owners in his or her own state, as well as any private programs in neighboring state that they were aware of. In follow-up questions the recipients were asked to assess forest owners' awareness of each program, its overall appeal among the owners aware of it, and its effectiveness in encouraging sustainable forest management and enabling owners to meet their objectives of forest ownership. They also were asked to estimate the percentage of program practices that remained in place and enrolled acres that remained in forest over time, and to suggest ways to improve owner participation in the program and its administrative effectiveness.

Greene developed the questionnaire in consultation with the other team members. The draft instrument was pre-tested and refined in February 2005, using the identified survey recipients in each of the co-principal investigators' home states. The final questionnaire consisted of a total of 89 questions on 30 pages. It was sent to the identified recipients in March 2005, using the Dillman (1999) Tailored Design Method. Follow-up telephone calls and e-mails were used to ensure a 100 percent response.

Study Phase 3: Non-industrial Private Forest Owner Focus Groups

This phase consisted of focus groups with non-industrial private forest owners in each U.S. region – East, Midwest, South, and West. Two focus groups were conducted in each region, one composed of members of forest owner associations and the other of non-members. Some prospective group participants were identified using the member and non-member mailing lists of the state forest owner association in each co-principal investigator's home state. Others were identified using a networking approach similar to that described for Study Phase 2.

Daniels conducted the focus groups for the eastern region, which the other team members attended as a demonstration. Daniels drew up guidelines to be used in conducting the remaining focus groups, following protocols described in *Working Through Environmental Conflict: The Collaborative Learning Approach* (Daniels and Walker 2001). Kilgore, Daniels, and Straka then conducted the focus groups for the Midwest, West, and South, respectively, with Greene attending to ensure consistency. The number of participants in each group ranged from 7 to 17 and averaged 11. The study plan anticipated conducting the focus groups in conjunction with meetings of interest to non-industrial private forest owners in order to minimize travel expenses for the participants, but it did not prove possible to do so. Refreshments were served during each session, to stimulate discussion. And as a token of thanks, each of the participants received a small honorarium.

The focus group moderators guided discussion by means of a chart mounted on the meeting room wall, as well as verbal prompts from the guidelines. Information was collected by recording the sessions and by taking notes. The recordings and notes for each session were analyzed twice – first by the regional co-principal investigator and again by Daniels – to ensure that key ideas and representative quotations were captured and treated similarly.

Study Phase 4: Comparative Analysis of Findings

The findings from the first three study phases were compiled and summarized, and the conclusions and program recommendations identified. In order to develop professional presentations and refereed publications, nonparametric statistical techniques – primarily Chi-square and Kolmogorov-Smirnov tests – are being used to test for differences between the focus group responses for each region and between the responses from forest owner association members and non-members. Comparative analysis techniques – including multivariate statistics and code mapping – will also be used to assess the established and potential incentive programs identified in the survey and focus group phases. The results of these tests will yield additional recommendations about how to most effectively structure financial incentive programs.

Deliverables

The deliverables from this study include:

1. A final report in the format specified by the National Commission on Science for Sustainable Forestry (NCSHF), due no later than October 31, 2005.
2. A presentation of the project's results at the NCSHF Fall Meeting, November 16, 2005.
3. A website with searchable databases on:
 - o Provisions of the tax, cost-share, and other financial incentive programs currently offered to non-industrial private forest owners by federal and state agencies, private entities, and nongovernmental organizations;
 - o Model provisions of other program approaches suggested by the study findings;
 - o Summaries of the study findings on the administrative effectiveness of the relative efficiency of different methods of administering similar programs; and
 - o Summaries of the study findings on interactions between different types of programs.
4. Popular summaries of the publications listed in Appendix C: List of Publications and PowerPoint presentations from the conferences listed in Appendix D: Other Project Outputs, for inclusion in the project website.

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Participants in the Non-industrial Private Forest Owner Focus Groups

Confidentiality considerations preclude identifying the participants in the non-industrial private forest owner focus groups. The lists below, however, provide demographic information about those who participated in each group, including their sex, age, occupation, and home town.

