

Grant Application

Organization Information

Lead Organization Name and Address	Audubon New York 200 Trillium Lane, Albany NY 12203
Name, phone and email for Project Director	Michael Burger, Ph.D. Audubon New York 159 Sapsucker Woods Rd. Ithaca, NY 12203 Phone: (518) 869-9731 Fax: (518) 869-0737 mburger@audubon.org
Lead Organizational Mission Statement (25 words or less)	Audubon New York mission: to conserve and restore natural ecosystems, focusing on birds, other wildlife and their habitats to benefit humanity and Earth's biological diversity.
Lead Organization Annual Operating Budget	\$3,237,472
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	Dr. Ross Whaley, Senior Advisor to the Adirondack Landowners Association, President Emeritus of S N ESF; rosswhaley@roadrunner.com ; 518-359-9631 Dr. Tim Tear, Director of Conservation Science for The Nature Conservancy in New York; ttear@tnc.org ; 518-690-7855

Project Overview

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
Empire State Forest Products Association (ESFPA); and Cornell University, Dept. of Natural Resources, Human Dimensions Research Unit	Linking Forest Management to Bird Conservation: A communications and outreach program for foresters and forest landowners in New York State	\$14,275	\$295,751 (3-yr budget includes indirect expenses and consulting, which are not included in the budget table at the end of this application, which totals \$212,214 for three years)	This project would provide a stronger link between forest management and bird conservation. We are developing a communications and outreach program for foresters and forest landowners in New York with the intent of	Principle 4, Protection of biological diversity, and Principle 11, Training and Education. This project also meets the following objectives, performance measures and indicators: Objective 4, Conservation of Biological Diversity

				transferring the knowledge and methods to 7 other states where Audubon is active along the Atlantic Flyway.	including forests with exceptional conservation value; Objective 8, Landowner Outreach.
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*For each partner organization, please list below the contact name, title, email, phone number and include a summary of the individual and organizations qualifications and experience as it relates to your project. Also you must include a copy of the Agreement to Public Communications, which can be found at the end of this document, for each Project Partner.

Staff/Partner Qualifications:

Empire State Forest Products Association – Will provide access to landowners and advertise and help run workshops in regions of the state where demand for them is greatest. ESFPA is the host of the SFI Implementation Committee for New York State and will be responsible for identifying key locations, landowners and manufacturers as the prime contacts for the workshops, site visits and follow up discussions.

Contact Eric Carlson, Executive Director, esfpa@esfpa.org, 518-463-1297, Empire State Forest Products Association (ESFPA), The New York Forestry Resources Center, 47 Van Alstyne Drive, Rensselaer, NY 12144.

Cornell University Human Dimensions Research Unit – Expertise on attitudes, values, information needs of forest landowners, as well as on communicating effectively with them.

Contact Shorna Allred, Ph.D., Associate Professor, srb237@cornell.edu, 607-255-2149, Cornell University, Dept. of Natural Resources, Human Dimensions Research Unit, 122C Fernow Hall, Ithaca, NY 14853. This research unit has been responsible for helping Audubon New York design survey instruments, analyze the results, advise on outreach mechanisms, identify woodland owner interests and guide project thinking on woodland owner outreach and communications.

Audubon **Director** Michael Burger, Ph.D., dir. of conservation and science, professional experience researching forest harvest impacts on wildlife abundance and variety, creating outreach materials, conducting workshops for landowners;

William Liner, dir. of bird conservation, responsible for identifying Important Bird Areas of New York and developing management plans, experience conducting workshops for landowners;

Graham Cox, Ph.D., open space and forest program coordinator, experienced in communications and community surveys in the Northern Forest on sustainable development and measurement of community sustainability, resilience and well-being.

Project Details

Audubon New York with its partners (ESFPA, which heads the SFI Implementation Committee in New York State, and Cornell University DNR Human Dimensions Research Unit) has initiated a project to provide a stronger link between forest management and bird conservation. We are developing a communications and outreach program for foresters and forest landowners in New York State with the ultimate intent of being able to transfer the knowledge and methods to other states in which Audubon is active along the Atlantic Flyway – Vermont (which is already well along with this initiative), Maine, Connecticut, Pennsylvania, Virginia and North and South Carolina.

Audubon New York has undertaken a pilot program to do this in the Tug Hill region of New York State. We have now submitted a substantial program to expand this to the other major forested areas of the state and have applied for a grant from the US Forest Service through the NY State Department of Environmental Conservation.

Fundamental to this state program is an appreciation of the fact that, though there have been individual organization efforts to reach segments of the 600,000 private forest landowners across the state, we can only make a serious dent in this task if we join together in a broad partnership of forest interests – landowners, industry, academic research, Cooperative Extension, state agencies, and the NGO community. To this end Audubon New York is taking the initiative to pull these

stakeholder interests together. This task has been aptly summarized by Eric Carlson, executive director of ESFPA, as follows: "We are well aware that we face a serious challenge and to make a landscape impact will take working with targeted groups in each region that have a critical mass of landownership to see actual resultsIf this was easy we'd have been doing it already so we can expect a few challenges along the way."

If successful, this application to SFI Inc. would contribute matching funds for a three-year grant proposal that has been submitted to the US Forest Service. The timeline for this overall project has been included in the 'Timeline' section below.

In response to the US Forest Service guidelines we ensured that this project is linked to and conforms with two overall and interrelated forest management frameworks, first the New York State Forest Resources Assessment and Strategy (FRAS) prepared in 2010 to meet US Forest Service funding requirements, and second, the National State and Private Forestry Priorities. We are dealing with three intertwined concerns – conserving biodiversity, developing new wood markets and, for landowners, paying taxes and bills. With this grant proposal we would be taking one more crucial step and linking this work to the SFI green certification program, making a priority target audience the forest tract owners and the fiber source companies that have enrolled in the national SFI Inc. program. Our link for reaching these interests is through ESFPA in its role as host of the SFI Implementation Committee for New York State.

To date seven major forest landowners have enrolled in the SFI certification program in New York State, with total acreage at 1.4 million acres, and seven manufacturers are enrolled in the fiber sourcing certification.

Even though there are extensive public forest holdings in New York State, the majority of the state's forests are owned by private landowners, and most of them are considered small, non-industrial owners. Although research has shown that wildlife is a primary interest of private forest owners, and wildlife are dependent on the management decisions made by those landowners, effectively communicating wildlife habitat needs to landowners in a way that facilitates integration with forest management undertaken for other reasons continues to be a challenge. In this project, a partnership including wildlife conservation interests, expertise in working with private landowners, and landowner and forest industry interests will undertake a 3-year project to communicate with forest landowners about integrating bird habitat considerations into their forest management plans and practices. There are three components to this project: educational workshops for landowners and foresters, site visits with select landowners and providing them with recommendations for their lands, and development of a web-based outreach tool for providing on-going assistance to forest owners. At its conclusion, this project will yield the following outcomes: 1) hundreds of forest owners will have a better understanding of how their forest management decisions affect forest birds, the importance of sustainable forest management, and specific things they can do to improve bird habitats, 2) strategically-selected forest owners will have been provided with tailored recommendations for their lands, 3) habitat for forest birds will have improved in some of the most important regions of the state for these species, and 4) a lasting, web-based outreach tool will have been launched.

1. *For conservation projects, please explain how your project will improve the implementation of the SFI Standard or will benefit forest management through certification. For community projects, please explain how this Project will strengthen and involve communities in forest management.*

The SFI 2010-2014 Standard, Section 2, dated January 2010, includes 14 principles of sustainable forestry and 20 objectives. Within these objectives are a number of very specific performance measures and indicators. This proposed project, the subject of the grant request, directly meets two key principles in the SFI standards, as follows:

Principle 4, Protection of Biological Diversity, and

Principle 11, Training and Education.

This project also meets the following objectives, performance measures and indicators:

Objective 4, Conservation of Biological Diversity including forests with exceptional conservation value; and

Objective 8, Landowner Outreach.

Protecting Biodiversity Audubon New York's mission is to conserve and restore natural ecosystems, focusing on birds, other wildlife and their habitats to benefit humanity and Earth's biological diversity. Using internationally accepted criteria, Audubon New York has identified 136 Important Bird Areas (IBAs) across New York State, many of which are found in the forested landscapes that are the focus of this project.

and Outreach Building on several years of original research, we and our partners are reaching out to forest landowners through workshops, printed materials, and our website, with a goal of helping them to integrate bird-friendly management into new or existing management plans for their forested properties.

Project detail related to these principles and objectives: We are proposing a 3-year project to communicate with forest landowners about integrating bird habitat considerations into their forest management plans and practices, thus linking biodiversity conservation with sustainable forest practices. Forest-breeding birds require large, unfragmented forests for successful breeding, with different species needing forests with different structural characteristics. A landscape that includes a mix of forest successional stages can support a diversity of forest birds, promoting successful reproduction and providing quality habitat for brood-rearing and migration. Primarily, achieving the desired landscape will require the appropriate use of clear-cutting and other intensive management practices to provide early-successional habitat within a largely forested landscape. Less intensive logging practices that result in habitat still suitable for birds that breed in "mature" forests would be complementary and compatible. This is not a single-species approach, but one that provides a landscape that meets the needs of an entire suite of forest birds. Overall, this project will build on landowner interest in wildlife to reach more landowners with a message about the compatibility of bird habitat creation and sustainable forest management.

Concerns – From the forest landowner's perspective, their woodlots and forest stands represent many values; conserving wildlife and aesthetics are near the top for many. But they also face heavy tax and financial obstacles that are forcing them to harvest, often without a stewardship plan and without professional advice, or subdivide their lands. Paying taxes and bills creates serious pressure on landowners no matter how committed they are to conservation. This communications and outreach project is designed to cross these boundaries, integrate bird conservation knowledge with sustainable forest management, and encourage landowners to get professional advice about managing their woodlot and forest stands to produce a win for wildlife and forest landowners.

Audubon New York's forest conservation and stewardship work is part of a larger effort being undertaken by Audubon throughout the Atlantic Flyway region, with similar work underway or planned in Maine, Vermont, Pennsylvania, Connecticut, Virginia, and North and South Carolina, as well as at wintering sites for priority migratory species in Central and South America. In New York, this work will focus on large, forested IBAs -- the Adirondacks and Catskills, Rensselaer Plateau, the Allegany Region and Tug Hill, the most important landscapes in the state for forest-breeding birds of conservation concern. Stewardship of these landscapes through sustainable forestry compatible with creation of quality bird habitat is a desired future condition.

Audubon New York's forest conservation and stewardship program is focused on the protection and proper management of highest priority forest sites in the state, which support numerous birds of conservation concern, including Wood Thrush, Canada Warbler, Scarlet Tanager, Blue-headed Vireo, and many others. Forest-breeding birds face many threats throughout their ranges and some species are in serious decline. Large forested areas with minimal non-forest land use provide the best environment for these birds to reproduce successfully. Forest-breeding birds also need the right kind of habitat for their individual requirements. Some species require early-successional forests, while others require more mature forests; some require conifers, while others require deciduous forests. Audubon New York is working with partner organizations, including NYS DEC, timber companies, and private landowners to promote sustainable forestry and the creation and/or maintenance of important bird habitat characteristics within key forested landscapes.

Building on the original research we conducted on this topic from 1999 through 2001 and the educational materials created following that research, we are now reaching out strategically to forest landowners and inviting them to workshops that we are conducting with our partners. The objectives are 1) to educate forest landowners about the habitat needs of priority forest bird species and 2) make woodland owners aware of opportunities and strategies to simultaneously manage for timber and create habitats favorable for certain bird species, and where appropriate, integrate this information into new or existing management plans for their lands. Recommendations for one property will complement those made for another, so that requirements of most bird species will be met at the landscape scale.

Specifically, with respect to SFI 2010-201 Standard, Section 2, this project will contribute information to SFI participants on conserving native biological diversity, including information about species, wildlife habitats and ecological community types, about threatened and endangered species, information about viable occurrences of imperiled species and communities. It will provide information to enhance management plans using best scientific information to retain stand level wildlife habitat elements, provide information on forest habitats at the individual ownership level and across landscapes, and encourage participation in plans to conserve old growth forests, (all indicators enumerated in Performance Measure 4.1). Further, this project will contribute information in Performance Measure 4.2, applying knowledge gained through research, science and technology and field experience to manage wildlife habitat and contribute to the conservation of biological diversity. It will contribute a methodology to incorporate research results and field applications of biodiversity and ecosystem research into forest management decisions (Indicator 4.2.2).

With respect to Objective 8, Landowner Outreach, this project will contribute to all three indicators in this Performance Measure 8.1, generating information in many forms (field visits, information packets, newsletters, workshops, tours and websites) about BMPs, reforestation, conserving critical wildlife habitat elements, biodiversity, threatened and endangered species and characteristics of special sites. As a benefit we believe that this communication element will encourage landowners to take part in forest management certification programs.

This project relates to several of the other principles and objectives indirectly; for example, to the principles related to forest sustainability, forest productivity, and protection of special sites as well as continued improvement of the practice of forestry; and to other SFI objectives related to forest management planning and adherence to best management practices.

2. *What activities will you and your Project partners perform to promote the outcomes of your Project and SFI Involvement in the Project*

The overall purpose of this project is to build on landowner interest in wildlife to reach more landowners with a message about the compatibility of bird habitat creation and sustainable forest management, thus ultimately resulting in improved forest stewardship and improved bird habitat within landscapes that have been identified as critical for a suite of forest birds of conservation concern.

This project has three main components: 1) designing and conducting 6-7 workshops for forest landowners in priority regions of New York State, 2) working individually with a strategically selected subset of those landowners to assess their lands and forest management plans and make specific recommendations about how they can integrate management to improve bird habitat, and 3) designing and launching a web-based outreach tool to provide information from the workshops in an ongoing, effective manner.

Workshops with input and assistance from experts at Cornell University's Natural Resources Department, Human Dimensions Research Unit (HDR) and based on our own experience in working with landowners, initially we will design and conduct 1 or 2 workshops in the Tug Hill Region that will teach landowners about bird habitat needs and forest management techniques that can produce quality habitat on their lands, as well as provide additional information useful to forest landowners, such as information about conservation easements and finding a consulting forester. In conjunction with these workshops, we will administer before and after surveys to participants to gauge what they learned and whether or not they intend to act on their new knowledge, and also to help us refine the workshops. Additional workshops will be conducted each year of this project in other high-priority forest landscapes in New York, after working with the Empire State Forest Products Association to identify those areas.

Site Assessments – Based on what we learn about the participants and their readiness to manage their forests with bird habitat in mind, we will reach out individually to select landowners and offer to conduct site visits with them and provide them with specific recommendations. Landowners will be selected based on their interest and likelihood of using the recommendations we will provide, as well as on how much land they own and intend to manage. This component was developed and refined by Audubon Vermont over the past several years and Audubon New York staff has been trained in its application. We intend to influence as many acres as possible during the duration of this project so as to have an impact at the landscape scale.

Web-based Outreach Tool – During the last 9 months of this project, we will work with partners to turn workshop materials into a web-based outreach tool that can effectively provide the information from the workshops to landowners into the future. We will explore adapting these media tools to the variety of participatory/interactive social media outlets now gaining acceptance and wide public use. This tool will be subjected to peer and landowner review for user-friendliness and quality of information provided, then finished and launched at the conclusion of this project.

SFI Involvement in the Project

ESFPA is the state's host of the SFI Implementation Committee and our point of contact with the SFI certified landowners and SFI certified fiber source companies will be done through ESFPA. The seven major landowners enrolled in SFI certification in New York State are as follows: Finch (185,000 acres), Hancock (12,039 acres), Lyme (240,000 acres), Rayonir (125,000 acres), Harden (8,853 acres), ATT (91,929 acres) and NYSDEC State Forest units which together total 764,050 acres. Audubon New York conducted a pilot site visit with Lyme Timber on some of the property in the Adirondack Park last August and follow up discussions are being scheduled.

3. *In the table below, please list the goals for your project. For each goal, please describe the actions you will take to achieve your goal, the corresponding tangible outcomes (e.g. implementation guidance on a component of the SFI Standard, outreach and education to landowners, acres positively affected by the Project) for each goal, how you will measure your success in achieving each goal, and the portion of the requested grant funds that would be used to achieve the goal. Add rows as-needed to address all project goals.*

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Reach several hundred private landowners	Workshops and follow-up landowner surveys	Provide information about integrating bird habitat needs into existing or new forest management plans and activities on their lands and promoting sustainable forestry	Measured by the number of landowners attending workshops; the knowledge they gain and their intentions to act on that knowledge will be measured in after-workshop surveys and changes in management plans.	\$8,100 or 57% of total in the request
Goal 2: Assess and provide management recommendations to several dozen select landowners	Individual site visits	Target the private forest landowners who own or manage the SFI certified lands, collectively owning more than 700,000 acres; Target the small landowners who ask for site visits as a result of the regional workshops; Work cooperatively with DEC to introduce bird friendly management concepts to the State Forest units (totaling 764,000 acres).	Quantify the number of acres for which bird-oriented management options have been provided; Quantify the number of acres covered by new or modified forest management plans that integrate concepts provided by Audubon New York and its partners.	\$5,775 or 40% of total in the request
Goal 3: Continue to provide information from the workshops and site visits	Use traditional communications means (newsletters, brochures, flyers); Create and launch a web-based outreach tool, based on the information and responses from the workshops and field visits, updated regularly, providing an easy-to-use means to access information about bird-oriented forest management techniques; Explore and develop other interactive social networking means of communicating with forest landowners.	Track the number of web site visits, field questions from landowners who use the tool. We will also continue to explore adapting these media tools to the variety of participatory/interactive social media outlets now gaining acceptance and wide public use.	Quantify the visits to the web site and the number and nature of the questions. This tool will be subjected to peer and landowner review for user-friendliness and quality of information provided. The web site will be launched at the conclusion of the workshop and site visit phases of the project. We expect that our approach, including the workshops, field assessments and web site will be adopted by other Audubon programs throughout the eastern U.S.	\$400 or 3% of total in the request

Project Timeline

Timeline: (Three-year project by quarters starting July 2011)

Activity	Quarters											
	1	2	3	4	5	6	7	8	9	10	11	12
Design and/or revise landowner workshops												
Conduct 1 or 2 workshops in Tug Hill Region												
Survey participants about information gained and intended actions												
Conduct site assessments; provide recommendations												
Conduct workshops in other focal regions of New York												
Identify target audiences; define needed web outreach materials												
Create educational and outreach web materials, launch												
Interim and final reports to SFI												

Project Budget **Three-year Budget**

Expenditure	Amount	Matching Funds*	In-Kind Contributions*
Staff Salary and Benefits	\$1,425	\$96,928	\$94,261
Michael Burger (37%)			
William Liner (25%)			
Graham Cox (38%)			
Operating Costs			
Research Activities			
Meetings	\$1,000	\$1,000	\$0
Travel	\$10,350	\$3,000	\$0
Education & Outreach	\$1,000	\$2,000	\$500
Communications	\$500	\$250	\$0
Total	\$1 ,2 5	\$10 ,1	\$, 1

*list sources and amounts of any matching funds or in-kind contributions

***Matching Funds** would come from a grant that has been submitted to the U.S. Forest Service for this project through the New York State Department of Environmental Conservation.

***In-Kind Contributions** would be provided by partner organizations (Audubon, Cornell, ESFPA) from various sources, including unrestricted donations and membership fees.

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:

I, Michael Burger, Director of Conservation and Science (Name, Title), as a representative of Audubon New York (Organization Name) and a Partner in Linking Forest Management to Bird Conservation: A communications and outreach program for foresters and forest landowners in New York State (Name of Project), hereby give the Sustainable Forestry Initiative (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Audubon New York (Organization Name) to sign this agreement.

Signed:



Name

Director of Conservation and Science
Title

Audubon New York
Organization

15 February 2011
Date



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.™

SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, Shorna Allred, Associate Professor and Associate Director, as a representative of Cornell University Human Dimensions Research Unit and a Partner in "Linking Forest Management to Bird Conservation: A communications and outreach program for foresters and forest landowners in New York State", hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Cornell University to sign this agreement.

Signed:

Shorna Allred

Name

Assoc. Prof.

Title

Cornell Univ.

Organization

2-13-11

Date

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:

I, Michael J. Burns (Name, Title), as a representative of Empire State Forest Products Association (Organization Name) and a Partner in N Audubon Birds (Name of Project), hereby give the Sustainable Forestry Initiative (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Empire State Forest Products Association (Organization Name) to sign this agreement.

Signed:



Name

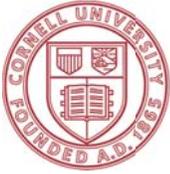
Deputy Director

Title

Empire State Forest Products Association
Organization

February 15, 2011

Date



Cornell University

Department of Natural
Resources

Fernow Hall
Ithaca, New York 14853
t. 607.255.2149
f. 607.255.0349

Graham Cox
Audubon NY
159 Sapsucker Woods Rd
Ithaca, NY 14850

February 14, 2011

Dear Graham Cox,

I am writing to express my strong support for the grant proposal that you are submitting to the Sustainable Forestry Initiative for the project titled "Linking Forest Management to Bird Conservation: A communications and outreach program for foresters and forest landowners in New York State." This project builds upon the strong research and outreach capacities and collaborations of the cooperating organizations which include Audubon NY, the Empire State Forest Products Association, the Human Dimensions Research Unit, and Cornell University Cooperative Extension. This project is important for a number of reasons. First, it will improve outreach to forest landowners and contribute to the sustainability of private woodlands. The proposed work will draw upon woodland owner's identified interests in wildlife as a means to reach them. The project also builds upon successful collaborations and work currently underway in woodland owner outreach and communication. Thank you for the opportunity to express my support for this exciting and important project! If you should have any questions, please do not hesitate to contact me at srb237@cornell.edu or 607-255-2149.

Warmest Regards,

A handwritten signature in cursive script that reads "Shorna Broussard Allred".

Shorna Broussard Allred, Ph.D.

Associate Professor, Dept. of Natural Resources, Cornell University Cooperative Extension
Associate Director, Human Dimensions Research Unit



Empire State Forest Products Association

The people behind New York's healthy forests and quality wood products

47 Van Alstyne Drive | Rensselaer, New York 12144 | 518-463-1297 | 518-426-9502 | esfpa.org | www.esfpa.org

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Forest Landowner

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Richard J. Shaw
Harden Furniture

Connie Smith
Sawmill Consultant

Kenneth L. Williams
Kenneth L. Williams & Assoc.

Edward G. Wright
W.J. Cox Associates, Inc.

Michael Burger, Ph.D.
Director of Conservation and Science
Audubon New York
c/o Cornell Lab of Ornithology
159 Sapsucker Woods Road
Ithaca, New York 14850

February 15, 2011

Dear Dr. Burger;

On behalf of the Empire State Forest Products Association (ESFPA) and our members, I am pleased to provide support to and participate in your proposed project to integrate bird friendly ideas into sustainable forest management.

Our members own and manage more than 1.5 million acres of private forest lands currently certified to Sustainable Forestry Initiative (SFI), American Tree Farm System, (ATFS) and/or Forest Stewardship Council (FSC) Standards of Sustainability.

We believe this project will provide critical information to land managers, allowing them to better manage certified forest lands for species of special concern. We also believe that this project will increase forest certification by introducing management tools to unengaged landowners interested in providing bird habitat.

As the co-sponsor of Tree Farm in New York State and the host of the New York State SFI Implementation Committee we are excited by the prospect of being able to offer this service to our forest owners and managers.

Sincerely,

Eric W. Carlson
President & CEO

Founded in 1906, ESFPA is dedicated to improving the economic climate for the forest products industry and to promote management of New York's forests to meet the resource needs of today and future generations. ESFPA counts among its 600 members furniture companies, lumber manufacturers, forest landowners, timber harvesters, pulp and paper companies, and other wood products manufacturers from across New York State. Members own and manage 1.5 million acres of New York's forests and employ over one-third of the 60,000 individuals who work in the forests and wood-using mills around the state.

New York State Department of Environmental Conservation

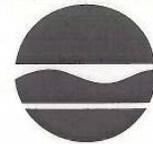
Division of Lands and Forests

Bureau of State Land Management

625 Broadway, Albany, New York 12233-4255

Phone: (518) 402-9428 • Fax: (518) 402-9028

Website: www.dec.ny.gov



Joe Martens
Acting Commissioner

February 15, 2011

Michael Burger, Ph.D.
Audubon New York
159 Sapsucker Woods Rd.
Ithaca, NY 12203

Mike:

I was very pleased to hear from Graham Cox regarding Audubon New York's proposal to link forest management to bird conservation, as it appears to me to be an excellent attempt to construct a program to reach the SFI private landowners. One of the many facets of DEC's mission is to enhance and protect the biodiversity of New York State. Supporting this project is one way that we can work towards achieving this goal.

As you likely are aware, DEC manages approximately half the SFI certified properties in the state. These lands could be a valuable teaching and education resource, and I would like to offer them as such. I look forward to speaking with you and your staff regarding ways in which DEC State Forest lands can most effectively be integrated into your program.

Regards,

A handwritten signature in blue ink that reads "Rob Messenger".

Rob Messenger
Chief, Bureau of State Land Management



INTERNATIONAL YEAR
OF FORESTS • 2011

Exempt Organization Certification

This certification is not valid unless all entries have been completed.

Name of seller	NYS Vendor ID number	Name of exempt organization making purchases	
Mailing address		National Audubon Society, Inc.	
City, village or post office		225 Varick Street 7th Floor	
State	ZIP code	New York, NY	10014

I certify that the organization named above holds a valid Form ST-119, *Exempt Organization Certificate*, and is exempt from state and local sales and compensating use taxes on its purchases.

Enter exempt organization number from Form ST-119

EX 115273

Signature of officer of organization	Title	Date prepared
	Asst. Secretary	

Instructions

Seller

If all entries have been completed and an officer of the organization has signed the certification, you may accept it to exempt sales to the organization named. The exempt organization must be the direct purchaser and payer of record. Any bill, invoice or receipt you provide must show the organization as the purchaser. Payment must be from the funds of the exempt organization.

This form may not be used to claim exemption for the following:

- the purchase of motor fuel or diesel motor fuel including No. 2 heating oil (see *Purchaser* section)
- the ten-cents-per quart tax on the retail sale of lubricating oil. This tax is imposed on the retail seller and included in the price charged the purchaser.
- the special fee on paging services unless the purchaser is a volunteer fire or ambulance company that has been granted exemption from sales and use tax pursuant to section 1116(a)(4) of the tax law. To claim this exemption, the exempt voluntary fire or ambulance company must supply the paging service with this form and a letter that identifies the exempt organization and states that it is exempt from the special fee on paging devices because it is a volunteer fire or ambulance company (see Notice N-92-17 for additional information.)

The exempt organization must give you certification at the time of the organization's first purchase. A separate document is not necessary for each subsequent purchase, provided that the exempt organization's name, address, and certificate number appear on the sales slip or billing invoice. The certification is considered part of each order and remains in force unless revoked.

If a certification with all entries completed is not received within 90 days after the delivery of the property or service, you will share with the purchaser the burden of proving the sale was exempt.

You must keep this *Exempt Organization Certification* for at least three years after the date of the last exempt sale substantiated by the certification.

Purchaser

Complete this certification and give it to the seller.

You may get additional copies of Form ST-119.1 at any district tax office or by writing to the NYS Tax Department, Taxpayer Assistance Bureau, W A Harriman Campus, Albany NY 12227. This form may be reproduced without prior permission from the Tax Department.

Your exemption from New York State and local sales and use tax does not extend to officers, members or employees of the exempt organization. Personal purchases made by these individuals are subject to sales and use tax. An organization's exemption does not extend to its subordinate or affiliated units. When making purchases, subordinate units may not use the exemption number assigned to the parent organization. Such misuse may result in the revocation of the parent organization's exemption.

You may not use this form to make tax exempt purchases of motor fuel, diesel motor fuel, lubricating oil and, if you are not a volunteer fire or ambulance company, to avoid the special fee on paging devices. Since No. 2 heating oil falls within the definition of diesel motor fuel; you may not use this form to purchase it tax exempt. You must use Form FT-1020, *Exemption Certificate for Certain Taxes Imposed on Diesel Motor Fuel and Propane* or Form FT-1025, *Certificate for Exemption from Certain Taxes Imposed on Diesel Motor Fuel*, to claim exemption on heating oil.

Hospitals that have been granted an exemption from sales and use tax pursuant to section 1116(a)(4) of the Tax Law may claim exemption on the purchase of motor fuel by using Form FT-937, *Certificate of Sales Tax and Motor Fuel Tax Exemption for Qualified Hospitals*.

Substantial civil and/or criminal penalties will result from the misuse of this form.



Department of the Treasury
Internal Revenue Service

P.O. Box 2508
Cincinnati OH 45201

In reply refer to: 0248364798
Dec. 30, 2008 LTR 4167C E0
13-1624102 000000 00 000
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BODC: TE

NATIONAL AUDUBON SOCIETY INC
225 VARICK ST FL 7
NEW YORK NY 10014-4396075



001562

Employer Identification Number: 13-1624102
Group Exemption Number: 2376
Person to Contact: MR. BAYER
Toll Free Telephone Number: 1-877-829-5500

Dear Taxpayer:

This is in response to your Dec. 17, 2008, request for information about your tax-exempt status.

Our records indicate that you were issued a determination letter in November 1972, and that you are currently exempt under section 501(c)(3) of the Internal Revenue Code.

Based on the information supplied, we recognized the subordinates named on the list you submitted as exempt from Federal income tax under section 501(c)(3) of the Code.

Donors may deduct contributions to you as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for Federal estate and gift tax purposes if they meet the applicable provisions of sections 2055, 2106 and 2522 of the Code.

If you have any questions, please call us at the telephone number shown in the heading of this letter.

Sincerely yours,

Michele M. Sullivan, Oper. Mgr.
Accounts Management Operations I

Grant Application Peter Duinker, School for Resource and Environmental Studies, Dalhousie University, February 2011

Organization Information

Lead Organization Name and Address	School for Resource and Environmental Studies Faculty of Management Dalhousie University 6100 University Ave. Halifax, NS B3H 3 5
Name, phone and email for Project Director	Peter Duinker (abbreviated CV attached) 902-494-7100 peter.duinker@dal.ca
Lead Organizational Mission Statement (25 words or less)	SRES, the centre for scholarship in natural resources and the environment at Dalhousie, is a leading institution in capacity-building and knowledge creation for resource and environmental management.
Lead Organization Annual Operating Budget	Ca. \$900,000 (School level)
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	Christian Messier, Université du Québec à Montréal messier.christian@uqam.ca 514-987-3000, ext. 4009 Paul Barten, University of Massachusetts pkbarten@eco.umass.edu 413-545-4853

Project Overview

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
NS SFI Implementation Committee NB SFI Implementation Committee NS Department of Environment NB Department of Natural Resources D Irving Ltd. Bowater Mersey Paper Company Ltd. FPInnovations University of New Brunswick Ducks Unlimited	Mitigating Impacts of Road Construction in Forested Wetlands: Best Management Practices for the Forest Industry	\$114,000	\$222,000	Our objective is to develop BMPs for roads crossing forested wetlands based on new knowledge of efficacy of alternative techniques for mitigating disruptions to water flows.	Objectives 3 and 4.

Contact name, title, email, phone number and summary of qualifications and experience. An abbreviated CV for the Project Leader is appended.

Organization: NS SFI Implementation Committee

Contact Name and Title: Jonathan Kierstead, Co-Chair

Email and Phone: jonathan.kierstead@abitibibowater.com; 902-354-3445, x. 2170

Qualifications and Experience: BScF, MScF, RPF and Co-chair of NS SFI IC since 2007. Responsible for management of Bowater Mersey Woodlands Environmental Management System, setting of annual environmental objectives and targets

and ensuring environmental compliance is conducted on Bowater Mersey Woodlands. Sits on three Nova Scotia Species at Risk Recovery teams. Responsible for public communication of environmental initiatives.

Organization: NB SFI Implementation Committee
Contact Name and Title: Marc Pinette, Chair
Email and Phone: Marc.Pinette@lpcorp.com; 207-532-7361
Qualifications and Experience: wood procurement and logistics

Organization: NS Department of Environment
Contact Name and Title: ohn Brazner, Wetland Specialist
Email and Phone: braznejc@gov.ns.ca; 902-446-5342
Qualifications and Experience: PhD in Limnology and Oceanography focused on wetland ecology, 25 years working on wetland research and policy

Organization: NB Department of Environment
Contact Name and Title: Reed Hentze, Biologist
Email and Phone: Reed.Hentze@gnb.ca; 506-457-4850
Qualifications and Experience: biology of surface-water protection

Organization: D Irving Ltd.
Contact Name and Title: ohn Gilbert, Manager, Fish, Wildlife & Environment
Email and Phone: gilbert.john@jdirving.com;
Qualifications and Experience: Graduated from University of New Brunswick 1975, BScF in Wildlife Management. Employed with the New Brunswick Department of Natural Resources 1975 - 1990 Manager of fish habitat and water-related programs. .D. Irving, Limited from 1990 to present. Manager, Fish, Wildlife & Environment - involved in all aspects of fish, wildlife and environmental management relating to forest planning and operations including the design of best practices for watercourse and wetland forest road crossings.

Organization: Bowater Mersey Paper Company Ltd.
Contact Name and Title: Rod Badcock, Woodlands Operations Superintendent
Email and Phone: rod.badcock@abibow.com (902) 541-5076
Qualifications and Experience: BSc Forest Eng (University of New Brunswick), MBA (Saint Mary's University). Woodlands Operations Superintendent – Bowater Mersey Paper Co. (2003 – Present)

FPInnovations

Contact Name and Title: Mark Partington, Senior Researcher
Email and Phone: mark.partington@fpinnovations.ca, 514-694-1140 ext. 318
Qualifications and Experience:
Mark is a registered professional forester (RPF) in Ontario and a certified environmental practitioner (EP) with an undergraduate degree in forestry and environmental management (B.Sc.F.) from the University of New Brunswick and a graduate degree in natural resource sciences (M.Sc.) from McGill University. Mark has worked with FPInnovations for the past 13 years and is currently a Senior Researcher in the Resource Roads and Environmental Impacts Groups. His research is primarily focused on reducing the environmental impacts of forest operations including forest soil protection in harvest operations and water crossings and erosion control on resource roads. Mark is the author of numerous technical reports and best management practice documents as well as an extensive list of field-based training workshops to industry and governments across the country.

Organization: Ducks Unlimited
Contact Name and Title: Tom Duffy, Manager of Atlantic Operations
Email and Phone: t.duffy@ducks.ca; 902-569-4544
Qualifications and Experience: BSc Wildlife Biology, Acadia Univ.; work experience with Fish and Wildlife Division of Government of PEI, environmental farm planning, and wetlands conservation; with DU since 2000.

University of New Brunswick
Contact Name and Title: Dr. Dirk Jaeger, PEng, Associate Professor and Forest Engineering Program Director
Email and Phone: jaeger@unb.ca, (506) 453-4945

Qualifications and Experience: Undergraduate studies and PhD in Forestry from the University of Gottingen (Germany), doctoral thesis on use of CAD and GIS for planning and design of low impact forest roads, 2.5 years with the State Forest Service in Hessen (Germany), 5 years as researcher and lecturer at the school of forest engineering at the University of Gottingen, since 2002 at the University of New Brunswick. Topics of interest and expertise: forest road design and transportation, impact analysis of off-road machine traffic on forest soils, adult education. International consulting experience in projects in Indonesia, China, Albania, Italy, USA.

<http://www.unb.ca/fredericton/forestry/people/jaeger.html>

<http://www.unb.ca/fredericton/forestry/news/forestpractice.html>

Project Details

Introduction

Atlantic Canada's forests are rife with wetlands. There are hundreds of thousands of hectares of forested wetland in Nova Scotia and New Brunswick alone (New Brunswick Wetlands Conservation Policy 2002; Nova Scotia Wetland Conservation Policy –Draft 2009). Thousands of kilometres of forest access roads are built each year in these two provinces to provide access to timber (Rod Badcock, Abitibi-Bowater Paper Company and John Gilbert, Irving Ltd., pers. comm.). Although the forest industry puts considerable effort into avoiding wetlands when building access roads, not all wetlands can be avoided, so some access roads inevitably need to be built through wetlands.

If not constructed properly, forest roads through wetlands can significantly alter water flow patterns, completely severing the hydrologic connection between the wetland that remains on either side of the road. This can permanently impact the character of the wetlands, flooding the "upstream" side of the road causing forest dieback, and drying out the "downstream" side converting wetland to upland and favouring different plant species altogether (Partington and Gillies, 2010).

Forested wetlands in Nova Scotia and New Brunswick commonly occur in large expanses of very flat landscapes in shallow basins with little topographic change over many 100s or even 1000s of metres of terrain (Randy Milton, NSDNR, pers. comm.). Those sites that are headwater systems often occur as treed bogs and fens on deep deposits of "peaty" soils, while sites that occur lower in the watershed are often mineral-based forested swamps with only a shallow layer of organic materials or peat (Tiner 1999).

Because of the difficulty and expense of constructing sustainable forestry roads through wetlands with deep layers of peat or large expanses of open water, it is wise to avoid peatlands and marshes (Welsch et al. 1995) and this is the usual practice in the Maritimes (John Gilbert, pers. comm.). Forest productivity is typically quite low at these sites anyway (Payandeh et al. 1997). It is the relatively more productive, mineral-based forested swamps that are the main interest of the forest industry in Nova Scotia and New Brunswick because these sites often contain closed canopy stands with a variety of commercial species (black spruce, balsam fir, red spruce, tamarack, red maple, eastern white cedar, hemlock) that are economically viable to harvest (Kevin Keys, NSDNR, pers. comm.). Road-building is also usually more economically feasible and successful in these locations (Welsh et al. 1995), particularly if the roads are only used during the drier and colder parts of the year as seasonal roads (Phillips 1997; Partington and Gillies 2010). As a result, the main concern over ecological impacts of forest roads in the Maritimes is associated with forested swamps because that is the most common wetland type that forest access and harvest roads cross.

A key element in reducing ecological impacts of such crossings is to maintain typical hydrologic flows through the wetlands as closely as possible (Phillips 1997, Partington and Gillies 2010). We seek to understand what technical approaches will do this best, and to identify best management practices (BMPs) that minimize impacts.

A number of publications have been produced since the early 1990s that provide BMP advice for road construction through wetlands (Ontario Ministry of Natural Resources 1990, Holaday and Martin 1995, Welsh et al. 1995, Phillips 1997, Minnesota Forest Resources Council 2005, Wetland Stewardship Partnership 2008). One of the most comprehensive treatments specifically focused on maintaining hydrologic connectivity during forest road construction was published as recently as November of last year (Partington and Gillies 2010). However, the recommendations provided in these reports are varied, sometimes contradictory and not supported by science-based, published evaluations.