Pennsylvania Focus Group Participants

Non-forest association member focus group:

- Male, 40s, farmer, Titusville, PA
- Male, 40s, photographer, Sharpsville, PA
- Male, 40s, produce grower, Stoneboro, PA
- Male, 50s, retired, Greenville, PA
- Male, 60s, sawmill, sand and gravel, New Castle, PA
- Male, 30s, farmer, Villa Maria, PA
- Male, 50s, carpenter, Cambridge Springs, PA
- Male, 70s, farmer, Springboro, PA
- Female, 50s, nurse, Guys Mills, PA

Forest association member focus group:

- Male, 50s, federal employee, Sandy Lake, PA
- Male, 30s, financial planner, Cochranon, PA
- Male, 70s, retired, Stoneboro, PA
- Male, 80s, retired, Mercer, PA
- Male, 40s, self-employed, Mercer, PA
- Male, 60s, retired, Grove City, PA
- Male, 50s, park manager, Carlton, PA
- Male, 60s, farmer, Cambridge Mills, PA
- Male, 50s, retired, Centerville, PA

- Male, 40s, sawmill owner, Meadville, PA

Minnesota Focus Group Participants

Non-forest association member focus group:

- Male, 40s, teacher, Hill City, MN
- Female, 50s, public official, Grand Rapids, MN
- Male, 50s, marketing, Iowa City, IA
- Male, 50s, university professor, Iowa City, IA
- Male 40s, farmer, Grand Rapids, MN
- Male, 60s, retired, Grand Rapids, MN
- Male, 70s retired, Grand Rapids, MN
- Male, 70s, retired, Grand Rapids, MN
- Female, 50s, resort owner, Grand Rapids, MN
- Female, 50s, work off-farm, Aitkin, MN
- Male, 50s, business consultant, Grand Rapids, MN
- Female, 50s, business owner, Hill City, MN
- Male, 60s, retired, Hill City, MN
- Male, 60s, CEO, Grand Rapids, MN
- Male, 70s, retired, Grand Rapids, MN

Forest association member focus group:

- Male, 60s, retired, Woodbury, MN
- Male, 60s, retired, Rush City, MN
- Male, 40s, self-employed, Mendota Heights, MN
- Male, 50s, security management, Minneapolis, MN
- Male, 60s, retired, Wabasha, MN
- Male, 60s, retired, Andover, MN
- Male, 60s, retired, Cottage Grove, MN
- Male, 50s, industrial distributor, St. Paul, MN

Oregon Focus Group Participants

Non-forest association member focus group:

- Male, 60s, forestry contractor/equipment operator, Lebanon, OR

- Husband, 50s, and wife, 50s, retired, Sweet Home, OR
- Husband, 40s, and wife, 40s, occupations not specified, Foster, OR
- Male, 40s, occupation not specified, Scio, OR
- Female, 50s, occupation not specified, Brownsville, OR

Forest association member focus group:

- Husband, 60s, university professor, and wife, 40s, homemaker, Adair OR
- Male, 70s, retired, Philomath OR
- Male, 50s, forester, Philomath, OR
- Male, 70s, retired, Corvallis, OR
- Male 50s, engineer, Corvallis OR
- Male, 60s, farmer/forester, Alsea OR

South Carolina Focus Group Participants

Non-forest association member focus group:

- Female, 60s, homemaker, Anderson, SC
- Male, 60s, retired, Greenville, SC
- Male, 50s, real estate investor, Simpsonville, SC
- Male, 40s, industrial manager, Greenville, SC
- Male, 60s, farmer, Pelzer, SC
- Male, 70s, retired, Toccoa, GA
- Male, 30s, textile plant supervisor, Cleveland, SC
- Male, 40s, banker, Spartanburg, SC
- Male, 50s, store owner, Greenville, SC
- Male, 30s, telephone company repairman, Tryon, NC
- Male, 60s, retired, Easley, SC
- Male, 20s, teacher, Greenville, SC
- Male, 40s, technical supervisor, Boiling Springs, SC
- Male, 40s, plant manager, Liberty, SC
- Male, 40s, machine operator, Six Mile, SC
- Male, 50s, realtor, Clemson, SC
- Male, 30s, university professor, Easley, SC