We are therefore interested in testing the efficacy of a number of the most promising approaches that have been suggested thus far, using a rigorous experimental design to determine which methods are most effective at maintaining hydrologic connectivity where forest roads cross forested swamps. Test scenarios will include road segments with cross

drains at various spacings, road sub-bases from coarse aggregate (rip rap) to allow for lateral flow and use of geo-grid and corduroy. Besides hydrologic pattern before and after construction, potential changes in flora and fauna will be assessed together with the structural integrity of the roads. We will also evaluate the economic costs associated with each of these methods so that ultimately, recommendations on best management practices (BMPs) for road-building through forested wetlands can be refined and provided to the forest industry.

We are proposing a two-year study (detailed below) yet understand that signals in the ecological response indicators may take much longer to manifest themselves fully. The intention is to return years later to the sites for longer-term measurements for which this study will have served as the essential baseline. We think it will be possible to inform BMP development to a significant degree based on our interim results.

References

Holiday S., and J. Martin. 1995. *Wisconsin's Forestry Best Management Practices for Water Quality – Wetlands*. University of Wisconsin Extension, Forestry Facts Publication No. 11.

http://basineducation.uwex.edu/woodland/OWW/Pubs/FEM/FEM_011.pdf

New Brunswick Wetlands Conservation Policy. 2002. Government of New Brunswick.

<http://www.gnb.ca/0078/publications/wetlands.pdf>

Nova Scotia Wetland Conservation Policy –Draft. 2009. Government of Nova Scotia.

<http://www.gov.ns.ca/nse/wetland/docs/Nova.Scotia.Wetland.Conservation.Policy.pdf>

Minnesota Forest Resources Council. 2005. *Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers and Resource Managers*.

<http://www.mlep.org/documents/completemfgbook2009.pdf>

Ontario Ministry of Natural Resources. 1990. Environmental Guidelines For Access Roads and Water Crossings.

<http://www.web2.mnr.gov.on.ca/mnr/forests/public/guide/roads%20&%20water%20crossings/toc.pdf>

Partington, M., Gillies, C. 2010. Resource roads and wetlands: opportunities to maintain hydrologic function. FP Innovations, Internal Report IR-2010-11-01.

Payandeh, B., V.F. Haavisto, and P. Papadopol. 1997. Comparative growth of peatland, upland, and a superior black spruce stand in Ontario. pp. 459-468, *In*, Trettin. C.C., M.F. Jurgensen, D.F. Grigal, M.R. Gale, and J.K. Eglum (eds.), *Northern forested wetlands: ecology and management*. CRC Press, Inc., Boca Raton, Florida, USA.

Phillips, M. J. 1997. Forestry best management practices for wetlands in Minnesota. pp. 403-409, *In*, Trettin. C.C., M.F. Jurgensen, D.F. Grigal, M.R. Gale, and J.K. Eglum (eds.), *Northern forested wetlands: ecology and management*. CRC Press, Inc., Boca Raton, Florida, USA.

Tiner, R.W. 1999. *Wetland indicators: a guide to wetland identification, delineation, classification, and mapping*. CRC Press, Inc., Boca Raton, Florida, USA.

Welsch, D. J., D.L. Smart, J.N. Boyer, P. Mirkin, H.C. Smith and T.L. McCandless. 1995. *Forested wetlands: functions, benefits and the use of best management practices*. SDA Forest Service Publication NA-PR-01-95.

Wetland Stewardship Partnership. 2008. *Wetland Ways: Interim Guidelines for Wetland Protection and Conservation in British Columbia – Chapter 5, Forestry*.

<http://www.env.gov.bc.ca/wld/documents/bmp/wetlandways2009/Wetland%20Ways%20Ch%205%20Forests.pdf>

Project Goals	Activities	Tangible Outcomes	Measures of Success	Grant Funds
Goal 1: characterize wetlands, including water flows and biodiversity conditions, prior to treatments	Students will take detailed measurements of wetland conditions, water flows, and biodiversity conditions in summer 2011	Pre-treatment measurements on mineral-based forested wetlands, three replicates for each treatment type	Adequacy of baseline pre-treatment wetland characterization	\$24K
Goal 2: build roads and install alternative techniques for water-flow maintenance	Industry partners will, during late summer and early autumn of 2001, install the alternative experimental treatments in chosen forested wetlands	Treatments will be in place	Suitable installed treatments installed	None (\$100K in-kind)
Goal 3: make sufficient measurements of post-treatment conditions of water flows and biodiversity conditions	Students will take detailed measurements of wetland conditions, water flows, and biodiversity conditions in summer 2012	First-year post-treatment measurements on both mineral-based and organic-based forested wetlands, three replicates for each treatment type	Adequacy of post-treatment measurements of water flows and biodiversity conditions	\$46K
Goal 4: analyze the collected data, interpret them, and report them in various formats for diverse audiences	Analysis of data and preparation and delivery of reports and workshops	Analyzed and interpreted data, BMPs formulated and communicated	Journal and conference papers delivered, theses defended, and workshops delivered	\$32K

Project Timeline

- start May 2011
- before-treatment field season, summer 2011
 - measurements in unaffected watersheds – watershed characterization, flow determinations, biodiversity assessment
- fall 2011 - implement experimental treatments (road-building and installation of experimental techniques)
- spring/summer 2012 - post-treatment field season – flow determinations, biodiversity assessment
 - measurements of effectiveness of treatment alternatives
- fall 2012 - data analysis and interpretation
- winter 2013 - documentation (theses, reports, journal papers) and presentations (conference presentations and workshops)

Project Budget

(Note: all expenditures are listed in the table below in CDN\$ 000)

Expenditure	Amount	Requested from SFI	In-Kind Contributions*
Staff Salary and Benefits	68	68	
Operating Costs			
Research Activities	100		100 (company partners)
Meetings	8		8 (all partners)
Travel	15	15	
Accommodation	12	12	
Education & Outreach	4	4	
Communications	3	3	
Materials & Supplies	2	2	
Administration	10	10	
Total	222	11	10

Budget Explanation:

Important Note: this is a 2-yr project, with expenditures of SFI grant funds equally spread over the two years (starting May 2011, ending April 2013)

Salaries: two Master's students, stipends of \$17K/yr for each of two years, total \$68K*

Research Activities: installation of alternative techniques for maintaining natural water flows in wetlands during road construction

Meetings: quarterly meetings of the entire project team – travel and other expenses

Travel: field truck and fuel, \$2.5K/month, six months (three months per summer) – total \$15K

Accommodation: \$1000/month/student, 6 months, 2 students – total \$12K

Education and Outreach: two stakeholder workshops, one in NS and one in NB, each \$2K – total \$4K

Communications: phone, internet, fax, mail – total \$3K

Materials and Supplies: measuring equipment and disposables – total \$2K

Administration: project and financial management – total \$10K

- * if the project is awarded SFI funds, we will apply for NSERC industrial postgraduate scholarships to reduce the SFI direct costs; should these applications be successful, we can reduce the SFI funding needs in year 2 of the project. One student will study at NB in Fredericton, and one at Dalhousie University in Halifax. Necessary funds to support the NB student will be transferred there from Dalhousie.

Current Employment:

Director and Professor, School for Resource and Environmental Studies, Faculty of Management
Dalhousie University, 6100 University Ave., Halifax, Nova Scotia, Canada B3H 3J5
Phone: 902-494-7100; Fax: 902-494-3728; Email: peter.duinker@dal.ca
(full CV available at <http://sres.management.dal.ca/People/Faculty/Duinker/index.php>)

Previous Employments:

Professor, School for Resource and Environmental Studies, Dalhousie University, 2004-2009
Director and Professor, School for Resource and Environmental Studies, Dalhousie University, 1998-2004
Professor and Chair in Forest Management and Policy, Faculty of Forestry, Lakehead University, 1988-1998
Research Scholar, International Institute for Applied Systems Analysis, Laxenburg, Austria, 1986-1988
Research Associate, Institute for Resource and Environmental Studies, Dalhousie University, 1981-1983

Education:

B.Sc.Agr., major in resource management, University of Guelph, 1978
M.Enviro.Studies., major in forest ecology, Dalhousie University, 1981
Ph.D., major in environmental assessment and forest management, UNB, 1986

Research Interests

Studies and published/presented papers (ca. 300) in the following areas: forest ecology; environmental assessment; natural resources decision-making; land-use and forest planning; wildlife habitat supply analysis; biodiversity assessment modelling, forest management and policy; forest decline and air pollution; climate change and forests; conflict resolution and public participation; forest sustainability; criteria and indicators of sustainable forest management; model forest partnerships; conservation of old-growth forests; European forests, urban forests

Teaching

Supervision of wide range of graduate and undergraduate thesis research projects in resource and environmental studies. Completed supervisions: 18 undergraduate theses, 55 Master's theses, 4 PhD theses. Courses (undergraduate, graduate, and professional short courses) in: environmental assessment; resource and environmental management; forest policy; public participation; research methods

Administration (selected examples)

Graduate Coordinator, Faculty of Forestry, Lakehead University, 1995-1998
Acting Dean of Graduate Studies, Lakehead University, January-June 1996
Director, School for Resource and Environmental Studies, 1998-2004, 2009-2012
Manager, C-CIARN Atlantic (Canadian Climate Impacts and Adaptation Research Network), 2001-2007
Academic Program Coordinator, School for Resource and Environmental Studies, 2008-2009
Associate Dean Research, Faculty of Management, 2010-2012

Facilitation Experience (selected examples)

1980 to present - led numerous workshops of experts, primarily on topics dealing with forest management and/or environmental assessment
1992-1993 - Co-Chair, Ontario Forest Policy Panel
1993-1994 - facilitator, Wabakimi Park Boundary Committee
2004-2009 - co-facilitator, Colin Stewart Forest Forum

Current Professional Service (selected examples)

Chair, CSA SFM Technical Committee
Chair, Nova Forest Alliance Partnership Committee and Management Committee
Member, Steering Committee for Urban Forest Master Plan, Halifax Regional Municipality
Member, Board of Directors, Canadian Model Forest Network

Current/Recent Major Funded Research Projects

1. Conservation of Old-growth Forests in Eastern Canada: Exploring Tradeoffs among Timber, Biodiversity, Carbon and Public Preferences (funded by SFM Network; completed except for documentation)

The project goal is to develop knowledge that will assist forest managers to conserve old-growth forest (OGF) and its associated values, through set-asides and active silvicultural intervention. Specific objectives are to: (a) develop comprehensive ecological characterizations of OGF at both the stand and forest scales, in two study forests in Nova Scotia and Ontario, and assess the degree to which the OGF is now fulfilling (and might fulfill in the future) ecological functions associated with biodiversity and carbon cycling; (b) determine how various citizen constituencies (such as rural people, urban people, and environmental advocates) perceive and value OGF and its management, in the 2 study forests; (c) assess, in the two study forests, implications of alternative OGF management approaches for forest values associated with timber production, biodiversity, and carbon uptake and storage, and explore tradeoffs among the values, across the assessed management approaches; (d) determine what management objectives and associated actions forest managers should apply to conserve OGF in their respective forests; and (e) develop comprehensive, detailed, well-grounded, and implementable OGF management strategies that will satisfy both the forest managers' wood-supply needs, and their desire to conserve biodiversity.

See: http://sfm-1.biology.ualberta.ca/english/projects/en_duinkerpoldg10.htm

2. Partnership Synergy (funded by Canadian Model Forest Network and Environmental Canada; completed except for documentation)

Here is what we are trying to accomplish in the study: (a) determine and document the stories and lessons associated with development and operation of each MF partnership; (b) determine and document stories and lessons associated with development and operation of other partnership arrangements in sustainable development of natural resources and environment (e.g., Atlantic Coastal Action Plan sites); (c) develop and test one or more tools that can help MF partnerships assess their own strengths and weaknesses and further strengthen their operations in the future; and (d) develop reports and other deliverables (e.g., print-based, CD-based) that assist people to set up and participate in effective partnerships associated with sustainable development of natural resources.

3. Forest Futures Project (funded by SFM Network; completed except for documentation)

Canada's forests and forest industry are facing transformation resulting from the stress of a changing climate, shifts in global markets, and changes in society's expectations of what forests should provide. The Forest Futures Project is based on the creation and analysis of alternative scenarios for Canada's forests and the forest sector to 2050. The scenarios are intended to help people think more clearly about the kinds of policies needed in the near term to secure a more sustainable long-term future for the forests and forest sector.

4. Public Values Associated with Canada's Urban Forests (funded by SSHRC; underway)

We are researching how citizens in various cities across Canada value the urban forests, defined as all the trees populating the urban ecosystem. Initial cities of interest include Calgary, Winnipeg, Fredericton and Halifax. Collaborators are John Sinclair, University of Manitoba, and Tom Beckley, University of New Brunswick.

Selected Recent Publications

- Smith, C., P. Duinker, K. Beazley, and K. Harper. 2010. Impacts of moose (*Alces alces andersoni*) on forest regeneration following a severe spruce budworm outbreak in the Cape Breton Highlands, Nova Scotia, Canada. *Alces* 46:135-150.
- Lynch, M.-F., P.N. Duinker, L. Sheehan and J. Chute. 2010. The demand for Mi'kmaw cultural tourism: tourist perspectives. *Tourism Management*: doi:10.1016/j.tourman.2010.08.009.
- Frittaion, C.M., P.N. Duinker, and J.L. Grant. 2010. Suspending disbelief: influencing engagement in scenarios of forest futures. *Technological Forecasting and Social Change*: in press.
- Frittaion, C.M., P.N. Duinker, and J.L. Grant. 2010. Narratives of the future: suspending disbelief in forest and forest-sector scenarios. *Futures*: doi 10.1016/j.futures.2010.05.003.
- Ordonez, C. and P.N. Duinker. 2010. Interpreting sustainability for urban forests. *Sustainability* 2:1510-1522. doi:10.3390/su2061510
- Steenberg, J.W.N. and P.N. Duinker. 2010. Post-hurricane coniferous regeneration in Point Pleasant Park. *Proceedings of the NS Institute of Science*: in press.
- Moyer, J.M., P.N. Duinker, and F.G. Cohen. 2010. Old-growth forest values: a narrative study of six Canadian forest leaders. *Forestry Chronicle* 86(2):256-262.
- Robinson, C., P.N. Duinker and K.F. Beazley. 2010. A conceptual framework for understanding, assessing and mitigating ecological effects of forest roads. *Environmental Reviews* 18:61-86. DOI: 10.1139/A10-002
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Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:



Agreement to Public
Communications.doc

I, Rod Badcock, Woodlands Operations Superintendent, as a representative of Bowater Mersey Paper Company Ltd and a Partner in "Mitigating Impacts of Road Construction in Forested Wetlands: Best Management Practices for the Forest Industry", hereby give the Sustainable Forestry Initiative (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Bowater Mersey Paper Company Ltd to sign this agreement.

Signed:

Name

Woodlands Operations Superintendent
Title

Bowater Mersey Paper Company Ltd
Organization

Feb 09, 2011
Date



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.™

SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, John Gilbert, as a representative of J.D. Irving, Limited and a Partner in Road Construction in Forested Wetland, hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by J.D. Irving, Limited (Organization Name) to sign this agreement.

Signed:

John Gilbert
Name

Manager, Fish & Wildlife
Title

J.D. Irving, Limited
Organization

Feb 14, 2011
Date

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:



Agreement to Public Communications.doc

I, Dr. D. Floyd (Name, Title), as a representative of UNB* (Organization Name) and a Partner in Mitigating Impacts (Name of Project), hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project. * Faculty of Forestry and Environmental Management

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by _____ (Organization Name) to sign this agreement.

Signed:

Dr. D. Floyd
Name

Dean
Title

Faculty of Forestry + Environ. Management
Organization

9 Feb 2011
Date



SUSTAINABLE FORESTRY INITIATIVE

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SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, **Jonathan Kierstead, Co-chair**, as a representative of the **Nova Scotia SFI IC** and a Partner in **Mitigating Impacts of Road Construction in Forested Wetlands: Best Management Practices for the Forest Industry**, hereby give the Sustainable Forestry Initiative[®] (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI[®] Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by **Nova Scotia SFI IC** to sign this agreement.

Signed:

Name

Co-Chair
Title

Nova Scotia SFI IC
Organization

February 15, 2011
Date



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SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, Mark Partington, Senior Researcher, as a representative of EPInnovations and a Partner In Mitigating Impacts of Road Construction in Forested Wetlands: Best Management Practices for the Forest Industry, hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the Information provided in this application is true and accurate, and I am authorized by EPInnovations to sign this agreement.

Signed:

Name

Senior Researcher

Title

EPInnovations

Organization

February 10, 2011

Date

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners [here](#):



Agreement to Public
Communications.doc

I, Marc Pinette, NB SIC Chair, as a representative of **NB SIC** and a Partner in **Mitigating Impacts of Road Construction in the Forested Wetlands: Best Management Practices for the Forest Industry**, hereby give the Sustainable Forestry Initiative™ (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI™ Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by **NB SIC** to sign this agreement.

Signed:

Marc Pinette

Name

Chair

Title

NB SIC

Organization

February 11, 2011

Date



SUSTAINABLE FORESTRY INITIATIVE

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SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, Peter Duinker, Professor and Director of the School for Resource and Environmental Studies, Faculty of Management, Dalhousie University and Leader of the project entitled "Mitigating Impacts of Road Construction in Forested Wetlands: Best Management Practices for the Forest Industry", hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Dalhousie University to sign this agreement.

Signed:

Dr. Carolyn R Watters
VP Academic & Provost,
Dalhousie University

Date

Dr. Peter Duinker, Project Leader
Director and Professor
School for Resource and Environmental Studies
Dalhousie University

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:



Agreement to Public
Communications.doc

I, **Tom Duffy, Manager Atlantic Operations** (Name, Title), as a representative of **Ducks Unlimited Canada** (Organization Name) and a Partner in **Mitigating Impacts of Road Construction in Forested Wetlands: Best Management Practices for the Forest Industry** (Name of Project), hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by **Ducks Unlimited Canada** (Organization Name) to sign this agreement.

Signed:

Tom Duffy
Manager of Atlantic Operations
Ducks Unlimited Canada
February 11, 2011

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:

Agreement to Public Communications.doc

I, John Brazner (Name, Title), as a representative of Nova Scotia Dept. of Environment (Organization Name) and a Partner in Forest Road ERM (Name of Project), hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by NSE Environment (Organization Name) to sign this agreement.

Signed:

John Brazner
Name

Wetland Specialist
Title

Nova Scotia Environment
Organization

February 9, 2011
Date

SFI Inc. Conservation & Community Partnership Grant Application (Over \$5,000)

Organization Information

Lead Organization:

The Land Trust for Tennessee
209 Tenth Avenue South, Suite 511
Nashville TN, 37203
(615) 244-5263
www.landtrusttn.org

The Land Trust for Tennessee will be the lead organization in this project and is a registered 501(c)(3) private non-profit non-governmental organization (see attached proof of status).

The Land Trust's Mission is to preserve the unique character of Tennessee's natural and historic landscapes and sites for future generations.

2010 Annual Operating Budget: \$1,126,000

Contact Person: Doug Rodman
Middle TN Project Manager / Staff Forester
(931) 996-9648 or (615) 244-5263
drodman@landtrusttn.org

Doug has a Master of Forestry from Duke University. He works directly with private landowners to create conservation easements and manages the exchange of information between the land trust, landowners, attorneys, and other advisors. Doug provides forestry and wildlife assistance to landowners who have already protected their lands. He is responsible for partnering with federal and state agencies and other NGO's to better leverage limited resources. He also develops and implements community outreach and education programs. With board of directors and leadership committees, Doug is working to create five-year strategic plans for various project areas.

The Land Trust for Tennessee was founded in 1999 by then-mayor and former Governor Phil Bredesen, and a group of citizens concerned about the rapid rate of development in Tennessee and its impact on our natural and historic resources. Since that time, The Land Trust has conserved over 60,000 acres in 48 counties. The Land Trust's primary method of protecting land is through conservation easements where the landowner gives away, as a charitable donation, some or all of their development rights. Doing so allows a landowner to retain private ownership of the land and obtain certain tax advantages, while preserving the land and their legacy for the public good through customized restrictions on future development. The Land Trust works with all kinds of landowners to encourage and complete these easement gifts that protect precious landscapes. The Land Trust also ensures that the easements are maintained in perpetuity. Since its inception, The Land Trust has worked directly or indirectly with landowners to protect forest resources including forest health, biodiversity, wildlife habitat and water quality as they are

impacted by forestry practices. We have been successful in protecting the natural resources that generations of forest landowners depend upon in so many ways. To date, The Land Trust has protected over 36,000 acres that are managed specifically as working forests.

References:

Herb Paugh
Tennessee Division of Forestry
(615) 837-5311
Herb.Paugh@tn.gov

Nate Wilson
The Forest Guild
(931) 598-1268
wnwilson@sewanee.edu

Project Overview:

Confirmed Project Partner:

Louisiana Pacific Corporation, SFI Certified

Contact Person: David Hudnall
Corporate Forest Resources Environmental Manager
Phone: 615-986-5796
Email: David.Hudnall@lpcorp.com

David has a B.S. in Forestry from Stephen F. Austin State University. He is LP's Corporate Forest Resources Environmental Manager and he also leads LP's Public Policy Council. David currently serves as a forestry-issues expert within the corporation, representing the company on pertinent environmental issues relating to forestland regulations and land use, including customer, lender and other 3rd party stakeholder concerns. He helps to assure the corporation's forestry group is well represented at the state & national levels, and that they have input into potential changes in sustainable forestry, green building and product labeling programs, and to assure these issues are appropriately communicated throughout the corporation.

Louisiana-Pacific Corporation (LP) is engaged in the manufacturing of building products. During the year ended December 31, 2010, the Company owned 23 facilities located in the United States and Canada. The Company also owns two facilities in Chile and acquired a 75% ownership interest in the Brazilian facility. The Company also participates in the joint venture operation that produces cellulose insulation. The products of the Company are used in new home construction, repair and remodeling, and manufactured housing. The Company operates in three business segments: oriented strand board (OSB), siding and engineered wood products (EWP). All of the mills and forests that LP directly manages in North America are SFI certified. Since most of the commercial forestland in the U.S. isn't certified, LP has turned to SFI because it includes process requirements to help ensure this vast amount of wood from private lands comes from sustainably managed forests. LP's SFI-certified procurement process helps to ensure that timber comes from

responsibly managed land. Since March of 2009, LP has added dual SFI and PEFC chain of custody certification to eleven of its Engineered Wood Products, Siding and OSB mills - keeping labeling options open for LP customers.

Project Title:

Sustainable Forest Management and Conservation Practices for Native Hardwood Forests

Amount Requested:

The Land Trust for Tennessee and Louisiana Pacific Corporation are pleased to submit a three-year grant request for \$90,000 (\$30,000 per year) to the SFI Conservation and Community Partnership Program.

Total Project Budget:

The three-year total budget for this sustainable forestry and conservation project is \$180,000 (annual budget for this project is approximately \$60,000). Additional funds for this project are to be covered with In-Kind contributions by The Land Trust and LP.

Brief Project Summary:

- Provide community education and outreach workshops to forest landowners about the benefits of sustainable management and working forest conservation easements.
- Provide financial project assistance to encourage forest landowners to donate conservation easements.
- Provide on-the-ground services to landowners and communities related to land conservation and sustainable forestry practices.

Applicability to SFI:

Landowners who chose to protect their working forests through permanent conservation are well on their way to meeting the needs of the present without compromising the ability of future generations to meet their own needs (*Principle 1. Sustainable Forestry*). Conservation agreements also protect ecosystem services and promote soil conservation, air and water quality protection, biological diversity, wildlife and aquatic habitat, recreation and aesthetics. In every conservation agreement, The Land Trust identifies buffer areas along streams and waterways. These buffer zones specifically provide additional protection for water resources (*Principle 3. Water Resources*). We also clearly note any special community types or rare and endangered plant or animal species in the immediate area, thereby adding additional protective measures for biological diversity (*Principle 4. Biological Diversity*). In addition, visible impacts and aesthetics (*Principle 5. Aesthetics and Recreation*) are one of the primary conservation values and the principle reason the IRS allows these landowners to take a charitable tax deduction. What the public sees from a road or waterway is an important conservation value and is seen as a high priority during forestry operations.

As partners, The Land Trust and LP will help Tennessee's forest landowners to protect the sustainable forestry base for future generations. Working together through this project, we will also provide education and outreach services to ensure that sustainable forestry practices are well

understood and applied on a large scale. This program will serve to further the SFI principles in a variety of ways, including:

- ✓ The education and outreach workshops will broaden the implementation of sustainable forestry practices and promote a long-range view of harvesting and forest productivity.
- ✓ As we work with individual landowners to permanently protect forest resources, we will also be protecting water quality, biological diversity, aesthetic qualities and other cultural values specific to each property.
- ✓ By assisting landowners with the long-term sustainable management of their forest resources, we will be interacting with forest management professionals, loggers and other contractors to improve the practice and implementation of sustainable forestry.
- ✓ Our university partners will be working to improve the research, science and technology that management decisions are based on.

Project Details:

In June 2010, the State of Tennessee and partners completed a statewide Forest Resource Assessment and Strategy Report which examined the current conditions, trends, threats and opportunities of the state's forest resources. The goal was to identify the highest priority areas where forest resource professionals and stakeholders can implement the most efficient and effective response to issues in those areas. According to the State Forester, Steven Scott, "the assessments and responses are not the responsibility of any one agency, but must be tackled with a multi-disciplinary approach. Ultimately, only a multi-disciplinary approach can lead to the ultimate goal of conserving, protecting, and enhancing our forest resources of Tennessee."

The sustainability section of Forest Resource Assessment and Strategy lists a number of issues that are expected to significantly impact the sustainability of our forest resources, including *Forest Parcelization & Fragmentation and Forest Health*.

As one of the leading conservation organizations in the state of Tennessee, we are especially concerned with parcelization and fragmentation as well as forest health and the wide ranging effects on the conservation values and benefits derived from forested landscapes. These conservation values include timber products, clean water, recreation, aesthetics and wildlife habitat. The capacity of the forest to provide these benefits may be lost completely if appropriate strategies are not implemented.

According to Forest Resource Assessment and Strategy, parcelization and fragmentation are driven by death, taxes and regulatory uncertainty as well as urbanization which can result in forestland being bought for residential and commercial development. The Forest Resource Assessment and Strategy also states that financial assistance for landowners can encourage forestland ownership. As for forest health, good silvicultural practices such as sustainable harvesting helps to keep stands vigorous and at lower risk to native and some non-native pests.

In Tennessee, 83% of the forests are owned by private individuals. The Public Benefits section of the Forest Resource Assessment and Strategy Report points out that the state's "wide variety of forest types provides a number of values, goods and services to the public. Forested

watersheds are of particular significance to water quality because of their numerous natural functions, including protecting drinking water quality and reducing risk of downstream flooding.” In the Issues and Strategies section of the Forest Resource Assessment and Strategy, The Land Trust is listed as a lead organization for accomplishing the goals set forth under all of the following issues, many of which are also elements of SFI:

- areas of forest based recreation
- ecosystem services
- sustainability of forest benefits
- parcelization and fragmentation
- small and large forest ownerships
- land use planning
- urban forest benefits
- public policy conflicts in urban landscapes
- forest fragmentation effects on wildlife

Project Goals:

The Land Trust and LP see the need for increased awareness of sustainable forestry across Tennessee (*Goal #1*). We also see the need for a better understanding by forest landowners about conservation agreements and how they can provide for an even greater level of conservation of Tennessee’s hardwood forests and economic forestry base (*Goal #2*). This three-year sustainability and conservation project will reach hundreds of landowners and translate into greater protection of thousands of acres of working forestlands. Through this program, The Land Trust and LP will provide the following:

- Bi-annual community education and outreach workshops to forest landowners about the benefits of sustainable management and working forest conservation agreements. We will invite the Tennessee Division of Forestry to be a partner in this part of the project by sharing their network of expertise and local knowledge to every part of Tennessee.
- Financial project assistance to encourage forest landowners to donate conservation agreements. This will include Land Trust staff time and other professional services necessary to complete strategic projects. Project assistance also covers the transactional costs associated with donating a conservation agreement such as title work, legal work, land surveys as well as stewardship monitoring.
- On-the-ground services to landowners and communities related to land conservation and sustainable forestry practices. This will include writing forest management plans for landowners who have protected their lands with conservation agreements and are preparing to harvest timber.

Activities:

With The Land Trust's five offices across the state of Tennessee and LP's corporate headquarters in Nashville, we are strategically located to provide the essential elements of this multi-year program. Within the first year of this program, we will provide the following:

1. Hold education and outreach workshops to engage forest landowners and the conservation community to permanently protect and enhance lands for timber management and other benefits.
2. Coordinate efforts with other partner organizations interested in helping private landowners protect and enhance their woodlands for a variety of forest resources. These partners may include Tennessee Division of Forestry, Tennessee SFI Implementation Committee, The University of Tennessee, The University of the South, Tennessee Wildlife Resources Agency, and USDA – Natural Resources Conservation Service.
3. Provide professional services and financial transaction assistance to encourage forest landowners to complete permanent conservation agreements on their lands.
4. Close and record working forest conservation agreements across Tennessee. Continue building a pipeline of potential projects to be completed in the future.
5. Write forest management plans for landowners who have already protected their lands and are planning to harvest timber in the near future.

Tangible Outcomes:

The impacts of this program will be deep and far reaching. Educating forest landowners on conservation opportunities and the principles of sustainable forestry is the foundation of good stewardship. The application of good forest stewardship will translate into the continued improvement of forest resources over time. Project assistance will allow for greater opportunities to protect working forest lands. Providing professional services, including Land Trust staff time to visit new landowners and prepare conservation agreements, creates the leverage to turn potential projects into permanently protected forestlands. Land conservation coupled with sustainable forest management will benefit the residents and visitors of Tennessee immediately and for many generations to come. Over the three year period of this grant, we expect the following measurable impacts:

- Hold six education and outreach workshops with 25 to 50 participants at each event.
- Distribute printed materials on the sustainable forestry practices discussed and presented in each workshop.
- Provide financial transaction assistance to a minimum of three forest landowners each year who donate conservation easements on their working forestlands (a minimum of 200 acres of forestland will be required for each landowner).
- Write or assist with the completion of at least three forest management plans for landowners who wish to implement sustainable forestry practices in their next timber harvest.

Measure Success:

Some of the benefits of this program will be easier to measure than others. Participants at workshops and acres protected by conservation agreements are straight forward and fairly easy to measure.

- ✓ We expect to increase awareness of sustainable forestry and conservation easements to up to one hundred influential landowners each year.
- ✓ We expect to help at least three working forest landowners conserve their properties with permanent conservation agreements each year.
- ✓ We also expect to write three forest management plans for landowners who have already protected their forestlands and are ready to harvest timber.

In contrast, the additional economic benefits to local businesses who supply the goods and services related to forest management will be harder to measure. We also expect to see a long-term positive impact on children as outdoor recreation promotes good health and a connection with nature that cannot be found anywhere else.

Grant Funds:

The partners of this project bring a variety of resources to the table. By working together, we can better leverage the limited resources of each organization to meet the goals and objectives of this project. While these organizations are all familiar with each other, we have never had the opportunity to work together on such an important project. We believe that sustainable forestry and conservation provides the perfect forum for our collaboration. As we work to increase awareness and understanding of sustainable forestry practices, we will also be creating permanent conservation agreements that will protect the forest resources for generations to come. By working together, we can accomplish much more than we can working alone.

We want to describe how sustainability, certification and conservation agreements have worked in the past. As an example, the Tennessee Department of Agriculture, as a partner in conservation, continues to provide funds to The Land Trust for working farms. These funds pay for on the ground services, easement preparation, community outreach and education and financial assistance when appropriate. While The Land Trust does not use these funds to purchase easements, we leverage these funds to offset the out-of-pocket costs associated with permanent conservation agreements. In many cases, the landowner believes that a conservation agreement is a critical part of the long-range plan for the property, but they simply cannot afford the \$5,000 to \$10,000 that is typically needed to complete the project. Working together, The Land Trust and the Department of Agriculture have been able to permanently protect thousands of acres of working family farms.

The Land Trust and our partners believe that the SFI program and other forest certification schemes work in much the same way to help forest landowners protect their properties. By covering a significant part of the costs associated with creating working forest conservation agreements, SFI will help to ensure that Tennessee will always have productive and sustainable hardwood forests. The benefits of this program will be felt by future generations who will be

able to harvest high quality forest products and thus stimulate the local economy and retain a professional workforce.

Project Timeline:

Year 1:

- First six months: Develop outreach and education strategy and hold the first workshop; write one forestry plan; identify potential conservation agreement landowners
- Second six months: Hold second outreach and education event; write two forestry plans; close and record three permanent conservation agreements with working forest landowners.

Year 2:

- Hold two outreach and education workshops; write three forestry plans; protect a minimum of 1,000 acres of working forestland with permanent conservation agreements.

Year 3:

- Hold two outreach and education workshops; write three forestry plans; protect a minimum of 1,000 acres of working forestland with permanent conservation agreements.

Project Budget:

Annual budget for three-year period - \$30,000:

Annual Expenditure	Amount	In-Kind Contributions
Staff Salary & Benefits	\$3,000	\$18,000
Education & Outreach	\$2,000	\$1,000
Travel (staff mileage)	\$1,000	\$1,000
Printing & Publications	\$500	\$500
Conferences & Meetings	\$500	\$500
Project Assistance	\$18,500	\$6,000
Forestry Plans	\$4,500	\$3,000
Total	\$30,000	\$30,000

The Land Trust for Tennessee and Louisiana Pacific Corporation are pleased to submit our application and three-year grant request for \$90,000 to the SFI Conservation and Community Partnership Program. In general, we anticipate the following breakdown of \$30,000 per year; with no more than 10% of SFI grant funding going to staff salary or benefits (additional funds for this project are to be covered with In-Kind contributions by The Land Trust and LP).

\$2,000: Implementation of education and outreach strategy to promote sustainable forestry practices. At a cost of \$1,000 per event, hold two education and outreach workshops on sustainable forestry practices reaching at least 25 individual forest landowners each time. Provide quality instructors, transportation, food and refreshments as well as publications and take-home materials to all participants.

\$23,500: Provide professional services and financial transaction assistance to encourage forest landowners to complete permanent conservation agreements on their lands. At a cost of \$5,000 to \$10,000 per project, close and record at least three working forest conservation agreements across Tennessee each year. Continue building a pipeline of potential projects to be completed in the near future.

\$4,500: At a cost of \$1,500 per plan, write at least three forest management plans for private landowners who have already protected their lands and are planning to harvest timber in the near future.

Conclusion:

As more and more land is bought for development, forest management opportunities for family forest owners continue to decline in many parts of Tennessee. Forest fragmentation and parcelization along with declining forest health will have significant impacts on not only the forest products industry in the near future, but on conservation as well. With over 80% of Tennessee's forests in non-industrial private ownership, the local forest products industry is completely dependent on private landowners willing to manage their forest resources.

Working together under this program, we can truly reach a broad audience of forest landowners and have a significant impact on sustainable forest management across the state of Tennessee. With SFI's support of our Sustainable Forest Management and Conservation Program, The Land Trust and LP look forward to providing education and outreach services, technical and financial assistance and on-the-ground services to forest landowners and communities on sustainable forestry practices and permanent conservation agreements.



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.™

SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, Doug Rodman, Middle TN Project Manager and Staff Forester, as a representative of The Land Trust for Tennessee and a Partner in Sustainable Forest Management and Conservation Practices for Native Hardwood Forests, hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by The Land Trust for Tennessee to sign this agreement.

Doug Rodman
Middle TN Project Manager and Staff Forester
The Land Trust for Tennessee

2-15-2011
Date



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.™

SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, David Hudnall, Forest Resources Environmental Manager, as a representative of Louisiana Pacific Corporation and a Partner in the Sustainable Forest Management and Conservation Practices for Native Hardwood Forests Project, hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Louisiana Pacific Corporation to sign this agreement.

David Hudnall
Corporate Forest Resources Environmental Manager
Louisiana Pacific Corporation

2/15/2011

Date

Organization Information

Lead Organization Name and Address:	Nature Conservancy Canada 825 Broughton Street, Suite 200 Victoria, BC, V8W 1E5	
Name, phone and email for Project Director:	Denise Robertson, Philanthropy Coordinator O:250-479-3191 x 224 F:250-479-0546 denise.robertson@natureconservancy.ca / bcoffice@natureconservancy.ca	
Lead Organizational Mission Statement:	The Nature Conservancy of Canada will protect areas of biological diversity for their intrinsic value and for the benefit of future generations.	
Lead Organization Annual Operating Budget	\$50,000,000+	
Two references who can speak to the potential of the Project:	Purnima Govindarajulu Terrestrial Conservation Science Section BC Ministry of Environment Purnima.Govindarajulu@gov.bc.ca 250-387-9755	Dr. Karl Larsen Associate Professor, Natural Resource Sciences Thompson Rivers University klarsen@tru.ca 250-828-5456

Confirmed Project Partners *See contact information below	International Forest Products Limited BC BAT BC Ministry of Natural Resource Operations	
Project Title	Bat hibernacula inventory and protection in the Thompson, Okanagan, Boundary and Kootenay Regions	
Amount Requested	\$60,000	
Total Project Budget	\$60,000 plus \$10,000 in kind support	
Brief Project Summary:	Assess a selection of caves and non-active mine shafts in the Thompson, Okanagan, Boundary and Kootenay regions to determine use as winter hibernacula for resident threatened/endangered bat species; based on habitat value and level of threat from human interference, selected mine shafts will be gated to prevent human entry.	
What element(s) of the SFI 2010-2014 Program does/do your Project address:	The project contributes to meeting the following Performance Measures of the SFI 2010-2014 Program: 4.1(promote biological diversity) 4.2 (manage/protect wildlife habitat) 6.1 (manage special sites) 15.1 (cooperative effort in research for conservation of biological diversity)	

Partner Organization Contact Information

International Forest Products Ltd.

Gerry Fraser Manager, Sustainable Forestry Gerry.Fraser@interfor.com 604-689-6870	Rhiannon McFarland Certification Coordinator Rhiannon.McFarland@interfor.com 250-679-6818
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BC Bat

Mitchell Firman
Biologist
Mitchell.firman@gmail.com
250-508-0535

BC Ministry of Natural Resource Operations

Lisa Tedesco Ecosystem Biologist – Nelson Lisa.m.tedesco@gov.bc.ca 250-354-6352	Helen Schwantje Provincial Wildlife Veterinarian Helen.schwantje@gov.bc.ca 250-953-4285
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Project Details

This project is aimed at identifying and protecting hibernacula of threatened and endangered bat species resident to the BC southern interior. Although much is known of bat activity in the active summer months, little is known about bat hibernation or hibernation sites in the province. A significant threat facing bat populations hibernating in the province is from human intrusion into hibernacula sites. In addition to vandalism, human access to these hibernacula sites can also be passively detrimental to bat populations (Thomas 1995). Human activity in a hibernacula during the fall season may cause active bats to abandon a site or cause wintering bats to wake from hibernation. The adjustment of warming from hibernation to an active body temperature uses energy reserves required to last through winter, with repeated disturbance essentially causing the bats to starve. Human access into hibernacula may also contribute to the spread of pathogens such as White Nose Syndrome, a fungus that is spreading from the eastern USA and Canada where it has caused mass bat die-offs, with mortality rates between 80-100% in affected colonies (Blehert et al. 2009).