Forest association member focus group:

- Female, 30s, teacher, Easley, SC
- Male, 50s, farmer, Belton, SC
- Male, 50s, real estate investor, Hartwell, GA
- Male, 40s, accountant, Pickens, SC
- Male, 50s, business owner, Starr, SC
- Male, 60s, farmer, Anderson, SC
- Male, 60s, veterinarian, Anderson, SC
- Male, 40s, banker, Melrose, NC
- Male, 30s, plant worker, Easley, SC
- Male, 60s, retired, Greenville, SC
- Male, 50s, realtor, Greenville, SC
- Male, 40s, business owner, Simpsonville, SC
- Male, 60s, retired, Fountain Inn, SC
- Male, 50s, financial supervisor, Greenville, SC
- Male, 50s, logging firm owner, Pelzer, SC

Appendix B: Links to Project Websites

As noted in the Deliverables section, the project website will include searchable databases of our findings on:

- Provisions of the tax, cost-share, and other financial incentive programs currently offered to non-industrial private forest owners by federal and state agencies, private entities, and nongovernmental organizations;
- Model provisions of other program approaches suggested by the study findings;
- Summaries of the study findings on the administrative effectiveness of the relative efficiency of different methods of administering similar programs; and
- Summaries of the study findings on interactions between different types of programs.

As discussed in Appendixes C and D, copies of the PowerPoint files used in presentations of the study findings and – to the extent that copyright regulations permit – copies of or links to articles published also will be placed on the project website. As well, organizations that represent the study's key user audiences – non-industrial private forest owners, public and private foresters, and other researchers and policy-makers – will be encouraged to link their websites to the project website.

Appendix C: List of Publications

Beyond the end of the project, the team members will continue to communicate the study findings through popular summaries and refereed publications directed toward each of the study's user audiences: non-industrial private forest owners, public and private foresters who serve non-industrial private forest owners, and other researchers and policy-makers.

Publications in the following outlets are specifically planned, to address the needs and interests of each user audience:

1. Non-industrial private forest owners:
 - *Forest Landowner*
 - *Tree Farm Magazine*
2. Public and private foresters:
 - *The Consultant*
 - *The Northern, Southern, and Western Journals of Applied Forestry*
3. Researchers and policy-makers:
 - *Forest Policy and Economics*
 - *Resource Management and Optimization* or the *Journal of Forest Economics*

To the extent that copyright regulations permit, electronic copies of or links to the articles will be placed on the project website. They also will be sent to NCSF for possible inclusion on its website.

Appendix D: Other Project Outputs

Beyond the end of the study, the team members will communicate the findings to user audiences including non-industrial private forest owners, public and private foresters who serve non-industrial private forest owners, and other researchers and policy-makers in the following ways.

1. Non-industrial private forest owners:
 - By presenting the study findings at the annual meetings of forest owner organizations, such as Forest Landowners, and state woodland owner associations; and
 - By encouraging forest owner organizations and other organizations that represent or speak for non-industrial private forest owners to link their websites to the project website.
2. Public and private foresters:
 - By presenting the study findings at the annual meetings of public and consulting forester organizations, such as the National Association of State Foresters, the Southern Group of State Foresters, and the Association of Consulting Foresters; and
 - By encouraging public and consulting forester organizations to link their websites to the project website.
3. Researchers and policy-makers:
 - By presenting the study findings at national and regional conferences for forestry professionals, such as the Society of American Foresters National Convention, the International Symposium on Society and Resource Management, the Southern Forest Economics Workshop, the Western Forest Economics Meeting, and the Midwestern Forest Economics Meeting; and
 - By presenting the study findings at national and regional conferences for state tax professionals, such as the Western States Forest Tax Administrator's Conference.

Copies of the PowerPoint files used in the presentations will be placed on the project website. They also will be sent to NCSF for possible inclusion on its website.