One method by which significant bat hibernacula sites within mine adits and caves are currently being protected is by the installation of gates to prevent public access (Tuttle and Taylor, 1994). Additionally, since all access to many of these sites are closed by mining authorities to prevent risks to public safety, gating their entrances ensures that they will be left intact for bat use. This project will identify and gate priority hibernacula sites in the southern interior of BC. Road de-activation may also be used as a tool to reduce human activity. This project will build on existing knowledge in the Okanagan and Kootenay regions and gating may occur at high priority sites that have already been identified by previous research.

1. *For conservation projects, please explain how your project will improve the implementation of the SFI Standard or will benefit forest management through certification. For community projects, please explain how this Project will strengthen and involve communities in forest management.*

The project will benefit forest management on public land in the BC southern interior by:

- identifying valuable hibernacula sites used by resident threatened and endangered bat species;
 - determining which of these sites are at the highest risk of human interference due to their accessibility (based on forestry road access use);
 - installing gate structures on selected sites to prevent human interference, and thereby protect the resident bat colonies;
 - where suitable, implementing access control on roads to further reduce human access and protect gate structures;
 - where appropriate, recommending buffers around high priority sites;
 - sharing the results of the project with the Provincial Wildlife Veterinarian, to assist in the effort to monitor the spread of White Nose Syndrome to BC bat populations;
 - sharing the results with the BC BAT group and Provincial Ministry of Environment as part of ongoing efforts into bat research and conservation in the province;
 - building on the successful partnership program SFI has established whereby SFI certified companies can partner up with other resource managers to improve management of resource features; and
 - developing working relationships amongst resource managers that may not otherwise have opportunity to liaise.
2. *What activities will you and your Project partners perform to promote the outcomes of your Project and SFI Involvement in the Project?*
 1. Public outreach: provide information to local communities to describe the nature of the project; and provide information on stewardship of resident threatened and endangered bat species
 2. Develop a video presentation documenting the progression of the project (field visits, gate installation, discussion with biologists and partners)
 3. Present at the annual SFI conference
 4. Present through the Western Canadian SFI Implementation Committee website
 5. Present through partner extension and outreach mechanisms (partner websites, newsletters, meetings, public presentations)

Project Goals

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Identify hibernacula sites and determine which species are using them.	<ol style="list-style-type: none"> 1. Desktop review of known sites (non-active mine adits and caves) and hibernacula. 2. Summer field visit to confirm suitability and usage. 3. Fall monitoring/detection (bio-acoustic technology) to determine winter usage and species. 	<p>An inventory of valuable bat hibernacula sites used by threatened or endangered bat species.</p> <p>Identified hibernacula that may be valuable for monitoring the presence of white-nose syndrome in the province.</p>	Success will be measured by the identification of sites used by threatened or endangered bat species.	33,000
Goal 2: Prioritize sites for protection based on use and level of risk of human interference.	<ol style="list-style-type: none"> 1. Determine the level of risk of human interference on sites used by priority species based on accessibility, proximity to people, etc. 	An inventory of bat hibernacula sites that would benefit from restricting human access prioritized by the level of risk currently posed to the resident colony.	Success will be measured by the generation of a priority list of sites for gate installation and/or road deactivation.	1,000
Goal 3: Install gates on highest priority sites.	<ol style="list-style-type: none"> 1. Installation of steel gates to prevent public access to key sites. 2. Implementation of access control on roads leading to key sites where appropriate. 	Protection/management of known habitat features important for the conservation of threatened and endangered bat species.	Success will be measured by the number of priority sites protected.	15,000

Project Timeline

Collection of initial inventory of potential sites and known un-gated priority sites	April-May 2011
Initial coarse filter of potential sites for suitability	May 2011
Summer field visit to sites to determine suitability of potential sites	June-August 2011
Fall monitoring/detection to determine species and activity levels	September-December 2011
Priority rating of sites for protection	June 2011 – June 2012
Installation of steel gates	June-August 2011, June – August 2012
Project timeline Start – Finish	April 2011 – October 2012

Budget

Expenditure	Amount	Matching Funds	In-Kind Contributions
Staff Salary and Benefits: Administrative costs for Project Lead	\$6,000		\$5,000 in staff time from forest industry proposal partners
Research Activities: Produce site inventories, contract qualified professional to conduct field visits, fall monitoring/detection, priority rating for protection	\$34,000		\$2,000 In staff time from forest industry proposal partners
Travel: Travel requirements for qualified professional	\$4,000		
Gate installation/Access prevention: Contract tradesmen for installation of gates	\$15,000		\$1,000 in staff time from forest industry proposal partners
Communications, Education & Outreach: Public outreach and presentation of project through extension mechanisms (public meetings and presentations, newsletters, websites, media contact)	\$1,000		\$2,000 in staff time from forest industry proposal partners
Total	\$60,000		\$10,000

Citations

Blehert, D.s., Hicks, A.C., Behr, M., Meteyer, C.U., Berlowski-Zier, B., Buckles, E.L., Coleman, J.T.H., Darling, S.R., Garga, A., Niver, R., Okoniewski, J.C., Rudd, R.J., Stone, W.B. 2009. Bat white-nose syndrome; an emerging fungal pathogen?. Science, v.323, no.5911. p227.

Thomas, D. W. 1995. Hibernating bats are sensitive to nontactile human disturbance. Journal of Mammalogy 76L940-946.

Tuttle, M.D., and D.A.R. Taylor. 1994. Bats and mines. Bat Conservation International Resource Puplication Number 3. 41 pp.

**SFI Inc. Conservation Community Partnerships Grant Application
 North Carolina Coastal Land Trust Lead Organization
 Conserving Biodiversity through the Cape Fear Arch Conservation Collaboration
 February 15, 2011**

Organization Information

Confirmation of tax exempt status for the NC Coastal Land Trust is attached.

Lead Organization Name and Address	North Carolina Coastal Land Trust, 131 Racine Drive Suite 202, Wilmington, NC 28403
Name, phone and email for Project Director	Kristen Howell, Conservation Specialist, (910) 790-4524 x 18, Kristen@coastallandtrust.org
Lead Organizational Mission Statement (25 words or less)	Enrich the coastal plain communities of our state through conservation of natural areas and working landscapes, education, and the promotion of good land stewardship.
Lead Organization Annual Operating Budget	attached
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	<ol style="list-style-type: none"> 1. Phil Prete, Senior Planner, City of Wilmington, (910) 342-2779, phil.prete@wilmingtonnc.gov 2. Christine Ellis, Waccamaw Riverkeeper, Winyah Rivers Foundation, (843) 349-4007, wrk@coastal.edu

Project Overview

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))

<p>North Carolina Coastal Land Trust</p> <p>Resource Management Service, LLC</p> <p>North Carolina Wildlife Resources Commission</p> <p>The Nature Conservancy</p>	<p>Protecting Biodiversity through the Cape Fear Arch Conservation Collaboration</p>	<p>\$25,000</p>	<p>\$48,000</p>	<p>ing Cape Fear Arch Conservation Collaboration, a regional partnership of 25 organizations, this project will support the protection of priority forest habitats for the maintenance of biodiversity by working with local and county governments, private landowners, and timber managers to promote sustainable forestry practices and permanent conservation of sensitive resources.</p>	<p>Objectives for Sustainable Forestry:</p> <ul style="list-style-type: none"> 3) Protection and Maintenance of Water Resources; 4) Conservation of Biological Diversity including Forests with Exceptional Conservation Value; 6) Protection of Special Sites; 8) Landowner Outreach; 11) Promote Conservation of Biological Diversity and, Biodiversity Hotspots, 16) Training and Education; 17) Community Involvement in the Practice of Sustainable Forestry;
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North Carolina Coastal Land Trust is a 501(c)3 non-profit organization. The NC Coastal Land Trust works with private individual and corporate landowners on a voluntary basis to conserve lands with ecological, recreational, historic and/or scenic value within 32 Coastal Plain counties of North Carolina. To date, the Coastal Land Trust has protected over 47,000 acres of valuable upland and wetland habitats through either donated or purchased conservation easements or fee title acquisitions. The Coastal Land Trust owns and manages 35 preserves and has developed and implemented forest management plans to improve stands for wildlife, aesthetics and/or natural community restoration. The Coastal Land Trust educates its members about its forest management and restoration work and assists conservation easement landowners with obtaining cost-share funds for sustainable forest management. Recently, the Coastal Land Trust has taken on an initiative to educate local and county government planners about special forest and aquatic resources in their area and to encourage implementation of conservation measures in their communities to protect biodiversity and significant wildlife habitats. Kristen Howell, Conservation Specialist, served as Coordinator for the Cape Fear Arch Conservation Collaboration for the past two years. Kristen has years of experience working with regional conservation partners, local, county and state government officials to identify sensitive natural resources and protect them through proactive planning. Ms. Howell can be reached at (910) 790-4524 x 18 or Kristen@coastallandtrust.org.

Resource Management Service, LLC is a Timber Investment Management Organization and a SFI Program Participant. RMS manages 2.7 million acres of land in the southern United States. Their management philosophy is one of sustainable management of all forest values to achieve environmental, social and economic objectives in a responsible manner. Tony Doster, NC Regional Manager, has been working with the Cape Fear

Arch Conservation Collaboration since 2008 to identify opportunities for improved timber management on private lands, conservation easements on high-priority forest habitats, and bio-energy education. Mr. Doster can be reached at (910) 790-1074 x 109 or tdoster@resourcegmt.com.

North Carolina Wildlife Resources Commission is a state agency dedicated to the wise use and management of the state's fish and wildlife resources. NC Wildlife Resources Commission manages about 2 million acres of game lands in NC utilizing sustainable forestry practices to promote wildlife habitat. The Commission has also developed the Green Growth Toolbox, a training and technical assistance program for county and town planners to encourage conservation of wildlife habitat and sensitive natural resources through land use planning processes. The Green Growth Toolbox is a statewide initiative using regional partner organizations to implement the project from the mountains to the coast of North Carolina. Jeff Marcus, Piedmont Wildlife Diversity Supervisor, has helped to guide the Green Growth Toolbox program since its inception in 2006. Mr. Marcus can be reached at (910) 281-4388 or jeff.marcus@ncwildlife.org.

The Nature Conservancy is a non-profit organization whose mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. The Nature Conservancy works with local governments and timber management organizations in the southeast coastal plain to protect the highest priority forest habitats through acquisition or conservation easements. Dan Ryan, Southeast Project Manager, is a leader in the Cape Fear Arch Conservation Collaboration and was instrumental in the acquisition of working forests last year. Mr. Ryan can be reached at (910) 395-5000 x 2 or dryan@tnc.org.

Project Details

The North Carolina Coastal Land Trust, in partnership with the North Carolina Wildlife Resources Commission, The Nature Conservancy-North Carolina Chapter and Resource Management Services, LLC, respectfully request a grant of \$25,000 from the Sustainable Forestry Initiative's Conservation and Community Partnerships Grant Program to advance key initiatives of the Cape Fear Arch Conservation Collaboration (CFACC). The significance of the forest resources within the Cape Fear Arch region, together with the Collaboration's emphasis to work together not only to conserve but to raise public awareness about these resources, suggest that the Collaboration fits well within SFI's Conservation and Community Partnerships Grant Program.

The Cape Fear Arch Conservation Collaboration

Formed in 2006, the Cape Fear Arch Conservation Collaboration (CFACC) is a bioregional conservation partnership of over 25 organizations in North and South Carolina (see map). Partners represent local, regional, state and federal government agencies, and non-profit environmental and conservation groups including the North Carolina Coastal Land Trust; North Carolina Coastal Federation; Winyah Rivers Foundation; Bald Head Island Conservancy; Cape Fear River Watch; Cape Fear Resource, Conservation and Development; City of Wilmington; New Hanover Soil and Water District; Brunswick Soil and Water District; North Carolina Wildlife Resources Commission; North



Carolina Parks and Recreation; North Carolina Natural Heritage Program; The Nature Conservancy-North Carolina Chapter; Resource Management Service, LLC; SDA Natural Resources Conservation Service; U.S. Fish and Wildlife Service and others that have signed a memorandum of agreement in support of the collaboration. The mission of the CFACC is "to develop and implement a community conservation vision to build awareness, protection and stewardship of the region's important natural resources." The CFACC meets on a quarterly basis and meetings are organized to inform participants about particular conservation issues (e.g., the Feb. 2011 CFACC meeting will focus on the emerging biofuels industry with speakers representing both industry and conservation interests) and to encourage partners to discuss and collaborate on projects within the Cape Fear Arch region. The CFACC has been working diligently to identify high priority resources in the southeast coastal plain region and to encourage protection through land conservation, proactive planning, and improved land use practices. The CFACC has developed a web site, www.capefeararch.org and drafted both a Conservation and Education Plan to guide its actions over the next few years. Conserving biodiversity in both terrestrial and aquatic habitats along with protecting special forest sites are a major focus of the plan.

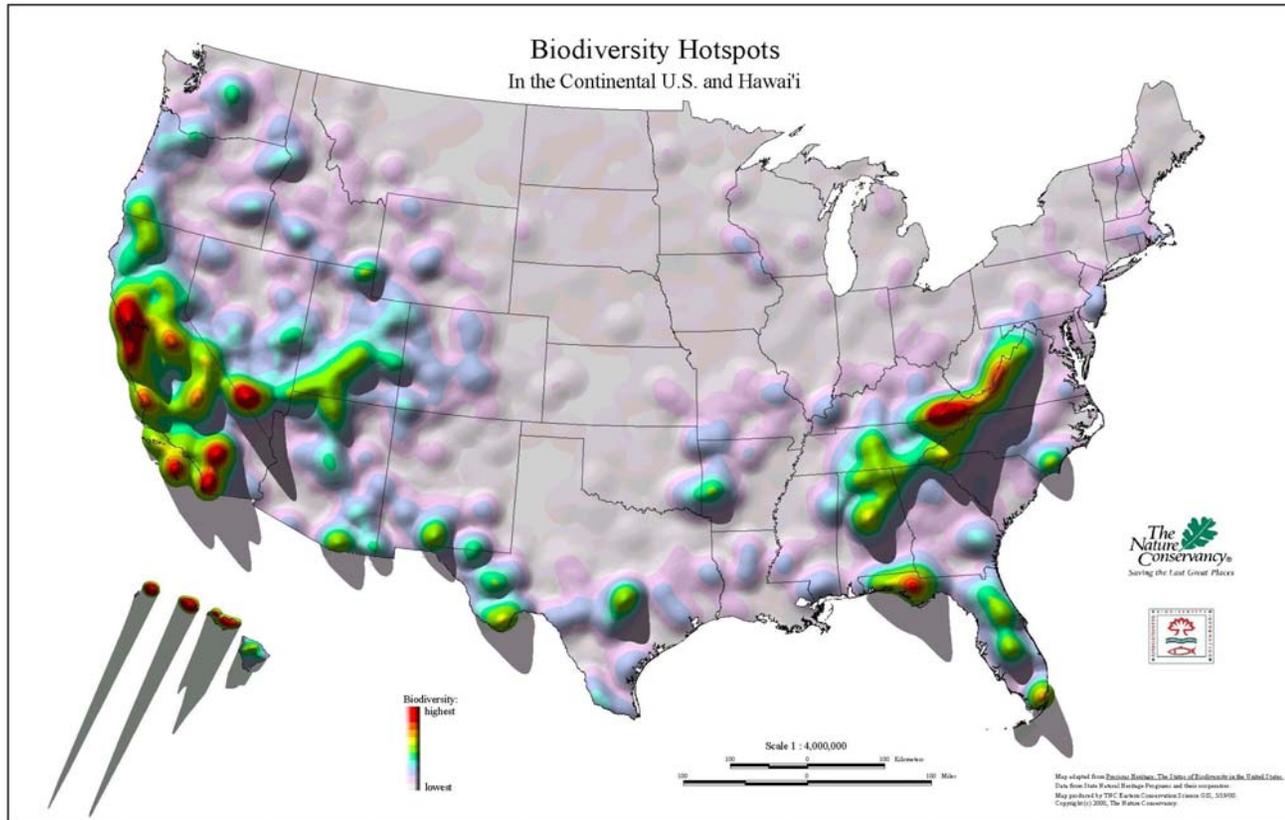
The Biodiversity of the Cape Fear Arch region

According to The Nature Conservancy, the southeast region of North Carolina is the most biologically diverse area along the entire east coast, north of Florida (see map), and they consider it one of the "biodiversity hotspots." This incredible biodiversity is partly due to a geologic feature called the Cape Fear Arch, an uplift of sand and limestone deposits centered around the Cape Fear River that create unique soil and hydrologic conditions. As noted in the Cape Fear Arch Conservation Plan, "the Cape Fear Arch region is a little higher in elevation than areas near the coast to the north and south, and has been above sea level for a longer period of time, even standing as a peninsula at certain times when the rest of the coastal plain was submerged. These factors have helped to produce an array of wet

and dry habitats. In turn, these habitats have nurtured a multitude of plants and animals, many found naturally nowhere else in the world."

Specifically, the North Carolina Natural Heritage Program recognizes that the Cape Fear Arch region hosts:

- 50 different natural communities, many of which are rare forest communities
- 300 different species of animals and plants
- 19 federally endangered and threatened species
- 63 state listed endangered and threatened species
- 22 endemic species, species found nowhere else in the world



The Cape Fear Arch's forest resources are particularly significant with sweeping longleaf pine forests, unique pocosins, Carolina bays,

floodplains (the bottomland forests along the Black River within the region contain some of the oldest trees east of the Rockies including a 1,700 year old bald cypress) and the exceedingly rare coastal maritime and fringe evergreen forests. The aquatic systems within the Cape Fear Arch are equally impressive. Two of the most sensitive watersheds in this region are the Waccamaw River and Town Creek. The Waccamaw River, which drains from a large Carolina bay, supports 9 aquatic animals that are found nowhere else in the world. Town Creek is considered to be a nationally significant aquatic site because of its pristine condition and unique features. Indeed, many of the terrestrial and aquatic communities of the Cape Fear Arch region rank as ***nationally significant*** according to the North Carolina Natural Heritage Program, which means they are habitats of exceptional ecological importance.

While portions of the Cape Fear Arch region wedged between Myrtle Beach, SC and Wilmington, NC, are experiencing intense growth pressure, there is still a window of opportunity to plan properly for the anticipated population growth in a way that will allow for economic development while protecting the forest and aquatic resources that make this area so special. And there still is a considerable amount of rural land, much of which is in working forest or farms. In fact, the Waccamaw River and Town Creek floodplains are dominated by large timberlands owned by timber management organizations, including Resource Management Service, LLC. (RMS), one of our SFI certified project partners. Finding creative ways to conserve working landscapes and to encourage sustainable forest management that protects biodiversity, special sites and water quality is a key focus of the CFACC and this particular project.

Project Summary

The overarching goal of this project is to conserve the special biodiversity of the Cape Fear Arch Region through the CFACC. The project will complement both ongoing CFACC activities like working to protect special sites and new initiatives like encouraging "Green Growth". The Coastal Land Trust along with its partners, The Nature Conservancy, Resource Management Service LLC, and NC Wildlife Resources Commission will promote the conservation of ecologically important forest and aquatic habitats primarily through outreach/education and direct landowner contacts as described in more detail below.

The partners propose the following specific activities for ***Conserving Biodiversity through the Cape Fear Arch Conservation Collaboration*** project.

- **Working Lands Workshop** – The Coastal Land Trust will host the November 2011 CFACC meeting which will specifically focus on conserving working lands and encouraging sustainable forest management. We will invite both members and associates of the CFACC as well as private forest landowners, particularly those with land in priority areas identified in the Cape Fear Arch Conservation Plan. A field trip to the Brunswick County Nature Park will be offered as part of the workshop to highlight recent collaborative forest management activities. The Brunswick County Nature Park, the County's first nature park, consists of 900-acres of forest land along nearly 2 miles of Town Creek, a tributary of the Cape Fear River. The Coastal Land Trust purchased the 900-acre property from International Paper Company in 2003 and transferred it to the County to be used for passive recreation, but retained timber management rights. The Coastal Land Trust hired a forestry consultant to develop a Forest Stewardship Plan for the park and now is implementing this plan by recently thinning over 500 acres of pine habitat to improve stands for wildlife and aesthetics. The Coastal Land Trust is now partnering with Resource Management Service, LLC to restore longleaf pine to one area of the park. Thus, the field trip will highlight the sustainable forestry practices implemented and future plans for longleaf pine restoration at the park.
- **Landowner Contacts** - The Nature Conservancy and Coastal Land Trust, with assistance from Resource Management Service, LLC, will contact and meet with key forest landowners, particularly in the Town Creek and Waccamaw River region to identify and encourage protection of special habitats on their properties through conservation easements or fee title sales to The Nature Conservancy or Coastal Land Trust; and/or by engaging in SFI's sustainable forest management practices. We will encourage participation in the SFI program or the Tree Farm certification, for those landowners not currently enrolled in these programs. We also will encourage networking opportunities between large timber management groups, and increasing participation in the North Carolina Natural Heritage Program registry, a voluntary program to protect important ecological sites on managed lands. Finally, whenever possible, we will invite landowners to come and visit some Resource Management Service, LLC properties along Town Creek to highlight not only sustainable forestry practices but conservation of special sites. Resource Management Service, LLC currently owns three properties (over 2,500 acres) along Town Creek that are subject to working forest

conservation and water quality easements. By using conservation priority maps developed by the CFACC to guide our outreach efforts, we will be reaching the landowners with the greatest opportunity to enhance biodiversity through wise forest management.

- Technical Assistance and Training to Local Governments – The Coastal Land Trust, in partnership with the NC Wildlife Resources Commission, will provide training and technical assistance to county and municipal land use planners within the Cape Fear Arch region through the “Green Growth Toolbox.” The Green Growth Toolbox project (www.ncwildlife.org/greengrowth) is a statewide program developed by the NC Wildlife Resources Commission to help local governments conserve wildlife habitat and working lands while accommodating future development through the land use planning process. The Coastal Land Trust will host 2 workshops targeting the planners in Brunswick and Columbus Counties to introduce them to the “toolbox” which contains GIS data, land use planning strategies, ideas for ordinances, and other tools used to conserve important wildlife habitat while building a strong economy. The workshops will provide an opportunity to not only encourage wildlife habitat conservation in general, but to educate planners and officials about the special biological significance of the Cape Fear Arch region and to highlight how sustainable forest management and the protection of working forest landscapes can help protect a multitude of wildlife species. The Coastal Land Trust also will provide technical assistance to local planners and government officials that will result in the mapping of important habitats in Brunswick and Columbus Counties, and recommendations to protect those habitats through land use plans, zoning, subdivision ordinances and development project review.

Project Implementation of the SFI Standards

This project will help implement seven of the SFI 2010-2014 Standard Objectives for sustainable forestry. Each objective is listed with associated project outcomes as follows:

Objective 3 Protection and Maintenance of Water Resources- The Green Growth Toolbox contains GIS data representing streams, rivers, lakes and wetlands. Local and county land use planners will be trained to use GIS data to identify sensitive water resources, including those that support rare species, important aquatic habitats, shellfish and fisheries, recreational values, and public water supplies. Planners also will be given the location of long-term water monitoring sites in their jurisdiction, so they can track the quality of their water, fisheries and benthic communities. Conservation recommendations provided in the Green Growth Toolbox include buffer widths for various types of water resource values, thresholds for impervious surfaces in a watershed, and strategies to minimize negative impacts on water resources. Land use planners will be encouraged to implement these recommendations in ordinance development and/or site review.

This project will include working with forest landowners along the Waccamaw River and Town Creek to encourage protection of these important waterways through conservation easements, state registry agreements and/or the implementation of sustainable forest management practices. It is important to note that both Brunswick and Columbus Counties are proposing the establishment of a canoe trail along the Waccamaw River in North Carolina. Both The Nature Conservancy and the Coastal Land Trust are supporters of this proposed extension of the Waccamaw River Blue Trail into North Carolina, a canoe trail system already established and popular in South Carolina. It is hoped that the canoe trail will eventually run from Lake Waccamaw in North Carolina to the Winyah Bay in South Carolina. The development of this trail system not only provides an opportunity to educate the public about the ecological significance of this waterway, but will enhance efforts to conserve forested buffers along it.

Objective 4 Conservation of Biological Diversity including Forests with Exceptional Conservation Value- The Cape Fear Arch Conservation Plan identifies 26 high-priority conservation areas in the southeast coastal plain. Two of these biologically rich areas have been included in this project proposal: Waccamaw River and Town Creek. Both river systems are known for rare aquatic species and intact floodplain forests.

Many scientists believe the Waccamaw River, a tributary of the Lumber River, to be one of the most pristine and unusual of all our southeastern blackwater rivers. Originating from a large Carolina bay, Lake Waccamaw, the river winds through deep and wild swamp forests and empties into the Atlantic Ocean at Winyah Bay in South Carolina. The expansive floodplain forests along the Waccamaw are home not only to relatively common wildlife species such as black bear, deer, wild turkey, and American alligator, but also to the incredibly rare such as the Waccamaw killifish, the Waccamaw

fatmucket and the Waccamaw lance pearlymussel. The primary reason for so many rare species in the Waccamaw is its geology and water quality. The entire Waccamaw drainage system is underlain and incised by the extensive Pee Dee Aquifer. The Pee Dee Aquifer is alkaline in nature, and influences the pH of the water in the Waccamaw River. Most blackwater systems are acidic, thus the unique nature of the Waccamaw River with its higher pH gives rise to a high level of species diversity and endemism. In total, the Waccamaw Basin supports six endemic fishes and several rare mollusks, including several that are federally listed as endangered or threatened, and overall supports a very diverse fish fauna with 62 species documented.

Town Creek, a tributary of the Cape Fear River, originates in the eastern portion of the Green Swamp and flows approximately 57 miles to its mouth at the Cape Fear River. It is a fourth order, tidally influenced blackwater creek. Town Creek is believed to be one of the most pristine and unusual of all the lower Cape Fear River tributaries with a near neutral pH, above average calcium levels, and good water quality. Town Creek and its associated cypress-gum swamps and freshwater marshes are biologically rich and home to a plethora of native fish and wildlife species including an extremely rare snail species.

Partners active in conservation activities in these two areas include NC Coastal Land Trust, The Nature Conservancy, NC Wildlife Resources Commission and NC State Parks. Under this project, the NC Coastal Land Trust and The Nature Conservancy will continue to work with landowners to secure conservation easements and nature preserves along both rivers. The Coastal Land Trust and The Nature Conservancy are particularly interested in buffering, connecting and/or expanding upon existing conservation investment along these waterways, e.g., existing conservation easements held by the Coastal Land Trust along Town Creek and existing State Game Lands and a State Park managed by the NC Wildlife Resources Commission and NC Division of Parks and Recreation, respectively, along the Waccamaw River. By working with private landowners to make them aware of the value of their property and the benefits of sustainable forest management we will be helping them to conserve the exceptional natural resources of the region. By encouraging enrollment in landowner incentive programs, conservation easements, and other conservation programs, we will help to ensure the long-term viability of these working lands and the plants and animals that depend on them. The Green Growth Toolbox will help to highlight the location of biological hotspots and will help to make land use planners and the development community aware of their existence and importance. Since development has been identified as one of the top threats to biological diversity in this region, it is essential to work with those stakeholders that influence the patterns of development on the landscape and set the development standards.

Objective 6 Protection of Special Sites – Along Town Creek, Resource Management Service, LLC has done an excellent job maintaining their floodplain forests and other water resources on their properties. Similarly, the Coastal Land Trust has conserved over 10,000 acres of land within the Town Creek watershed primarily focusing on conserving its exceptional floodplain forests and water quality. The Nature Conservancy has conserved over 15,000 acres of the Green Swamp which serve as headwater wetlands to Town Creek as well as a link to the Waccamaw River along uniper Creek. This project will expand upon those efforts and will include working with forest landowners along both the Town Creek headwaters region and Waccamaw River (along with other areas within the Cape Fear Arch region) to conserve more land along these important waterways. The Coastal Land Trust and The Nature Conservancy will showcase existing efforts to protect special sites like the Resource Management Service, LLC properties and the Brunswick Nature Park through landowner contacts and at the Cape Fear Arch Conservation Collaboration November 2011 meeting. As noted above, the Coastal Land Trust and The Nature Conservancy, in coordination with Resource Management Service, LLC, will provide other private forest land owners an opportunity to tour the Town Creek properties and learn what Resource Management Service, LLC is doing as an SFI certified partner. By pursuing fee simple acquisition, conservation easements, and conservation agreements for the best sites, we will help protect special sites for future generations.

Objective 8 Landowner Outreach- Both The Nature Conservancy and the Coastal Land Trust, in collaboration with Resource Management Service, LLC, will be conducting landowner outreach through direct contacts and meetings and through the proposed Working Lands Workshop. Landowners will be educated about the special resources within the region and on their properties, and will be encouraged to conserve these resources. By working through the CFACC we will have quick and easy access to a wide array of professionals from state, local, federal, non-profit and private entities available to advise landowners on a wide variety of land management activities and programs, according to the landowners' needs and interests.

Objective 11 Promote Conservation of Biological Diversity, Biodiversity Hotspots, and High-Biodiversity Wilderness Areas- This objective represents the main goal of our proposed project. The conservation priority maps developed for the CFACC and the Green Growth Toolbox will help to steer land management, conservation, and land use planning efforts toward the locations of highest biological diversity. Private lands comprise approximately 90% of land holdings in North Carolina. Timber Investment Management Organizations like our partner Resource Management Service, LLC are now the largest group of timberland owners in the South. With this proposed project, we will be working to promote conservation at all levels. we will work with the Cape Fear Arch Conservation Collaboration, which incorporates all government, non-profit, public and private interests in the southeast coastal plain. We will hold a Working Lands workshop in November 2011 to educate community leaders and forest landowners about the importance of timberlands and farms to our environment and economy. Next, we will focus in on Brunswick and Columbus counties where our two target resources (Waccamaw River and Town Creek) are located. We will work with private forest landowners, and private individuals to help identify sensitive resources and provide options for protecting them. Throughout the entire project, at all levels, we will promote the objectives of SFI which balance the need for timber resources with protection of the environment.

Objective 16 Training and Education- Coastal Land Trust in partnership with the NC Wildlife Resources Commission will provide training to local and county governments about the Green Growth Toolbox through workshops and technical assistance. The content of the workshops and supporting materials has been refined and improved through Green Growth Toolbox implementation efforts statewide and have been modified to provide relevant and timely information and recommendations for counties in the Cape Fear Arch region. Coastal Land Trust, The Nature Conservancy, NC Wildlife Resources Commission and Resource Management Service, LLC will educate other CFACC members and private landowners about the efforts to conserve biodiversity in the region and sustainable forest management practices through the November 2011 meeting and direct landowner contacts.

Objective 17 Community Involvement in the Practice of Sustainable Forestry – Our proposed field trip to the Brunswick Nature Park as part of the November 2011 Working Lands Workshop will focus on recent timber thinning work and the practice of sustainable forestry. This field trip will be open not only to CFACC members but also to the public. In addition, our landowner contact work and Green Growth Toolbox technical assistance work will attempt to get private forest landowners and local and county planners out to Resource Management Service, LLC’s Town Creek properties to observe sustainable forestry practices and the conservation of special sites.

romoting ro ect Outcomes and SFI In ol ement

The Coastal Land Trust will publicize the receipt of the grant, if awarded, through a press release informing the public of SFI’s grant program and support of the CFACC and its proposed activities. The Coastal Land Trust also will officially recognize the support of the SFI grant during the November Working Lands and proposed Green Growth Workshops. A summary of the SFI grant award and the **Conser ing Biodi ersity through the CFACC** project will be posted on the CFACC web site.

ro ect Goals and Tangible esults

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Train local and county governments on ways to protect biodiversity in their communities. Provide follow up technical assistance.	Present 2 Green Growth Toolbox workshops to Brunswick & Columbus Counties and provide technical assistance.	Brunswick & Columbus Counties will include biodiversity protection as a priority in their countywide Land se Plans. Technical assistance will be provided to a minimum of 5 local and county governments within the Cape Fear Arch Region.	Track instances of local governments downloading and using conservation data, incorporating recommendations into land use plans, ordinance and permit review. Track types of sensitive habitats and rare species that are protected from development as a result	\$15,500

			of this project.	
Goal 2: Work with private and corporate forest landowners in the Cape Fear Arch region, particularly focusing on the Waccamaw River and Town Creek watersheds, to identify and conserve special ecological sites and to improve water quality through sustainable forestry practices.	Identify special ecological sites and wildlife habitats, and the landowners that own them. Contact landowners using networking opportunities through SFI and RMS. Recommend strategies and practices for landowners to conserve special sites. Encourage participation in SFI certification or the Tree Farm certification as appropriate.	Meet with a minimum of 3 large timber management investment organizations and 10 private forest landowners that are known to own forest lands with ecologically significant sites. Inform timber managers and landowners of special resources and encourage conservation and/or implementation of specific management practices. Recommendations to avoid impacts to water quality will also be provided as necessary according to best management practices and SFI practices.	Track the acres conserved through voluntary conservation easements or registry agreements. Track the number of acres on which landowners implement recommended management practices. Track the number and acres of special habitats identified and the types of timber practices used by land managers to protect sensitive habitats and water quality.	\$3,000
Goal 3: Educate conservation organizations, community leaders, private forest landowners, and the public about the importance of conserving working landscapes and the need to promote sustainable forestry and the SFI program.	Host a "Working Lands" workshop through the Cape Fear Arch Conservation Collaboration to describe the importance of responsible timberland management to the protection of biodiversity, water quality, open space, and natural beauty. Include a field trip to a local public nature park to learn about recent forest management activities that followed SFI practices.	Leaders representing conservation organizations, timber management groups, local and county government officials, forestry students, and citizens will learn about ways to conserve working lands and sustainable forestry.	Workshop attendance will be the primary method of tracking success with a goal of reaching a minimum of 40 attendees. Workshop evaluations completed by participants will be used to evaluate what attendees learned and what recommendations they plan to apply in their own communities.	\$6,500

ro ect Timeline 12 months April 2011 to April 2012

- June 2011- Hold two Green Growth Training Workshops for Brunswick & Columbus Counties
- September 2011- Complete technical planning assistance for local and county land use planners
- November 2011- Present the "Working Lands" workshop and host field trip to Brunswick Nature Park through the Cape Fear Arch Conservation Collaboration
- April 2012- Complete landowner contacts, complete at least two new registry agreements and/or initiate two conservation easement or fee title projects that conserve key forest resources in region.

Project Budget

Expenditure	Amount	Matching Funds*	In-Kind Contributions*
Staff Salary and Benefits			
Landowner contacts, negotiations	\$2,500		\$6,000
Operating Costs			
Workshops and field trip	\$1,500		\$2,000
Landowner contacts			\$3,000
Travel	\$500		
Education & Outreach	\$20,000	\$15,000	
Printed materials	\$200		
Web site updates	\$300		
Total	\$25,000	\$15,000	\$,000

\$23,000 in matching funds and in-kind contributions

(please note: this is a conservative estimate as we expect additional in-kind contribution from Cape Fear Arch Conservation Collaboration partners)
 \$15,000 (64% of matching funds) NC Wildlife Resources Commission is contributing matching grant funds to NCCLT for working with local and county governments, pending grant award.

\$2,000 (9% of matching funds) NC Coastal Land Trust is providing in-kind contribution for landowner contact work.

\$2,000 (9% of matching funds) The Nature Conservancy –North Carolina Chapter is providing in-kind contribution for landowner contact work.

\$2,000 (9% of matching funds) NC Wildlife Resources Commission is providing in-kind staff time for Green Growth Toolbox training workshops.

\$2,000 (9% of matching funds) Resource Management Services is providing in-kind contribution for landowner contacts, education and outreach to landowners.

% of total budget for each organization and lead staff person:

NC Wildlife Resources Commission (4% of total budget) for Jeff Marcus in support of Green Growth Toolbox workshops.

NC Coastal Land Trust (82% of total budget) for Kristen Howell and other NC CLT staff for project leadership, education/outreach, and landowner contacts.

The Nature Conservancy (4% of total budget) for Dan Ryan in support of landowner negotiations.

Resource Management Service (4% of total budget) for Tony Doster in support of landowner negotiations, workshops and field trips.

Other expenses (2% of total budget) for printing, website, and travel expenses.

Grant Application

Organization Information

Lead Organization Name and Address	The Nature Trust of British Columbia #260 – 1000 Roosevelt Crescent North Vancouver, BC V7P 3R4 CANADA
Name, phone and email for Project Director	Carl MacNaughton; 604-969-3241 cmacnaughton@persona.ca
Lead Organizational Mission Statement (25 words or less)	The Nature Trust of British Columbia is dedicated to conserving BC's biological diversity through securement and management of ecologically significant lands.
Lead Organization Annual Operating Budget	\$2,500,000
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	Linda Wilson, Ministry of Agriculture; 604-556-3085; Linda.M.Wilson@gov.bc.ca Kerry Rouck, Gorman Bros. Lumber Ltd.; 250-768-6220; krouck@gormanbros.com

Project Overview

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
The Nature Trust of British Columbia Weyerhaeuser Company Limited South Okanagan-Similkameen Invasive Plant Society BC Ministry of Natural Resource Operations	Conservation of Biological Diversity in British Columbia's Interior Forests through Invasive Plant Management	\$73,150	\$112,150	This three-year project endeavors to determine what seed mix gives the quickest competitive impact to effectively reduce invasive plants to a level where they are no longer an environmental threat, and also identify if this management technique is enhanced when combined with herbicide application and/or fertilization.	Objective 4: Conservation of Biological Diversity including Forests with Exceptional Conservation Value. Performance Measures 4.1 and 4.2 Objective 2: Forest Productivity. Performance Measure 2.4 Objective 8: Landowner Outreach. Performance Measure 8.1 Objective 16: Training

					and Education. Performance Measure 16.2 Objective 17: Community Involvement in the Practice of <i>Sustainable Forestry</i> . Performance Measure 17.1
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*For each partner organization, please list below the contact name, summary of the individual and organizations as it relates to your project. Also you must include a copy of the Agreement to Public Communications, which can be found at the end of this document, for each Project Partner.

Organization: The Nature Trust of BC

Contact Name: Carl MacNaughton
 Title: Conservation Land Manager
 Email: cmacnaughton@persona.ca
 Phone number: 604-969-3241

Summary of qualifications and experience: The Nature Trust of British Columbia (TNT) is a private non-profit, charitable land conservation organization operating solely in British Columbia. Founded in 1971 with a grant from the federal government, The Nature Trust is one of the oldest and largest land conservation organizations in the province. Over the last 39 years, The Nature Trust, with many partners, has invested over \$70 million dollars to secure over 450 individual properties, totaling over 60,500 ha (150,000 acres) of critical habitat. The Nature Trust has been working in the South Okanagan since 1983, is a founding partner in the South Okanagan Similkameen Conservation Program, and has implemented a broad range of projects including land acquisitions, riparian fencing, and invasive plant management. Our project leaders are well trained experts in the field of conservation. Carl MacNaughton, Conservation Land Manager, has a B.Sc. in Environmental Science from Royal Roads University and has been working with The Nature Trust for 12 years.

Organization: Weyerhaeuser Company Ltd. (SFI Program Participant)

Contact Name: Brian Drobe
 Title: Planning Forester
 Email: Brian.Drobe@weyerhaeuser.com
 Phone number: 250-295-4263

Summary of qualifications and experience: Weyerhaeuser Company Limited has been working cooperatively with the South Okanagan-Similkameen Invasive Plant Society for over a decade. From approximately 1996-2006, Weyerhaeuser completed access management plans on priority sections of their operating area and a key component of these plans involved deactivating roads and re-vegetating. With specific reference to invasive plant management activities, Weyerhaeuser has conducted grass seeding in attempt to prevent invasive plant establishment for at least 20 years. More recently, the company has initiated more specific invasive plant training of road inspectors, road contractors and staff since 2007. Brian Drobe is a Planning Forester with Weyerhaeuser; he is a Registered Professional Forester with 20 years working experience in the Okanagan/Similkameen.

Organization: South Okanagan-Similkameen Invasive Plant Society

Contact Name: Lisa Scott

Title: Coordinator

Email: sosips@shaw.ca

Phone number: 250-404-0115

Summary of qualifications and experience: The South Okanagan-Similkameen Invasive Plant Society (SOSIPS) was formed in 1996 to address the major environmental threat of invasive plants in natural habitats and agricultural areas in the Okanagan-Similkameen region. The Society includes over 20 stakeholder groups including: utility companies; municipal, regional, provincial and federal government; conservation groups; First Nations; and members of the ranching community. The role of SOSIPS is to encourage and facilitate agency coordination, prioritize management activities, deliver cooperative treatment programs and to provide public information programs for invasive plant management. Prevention and education are considered priority invasive plant management activities. Lisa Scott is a Registered Professional Biologist for BC. Since 1996, Lisa has consistently been the primary contractor for the Okanagan-Similkameen Invasive Plant Education and Coordination Program. During this time, Lisa has assisted in excess of 1000 land manager through site visits of infested properties and providing input on invasive plant management options. She has developed invasive plant management plans for individual property owners, community groups, local governments, First Nations reserve lands, Forestry Companies, government agencies and conservation organizations. Lisa organizes annual field tours, training sessions for field crews and has developed several marketing tools including a series of twenty-five species-specific fact sheets. Lisa is currently the Chair of the BC Weed Coordinators Working Group and is an Alternate Director on the Invasive Plant Council for BC.

Organization: BC Ministry of Natural Resource Operations

Contact Name: David Ralph

Title: Senior Weed Technologist

Email: David.Ralph@gov.bc.ca

Phone number: 250-371-6062

Summary of qualifications and experience: The BC Ministry of Natural Resource Operations (MNRO) is the lead government agency for strategic planning for, and the management of, invasive plants on public lands in BC. David Ralph, Senior Weed Technologist, was formerly employed by the BC Ministry of Agriculture and Lands for 27 years, and then was transferred in October 2010 to the newly created MNRO. David has significant experience with integrated weed management systems in intensive agricultural crop production on private lands. He has conducted field research for crop tolerance and weed control efficacy for new herbicide product registration, as well as field research for timing and rate trials to test new target species for label expansion of registered herbicide products. David's experience extends to integrated invasive plant management in native rangelands, domestic pastures, forested ecosystems and natural plant communities. He is intimately familiar with invasive plant, noxious and agricultural weed identification. David has assisted in the development of pest management plans for noxious and invasive plant management on designated public grazing, forest and industrial lands, as well as the development of integrated weed management plans for private grazing and pasture lands. David is is an Alternate Director on the Invasive Plant Council for BC.

Project Details

Introductory Narrative: According to the most recent Millennium Ecosystem Assessment (2005), invasive alien species are one of the five "most important direct drivers of biodiversity loss and change in ecosystem services" around the globe. In 2008, Biodiversity BC¹ identified alien species as one of the three most significant threats to biodiversity in British Columbia (BC). Ecosystems across BC are vulnerable to invasive plants, particularly the province's interior grasslands and dry forests². Once they invade, these alien plants cause untold and irreversible impacts to the province's economy, environment, public health and safety, and community well being. Uncontrolled, these species can invade new environments and alter the structure and function of natural ecosystems. In 1995, an estimated 100,000 hectares of grassland and open forest were infested with a variety of invasive plant species, and at least another 10 million hectares of Crown

¹ Biodiversity BC is a partnership of conservation and government organizations formed in 2005 to develop a biodiversity strategy for British Columbia.

<http://www.biodiversitybc.org/EN/main/findings/4576.html>

² <http://www.invasiveplantcouncilbc.ca/>

(public) land were susceptible to invasion³. Today, there are over 200,000 hectares of Crown land infested with 56 designated invasive plants and noxious weed species⁴. The BC Government estimates that, given pine beetle, wildfires, timber harvesting, and other land development and recreational activities, over 20 million hectares of Crown land are now susceptible to invasion.

The impacts of invasive plants in forested ecosystems are numerous. Invasive plants can: affect the survival and growth of planted conifers; accelerate soil erosion and stream sedimentation; consume critical water resources and negatively impact water quality; increase the wildfire hazard; interfere with regeneration of forests; and destroy or otherwise alter critical natural habitats required by species at risk or other high valued wildlife.

In the South-central Interior of BC, Weyerhaeuser Company manages 418,559 hectares of forested lands which are SFI certified. Approximately 20% of their operating area is important ungulate wintering grounds (deer, bighorn sheep, elk, mountain goat), 8% is community watersheds, 7% is fish sensitive watersheds. Additionally, there are seven Federally-listed Species at Risk occurring within Weyerhaeuser's operating area. This project will occur on Weyerhaeuser's SFI certified operating area in the Okanagan and Similkameen Valleys.

How our project will improve the implementation of the SFI Standard: This project will focus on Objective 4 of the SFI 2010-2014 Program: Conservation of Biological Diversity including Forests with Exceptional Conservation Value, with a focus on invasive plants that directly threaten or are likely to threaten native plant and animal communities. The project will also address components of Objectives 2,8,16 and 17 as they relate to invasive plant management and community outreach and education. In order for Weyerhaeuser Company and other forestry companies to participate in programs and activities that limit the introduction, impact and spread of invasive plants, it's imperative that there be a clear understanding of (a) which invasive plants presently occur on the landscape and where are infestations located, and (b) the most effective management options to address the invasive plants. For some high priority invasive plants such as tansy ragwort, sulphur cinquefoil, spotted knapweed and the hawkweed complex, there is limited information on the effectiveness of seeding as a tool to reduce infestations in forested ecosystems; and yet, grass seeding is a commonly accepted tool adopted by forestry companies and other stakeholders as a means to reduce spread and establishment of other invasive plant species. This three-year project endeavors to determine what seed mix gives the quickest competitive impact to effectively reduce invasive plants that have the greatest negative impacts, to a threshold where they are no longer an environmental threat. Our project will also identify if this management technique is enhanced when combined with herbicide application and/or fertilization. We will attempt to determine what combination of naturalized native or agronomic species will work to give the best outcomes of early competitiveness to prevent undesirable vegetation and over time have a more sustainable population of naturalized (but not invasive) species and native species. Our research trials will be scientifically rigorous to ensure valid results. It is anticipated that the results of our field trials will have broad application across BC's Interior forested landscapes and findings will likely be applicable throughout much of the dry forests of the western US states.

Under section 17 of the British Columbia's *Forest Planning and Practices Regulation*, a person who prepares a Forest Stewardship Plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the *Invasive Plants Regulation*, if the introduction or spread is likely to be the result of the person's forest practices. Thus, not only will the results of this conservation project improve the implementation of the SFI standard, it will also demonstrate how SFI certification complements existing government initiatives and will assist forest companies to meet legislative responsibilities in British Columbia.

³ Wikeem, B. and S. Turner, "*BC Ministry of Forests Noxious Weed Biocontrol Function 1995 Annual Report*," Silviculture Practices Branch, Ministry of Forests, Victoria, 1996, 48p.

⁴ As calculated from the Invasive Alien Plant Program Application (IAPP) <http://www.for.gov.bc.ca/hra/plants/application.htm>

Activities to promote the outcomes of our Project and SFI Involvement in the Project : We will host a field tour, release a technical report and provide outreach materials to the community during the third year of the project to showcase our results; this will contribute to SFI Objectives 8, 16 and 17. Field tour invitees will include representatives and managers from each of the partnering organizations, government decision makers, local biologists, agrologists and foresters (consultants and government employees), Southern Interior forestry companies, conservation groups, representatives from the Invasive Plant Council of BC and the media. Results will be compiled in a technical report that is circulated to forestry companies and woodlot managers through BC's southern interior, and posted on relevant websites (e.g. www.sosips.ca and www.invasiveplantcouncilbc.ca). Information will additionally be provided to seed companies that regularly supply seed mixes for forested landscapes, with seed suppliers encouraged to promote these seed mixes. SFI will be duly acknowledged as the primary funding agency in all technical reports, media releases and other printed materials that results from this project. All invasive plant data collected during the course of this project will be entered into BC's Invasive Alien Plant Program (IAPP) application, a provincial database used to coordinate and share invasive plant information generated by various government and non-government agencies involved with invasive plant management. Forest licensees in BC commonly use the IAPP application when preparing operational plans, thus, this will be another means of effectively promoting and applying the outcomes of this project.

If funding permits, a representative from one of the partner organizations would willingly speak about the project at the SFI Annual Conference in 2013.

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Accurately identify and map locations of high priority invasive plants within the most vulnerable landscapes.	Qualified personnel will conduct planning meetings with GIS consultants and Weyerhaseuser staff to identify the highest priority locations to inventory and map invasive plants. Surveys will be conducted using hand held GPS units, following provincial inventory standards (http://www.for.gov.bc.ca/hra/plants/RefGuide.htm) Data will be entered in the provincial database (IAPP) http://www.for.gov.bc.ca/hra/plants/application.htm	Accurate locations of high priority invasive plants that pose a threat to the biological diversity. Total coverage area is anticipated to be 5000 ha, with a focus on forestry roads and cut blocks. This base level information is required as a first step towards achieving Performance Measures 4.1 and 4.2 of the SFI standard.	The amount of forested habitat that is surveyed and number of accurate accounts for priority invasive plants will be measures of success. Entry of all data into IAPP database will also be a measure of success.	30%
Goal 2: Identify the most effective management options for reducing the spread and establishment of invasive plants.	Collaborate with partner organizations to develop a research protocol and design based on the findings of the inventory and mapping component of the project. Implement the research trials in a scientifically rigorous fashion. Monitor the results for a two year period to determine outcomes.	Clear understanding of which seed mix(es) give(s) the quickest competitive impact to effectively reduce invasive plants to a level where they are no longer an environmental threat. This will contribute to Performance Measures 2.4 and 8.1. Identify if grass seeding is enhanced when combined with herbicide application and/or fertilization. Results will provide implementation	The discovery of one or more seed mixes that effectively reduce invasive plant establishment and spread will be an indication of a measure of success. The identification of additional techniques that enhance the seeding results will also be a measure of success.	48%

		guidance for Performance Measures 4.1 and 4.2 of the SFI standard.		
Goal 3: Effectively communicate information on the results of the project to government and private land managers, decision makers and relevant stakeholders.	Collaborate with partner organizations to showcase our results via: a field tour; production of a technical report; postings on relevant websites; articles in the local newspaper and in appropriate newsletters.	Outreach and education to a broad base of stakeholders, including private landowners, decision-makers and land managers at government agencies, who collaborate to conserve biological diversity within BC's dry, interior forests. Outreach and education will contribute to achieving Performance Measures 16.2 and 17.1.	Participation by at least 30 people on the field tour. Requests for additional information from at least 10 stakeholders that are not directly involved with the project. A clear demonstration of how SFI certification complements existing BC legislation. Share information with other SFI or CSA (Canadian Standards Association) certified forest licensees.	22%

Project Timeline (April 2011 – March 2014)

Project Goals	Apr-Jun 2011	Jul-Sept 2011	Oct-Dec 2011	Jan-Mar 2012	Apr-Jun 2012	Jul-Sept 2012	Oct-Dec 2012	Jan-Mar 2013	Apr-Jun 2013	Jul-Sept 2013	Oct-Dec 2013	Jan-Mar 2014
Goal 1	Prepare for inventory and mapping fieldwork Initiate fieldwork	Continue fieldwork	Data entry	Prepare annual report								
Goal 2		Develop research protocol and			Continue research trials	Continue research trials	Complete research trials	Prepare annual report	Initiate 2 nd year of monitor	Continue monitor program	Data entry	Prepare Final Report

		design Execute research trials			Initiate monitor program	Continue monitor program	Data entry		program			
Goal 3										Field tour	Execute outreach and education program	Execute outreach and education program

Project Budget

Expenditure	Amount – year 1 (Apr 2011 – Mar 2012)	Amount – year 2 (Apr 2012 – Mar 2013)	Amount – year 3 (Apr 2013 – Mar 2014)	Matching Funds (over 3-years)	In-Kind Contributions (over 3-years)
Staff Salary and Benefits (10%)*	\$2050	\$2200	\$2400		
Operating Costs					
Project Coordination	\$3000	\$3000	\$3000		\$1000 (Weyerhaeuser)
Inventory & Mapping	\$9000			\$6000 (SOSIPS)	
Research Trials	\$2000	\$10,000	\$4000		\$1000 (Weyerhaeuser) \$3000 (MNRO)
Monitoring		\$2500	\$3500		\$3000 (SOSIPS)
Data Entry	\$2000	\$2000	\$2000	\$2000 (SOSIPS)	
Meetings	\$1000	\$1000	\$1000		\$2000 (Weyerhaeuser) \$2000 (MNRO) \$2000 (SOSIPS)
Travel	\$2500	\$2500	\$2500	\$2000 (SOSIPS)	\$2000 (Weyerhaeuser) \$2000 (MNRO) \$2000 (SOSIPS)
Education & Outreach (includes field day)			\$2500		\$1000 (MNRO) \$1000 (Weyerhaeuser) \$2000 (SOSIPS)
Communications (e.g. media release, newsletters, technical report)			\$3000		\$1000 (MNRO) \$1000 (Weyerhaeuser) \$2000 (SOSIPS)
Reporting (annual and final)	\$1000	\$1000	\$2500		\$1000 (Weyerhaeuser)
Total	\$22,550	\$24,200	\$26,400	\$10,000	\$29,000

* Staff salary and benefits will be split approximately 50:50 between the Accounting staff and the Conservation Land Manager with the Nature Trust of BC

SFI Inc. Conservation Community Partnerships Grant Program

Grant Application

Organization Information

Lead Organization Name and Address	American Forest Foundation
Name, phone and email for Project Director	Jerry Greenberg, Senior Vice President, Conservation Solutions, P: 608.231.6000, jgreenberg@forestfoundation.org
Lead Organizational Mission Statement (25 words or less)	The American Forest Foundation (AFF) works on the ground with families, teachers, and elected officials to promote stewardship and protect our nation's forest heritage.
Lead Organization Annual Operating Budget	\$10.7 million
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	Mike Prouty, Executive Director, Great Lakes Forests Alliance, P: 651.468.8006, mike.qlfa@gmail.com ; Mark Rickenbach, UW Madison; P: 608.262.0134; mgrickenbach@wisc.edu

Project Overview

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
Aldo Leopold Foundation, American Forest Foundation, Driftless Area Initiative,	Building sustainable landscapes in a patchwork of private ownership: A coalition to engage	\$50,000	\$1,241,999	Local, state, and national groups will collaborate on a comprehensive approach to	Objective 1 – Forest Management Planning Objective 2 – Forest Productivity Objective –

<p>Kickapoo Woods Cooperative, W-Cooperative Extension, WI DNR, Wisconsin Family Forests</p>	<p>and support forest owners in the Driftless Area of Wisconsin</p>			<p>educate, support, and track private forest owners within the Driftless Area of Wisconsin. Products and services already available will be leveraged through new investments to help bring increased access to expertise to landowners on the local level.</p>	<p>Protection and Maintenance of Water Resources Objective 9 – Conservation of Biological Diversity including Forests with Exceptional Conservation Value Objective 10 – Protection of Special Sites Objective 11 – Efficient Use of Forest Resources Objective 12 – Landowner Outreach Objective 13 – Use of Qualified Resource and Qualified Logging Professionals Objective 14 – Adherence to Best Management Practices Objective 15 – Promote Conservation of Biological Diversity, Biodiversity Hotspots and High-Biodiversity Wilderness Areas Objective 16 – Forestry Research, Science, and Technology Objective 17 –</p>
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					Training and Education Objective 1 – Community Involvement in the Practice of Sustainable Forestry Objective 20 – Management Review and Continual Improvement
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Aldo Leopold Foundation Steve Swenson, Ecologist, P: 608.355.0279, steve@aldoleopold.org; The Aldo Leopold Foundation has worked in the Driftless Area to provide education and tools to forest landowners to help them use sustainable forestry on their land. They co-produced the booklet, "My Healthy Woods," a guide for landowners in the Driftless Area. As an ecologist, Steve plays a critical role in ensuring that the outreach and support the coalition conducts with forest owners is tied to improving overall forest health conditions, wildlife habitat, and clean water in the area.

Driftless Area Initiative John Walsh, Executive Director, P: 563.580.5828, jwalsh.dai@gmail.com. DAI is a non-profit organization that provides support for a wide range of groups and agencies working to manage and protect the forests of the Driftless Area across Wisconsin, Minnesota, Iowa and Illinois. DAI will ensure that tools and successes gained in the Wisconsin Driftless Area are made available to organizations and agencies working across the entire Driftless Area in the four states. In addition, DAI will take the lead on establishing the "Friends of the Driftless Area" citizens group.

Kickapoo Woods Cooperative Paul Bader, Forestry Management Coordinator, P: 608.625.2515, kwc@mwt.net. With its 350 members, the Kickapoo Woods Cooperative has for years supported forest owners in the Kickapoo Valley, the ecological heart of the Wisconsin Driftless region. Paul's forest experience and relationships throughout the local communities will be essential in the coalition's effort to reach landowners and build a peer to peer volunteer network.

W-Cooperative Extension Randy Mell, River Basin Educator for Natural Resources, P: 608.784.0303, randy.mell@ces.uwex.edu. Randy provides an invaluable landowner outreach program, entitled "Learn About our Land." The coalition will help support Randy's continued outreach efforts as well as work closely with him to ensure follow up after successful workshops.

Wisconsin John Nielsen, Southern Region, Regional Team Leader, P: 608.935.3358, john.nielsen@wisconsin.gov. At the heart of much of the coalition's effort are the direct landowner professional services provided by the Wisconsin Division of Forestry throughout the Driftless Area.

Wisconsin Family Forests Gerry Mich, Founder, Woodland Advocate Program, P: 715.213.1618, gerry@wisconsinfamilyforests.org. The Woodland Advocate Program is a premier peer-to-peer training program in Wisconsin. Its founder and leader, Gerry Mich, will help the coalition develop and implement training and support mechanisms as part of the peer-to-peer network it will establish.

Project Details

1. *For conservation projects, please explain how your project will improve the implementation of the SFI Standard or will benefit forest management through certification. For community projects, please explain how this Project will strengthen and involve communities in forest management.*

With 44,000 landowners in its ranks, Wisconsin's Managed Forest Law program is the envy of nearly every other state. Yet despite its success, the vast majority of forest owners in Wisconsin (some 140,000 owning 10 or more acres) do not participate, calling into question how much forest planning and management they carry out. This is no academic question. Reaching and engaging these "other" landowners is essential because of the urgent need to actively manage Wisconsin's private forests in the face of threats that include fragmentation, invasive species, and unsustainable logging practices, among others.

Perhaps the challenge is nowhere more urgent than in the Driftless Area, a priority landscape identified by the Wisconsin Department of Natural Resources' Statewide Forest Assessment. The Driftless Area is 40 percent forested (2.1 million acres), nearly all of which (96 percent) is privately owned. The dominant forest type, oak-hickory, accounts for an array of economically important forest products. In addition, the rugged, physical landscape supports tremendous wildlife diversity. Affirming its importance, the Wisconsin State Wildlife Action Plan recognizes several Conservation Opportunity Areas within the landscape for wildlife species of greatest conservation need: Lower Wisconsin River, Lower Kickapoo, Snow Bottom, Wyoming Bluffs, and Rush Creek. Water quality within this Upper Mississippi River Basin depends heavily on forested hillsides and use of Forest Best Management Practices for Water Quality.

Yet, the region's forests are threatened by unplanned development and unsustainable logging practices, leading to forest fragmentation, diminished wildlife habitat and water quality and fewer potential forest products. Oak is a critical species for the region's economy and wildlife. However, its regeneration is not keeping up with rate of harvest and spread of oak wilt disease, both preventable. Encouraging and supporting private forest owners in activities that maintain forest cover and critically important tree species provide an economic return for the landowner and build functioning landscapes that support clean water, air and other public benefits. Because core public and private forest areas are already protected in the landscape, (for example, Kickapoo Valley Reserve, Wildcat Mountain State Park, Lower Wisconsin State Riverway) private lands represent a unique opportunity to promote sustainable

forestry practices and develop opportunities for the permanent protection of private working forests, ultimately providing for forest products while protecting water quality and wildlife diversity.

Through targeted education initiatives, the project partners will engage the majority of private landowners in the Driftless Area in the use of sustainable forestry on their land to ensure the long-term success of these practices. Through this targeted outreach in the Driftless Area, the project partners hope to engage at least 16,000 additional acres of private forestland in sustainable management, which could lead to additional certified acreage in the landscape.

2. What activities will you and your Project partners perform to promote the outcomes of your Project and SFI Involvement in the Project

The proposed project includes several key activities that form the basis of a comprehensive, multi-year strategy to attract and retain new landowners across the critical Driftless Area of Wisconsin in the practice of sustainable forestry and certification. These activities include:

Sophisticated approach to landowner engagement: Successful outreach starts by speaking directly to those values and goals that are most important to landowners. However, to help ensure success, outreach must include sustained communication that builds trust and confidence with landowners over time. Opportunity costs are high when such sustained follow-up fails to occur after a landowner has signaled a desire to engage. For example, W Extension has a database of 780 landowners who attended a workshop or otherwise asked for help. After a year, follow up contacts with these landowners by professional foresters has been minimal. To overcome this barrier to greater landowner engagement, we will establish a comprehensive database capable of tracking outreach so that we always know what has happened (or not) with a landowner and what needs to happen next and when. The coalition will build on current landowner databases, such as those managed by the DNR, W Extension (through its highly successful “Learn About our Land” program), Driftless Area Initiative, Aldo Leopold Foundation, and the American Forest Foundation to add information such as interests (e.g., timber, hunting, wildlife, etc.), forestry/conservation group affiliations, service provider records (e.g. consulting forester visit), frequency of contact, reminders to contact (i.e. tickler system), ownership statistics, and topics of interest or contact (e.g. invasive species, emerald ash borer, etc.). We will also utilize micro-targeting marketing data regularly employed by business and political campaigns, the large volume of data already generated through the Woodland Owner Survey, and surveys conducted by various partners. To ensure this database tool is maintained and utilized, the coalition will hire a coordinator to update its information to help equip foresters and peer-to-peer volunteers in building relationships with landowners.

Robust and reliable peer-to-peer network: At its core, the peer-to-peer network facilitates the growth of a landowner into greater engagement with his or her land. Peers can fill a critical gap between the initial outreach and the decision by a landowner to engage professionals. Indeed, they can play a vital role in ensuring sustained landowner follow up occurs after the initial outreach. To this end, the coalition will dedicate staff to recruiting, training and supporting the volunteers to enhance accountability and reliability. Peer

recruitment will start with two of the coalition's members. The Kickapoo Woods Cooperative has 350 members concentrated in our focal area and will help identify, recruit and train individuals from their membership ranks. At the same time, W Extension has developed a potential recruiting pool from the workshops it has been conducting in the area. The skill set and experience we seek in volunteers includes strong interpersonal skills and a desire to help people learn about their land; a strong commitment to seeing the land holistically; some experience with forests; and appreciation for the role of professional assistance. Training is essential because we seek a certain consistency of support provided by the volunteers and we want to ensure that they are fully aware of the suite of resources available to them. Wisconsin Family Forests with its Woodland Advocate Program, one of the state's premier mentoring programs, will help the coalition design and implement such training. The value added of the peer network is in the interaction with the landowner; therefore, we will maximize their landowner interaction by eliminating the time they spend arranging their visits, or preparing information for landowners. The coalition's coordinator will support the peers in this way, freeing them to maximize their volunteer hours interacting with landowners.

Support through professional and technical assistance: A critical stepping-stone along the path to greater landowner awareness and engagement is time spent with a professional. The coalition will rely on some of its member resources -- the Wisconsin DNR and the Southwest Badger RC&D, for example, will provide leadership in this regard. In addition, we will work with local partners, consultant foresters and the forest products industry to help ensure that individual land management plans and recommendations are informed by larger landscape needs and considerations. To guide individual landowner management prescriptions from a landscape perspective, the foresters will utilize information from the Driftless Area Initiative, including *Managing from a Landscape Perspective: A Guide for Integrating Forest Interior Bird Habitat Considerations and Forest Management Planning in the Driftless Area of the upper Mississippi Valley River Basin*, as well as a database of mapping tools.

Tailored information for landowners: There is no shortage of information and resources for helping landowners. The Driftless Area Initiative, Wisconsin DNR, W-Extension, the Aldo Leopold Foundation, and the American Forest Foundation will play important roles in providing materials and information. Therefore, our focus will be to synthesize and simplify information and tools that already exist. More specifically, every tool we use should not overwhelm landowners but rather convey the right amount of information and offer the door for the landowner to go deeper into that issue. Building this "library" of resources will be another primary duty of the coalition's coordinator position.

Friends of the Driftless Area: Organized and managed through the Driftless Area Initiative (DAI), this citizens group will increase awareness of unique and diverse natural resources of the region through education, outreach, collaboration, peer-to-peer relationships, partnerships and grass roots action, with a special emphasis on the enhancement and restoration of the area's forests and watersheds. They will be empowered to: make recommendations to the DAI's board and Forestry Steering Committee, host an annual Friends meeting, and develop projects and activities to support natural resource conservation within the region.

Over the long-term, the coalition’s vision is to help significant numbers of landowners reach their forestland goals by using sustainable practices that lead to improved forest and ecological health on the landscape. Just as it took time and a sustained effort to change Driftless Area farming practices in the 1930s and 40s to stop widespread soil loss, so it will take time to change landowner attitudes and behavior to adopt strong forest stewardship. With a commitment to this long term work, the right approach and key resources, a tipping point can be ultimately be reached. As with the change to contour plowing, we, too, can reach, educate and engage enough landowners over the long term that strong forest stewardship becomes an accepted cultural value.

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
<p>Goal 1 Help forest owners meet their needs while ensuring sustainable forest management; determine the impact of these strategies used to educate and engage landowners on a long-term basis.</p>	<ul style="list-style-type: none"> -Create a sophisticated and comprehensive database to track landowner engagement. -Build a well-trained and staff-supported peer-to-peer network. -Develop and distribute synthesized, targeted, and easy to understand forestry information. -Successfully demonstrate the impact of the database, a well-supported peer network, and the library of landowner-friendly information on growing landowner engagement. 	<ul style="list-style-type: none"> -We have communicated with at least once with 10,000 landowners with a response rate significantly higher than usual response rates. -400 landowners will be engaged in sustainable forestry management planning affecting as many as 16,000 acres, placing them on the path to certification. 	<ul style="list-style-type: none"> - Use micro-targeting data to track landowner outreach long-term on an on-going basis to ensure the correct landowners are being targeted with the appropriate information. -Follow up individually (in-person or electronically) with participating landowners on a regular basis after the completion of the project to ensure they have benefited from the targeted outreach and are actively participating in sustainable forestry or certification programs. 	\$30,000
<p>Goal 2 Improve overall forest conditions within the</p>	<ul style="list-style-type: none"> -Help private forest landowners develop sustainable management 	<ul style="list-style-type: none"> -1,000 acres will be identified for protection through easements. 	<ul style="list-style-type: none"> -Follow up individually (in-person or electronically) with 	\$10,000

landscape.	plans that help improve overall landscape integrity through forest connectivity and protected wildlife habitat.	-400 landowners will be engaged in sustainable forestry planning affecting as many as 16,000 acres.	participating landowners on a regular basis after the completion of the project to ensure they have benefited from the targeted outreach and are actively participating in sustainable forestry or certification programs.	
Goal Establish the capacity and skills of the coalition, as well as those of local partners, to operate the project on a long-term basis.	<p>-Work in conjunction with all project partners to take advantage of the wide and varying knowledge and experience of each coalition member to ensure common short-and long-term goals are being met throughout the development and implementation of the project.</p> <p>-Establish a "Friends of the Driftless Area" citizens group to work with the coalition to reinforce the work of the project partners and carry out future resource protection and education in the targeted area.</p>	<p>-At least 400 landowners and stakeholders will join the "Friends of the Driftless Area" initiative and work in conjunction with the coalition and local project partners.</p> <p>-The "Friends of the Driftless Area" group will make regular recommendations to the DAI's board and Forestry Steering Committee, host an annual Friends meeting, and develop projects and activities to support natural resource conservation within the region.</p>	-Follow up regularly over the next 3 years with the leadership of the "Friends of the Driftless Area" group to ensure the needs of participating landowners are being met and plan for any education and outreach in the future.	\$5,000
Goal Use the coalition to share lessons with state,	-Share successes and lessons learned through this project with partners	-National partners will be contacted at least once per year to share the progress	-The ability of the Driftless Area project to be successfully	\$5,000

<p>regional, and national groups.</p>	<p>across the country including: Sustaining Family Forest Initiative, Oregon State University Extension, Cornell University, Minnesota Forest Resources Council, University of Minnesota-Cooperative Extension, MNDNR, among many others.</p> <p>-National partners will have the opportunity to share their opinions with the coalition in improving the project.</p>	<p>of the project and any successes and lessons learned to help improve the long-term success of the project.</p> <p>-National partners will share their opinions and expertise on a regular basis to improve the success of the project and to help set the project up for replication in other key areas.</p>	<p>replicated in other key areas across the U.S. will help coalition partners determine the success and long-term viability of the project.</p> <p>-The coalition will monitor the project's application in other areas in order to assess the overall capability of the project.</p>	
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Project Timeline

This will be a three year project with year one focused on building the coalition and developing the integrated outreach, support, tracking, and evaluation systems. Years two and three will be implementation of the full scope of work contained in the proposal. The goals listed above will be tracked on a continual basis in order to set the project up for long-term success.

Project Budget (per year)

The budget outlined below is the cost per year to fully implement the proposed project over three years. The \$50,000 contribution from SFI will be used in year one in order to help develop the initial outreach and education necessary to engage landowners in the Driftless Area and promote long-term engagement in and follow-up with the project.

Expenditure	Amount from SFI	Matching Funds*	In-Kind Contributions*
Staff Salary and Benefits		\$50,000	\$275,333
Operating Costs			
Research Activities			
Meetings		\$14,100	
Travel		\$14,100	
Education & Outreach	\$30,000	\$21,900	
Communications	\$20,000	\$21,900	
Total	\$50,000	\$122,000	\$2 5,

*The matching funds and in-kind contributions will be provided by the coalition partners: Aldo Leopold Foundation, American Forest Foundation, Driftless Area Initiative, Kickapoo Woods Cooperative, W-Cooperative Extension, WI DNR, and Wisconsin Family Forests.



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.SM

SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, Tom Martin, as a representative of American Forest Foundation and a Partner in Building sustainable landscapes in a patchwork of private ownership: A coalition to engage and support forest owners in the Driftless Area of Wisconsin, hereby give the Sustainable Forestry Initiative[®] (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI[®] Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by American Forest Foundation to sign this agreement.

Signed:

Name

President and CEO

Title

American Forest Foundation

Organization

February 8, 2011

Date

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:



Agreement to Public Communications.doc

I, John V. Walsh (Name, Title), as a representative of Driftless Area Initiative, Inc. (Organization Name) and a Partner in Building sustainable landscapes in a patchwork of private ownership: A coalition to engage and support forest owners in the Driftless Area of Wisconsin (Name of Project), hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

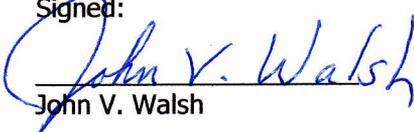
I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Driftless Area Initiative, Inc. (Organization Name) to sign this agreement.

Signed:


John V. Walsh

Executive Director

Driftless Area Initiative, Inc.
Organization

February 4, 2011
Date

I, Randall Mell, UWEX River Basin Educator, as a representative of UW Cooperative Extension and a Partner in Building sustainable landscapes in a patchwork of private ownership: A coalition to engage and support forest owners in the Driftless Area of Wisconsin, hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by UW Extension to sign this agreement.

Signed:



Randall G. Mell
River Basin Educator for Natural Resources

UW Cooperative Extension
Organization

February 3, 2011
Date

Agreement to Public Communications

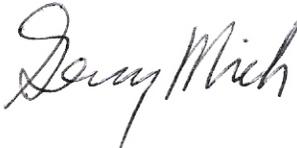
I, Gerry Mich, Woodland Advocate Program Coordinator, as a representative of Wisconsin Family Forests Inc. and a Partner in Driftless Coalition Project, hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Wisconsin Family Forests to sign this agreement.

Signed: 

Name: Gerry Mich

Title: Woodland Advocate Program Coordinator

Organization: Wisconsin Family Forests Inc.

Date: February 8, 2011

Internal Revenue Service

Date: June 12, 2007

AMERICAN FOREST FOUNDATION
1111 19TH STREET NW
WASHINGTON DC 20036-3603

Department of the Treasury
P. O. Box 2508
Cincinnati, OH 45201

Person to Contact:

Geoffrey T. Rash 17-19328
Customer Service Representative

Toll Free Telephone Number:
877-829-5500

Federal Identification Number:
52-1235124

Dear Sir or Madam:

This is in response to your request of June 12, 2007, regarding your organization's tax-exempt status.

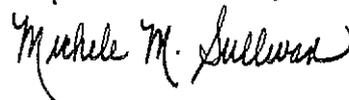
In April 1994 we issued a determination letter that recognized your organization as exempt from federal income tax. Our records indicate that your organization is currently exempt under section 501(c)(3) of the Internal Revenue Code.

Our records indicate that your organization is also classified as a public charity under sections 509(a)(1) and 170(b)(1)(A)(vi) of the Internal Revenue Code.

Our records indicate that contributions to your organization are deductible under section 170 of the Code, and that you are qualified to receive tax deductible bequests, devises, transfers or gifts under section 2055, 2106 or 2522 of the Internal Revenue Code.

If you have any questions, please call us at the telephone number shown in the heading of this letter.

Sincerely,



Michele M. Sullivan, Oper. Mgr.
Accounts Management Operations 1

Grant Application – Pine Grove Community Wetland Project, Liverpool, Nova Scotia “Wetland conservation and forest management working together for wildlife” - Deanne Meadus, Ducks Unlimited Canada (DUC) – Atlantic, February 2011

Organization Information

Lead Organization Name and Address	Ducks Unlimited Canada – Atlantic 64 Highway #6 PO Box 430 Amherst, NS B4H 3Z5
Name, phone and email for Project Director	Deanne Meadus, B.Sc.Env, M.Sc.F. 902-667-8726 ext 231 d_meadus@ducks.ca
Lead Organizational Mission Statement (25 words or less)	DUC is a non-profit organization whose mission is to conserve and restore wetlands and associated habitats for the benefit of North America’s waterfowl, which in turn provide healthy environments for wildlife and people.
Lead Organization Annual Operating Budget	\$4.4 Million (Atlantic)
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	Glen Parsons, NS Department of Natural Resources parsongj@gov.ns.ca 902-679-6223 Trish Edwards, Canadian Wildlife Service Patricia.Edwards@EC.GC.CA 506-364-5085

Project Overview

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
Bowater Mersey Paper Company Ltd Ducks Unlimited Canada	Pine Grove Community Wetland Project	\$6,000	\$27,600		Objective 4 – Wildlife Habitat

*For each partner organization, please list below the contact name, title, email, phone number and include a summary of the individual and organizations qualifications and experience as it relates to your project. Also you must include a copy of the Agreement to Public Communications, which can be found at the end of this document, for each Project Partner.

Bowater Mersey Paper Company Ltd.

Contact Name and Title: Jonathan Kierstead, Environment Superintendent - Woodlands

Email and Phone: Jonathan.Kierstead@AbitibiBowater.com T: 902.354.3411 ext.2170 F: 902.354.2867 C: 902.521.0426

Qualifications and Experience:

Jonathan Kierstead, B.Sc.F, M.Sc.F, RPF

Responsible for management of Bowater Mersey Woodlands Environmental Management System, setting of annual environmental objectives and targets and ensuring environmental compliance is conducted on Bowater Mersey Woodlands. Sits on three Nova Scotia Species at Risk Recovery teams. Responsible for public communication of environmental initiatives.

Ducks Unlimited Canada

Contact Name and Title: Deanne Meadus, Manager of Conservation Programs – Atlantic Region

Email and Phone: d_meadus@ducks.ca T: 902-667-8726 ext 231 F: 902-667-0916 C: 902-694-2656

Qualifications and Experience:

Deanne Meadus, B.Sc.F, M.Sc.F

Responsible for the management of the implementation of DUC's conservation programs across Atlantic Canada. This includes long term conservation strategic planning for wetland conservation and research. DUC's conservation programs include, land securement, wetland restoration, infrastructure maintenance of over 118,000 acres of habitat in Atlantic Canada.

Project Details

Introduction

Historically, agricultural, urban expansion and forestry activities in Nova Scotia have taken its toll on wetlands. Wetlands were and still are prevalent throughout Nova Scotia's forests and the most common wetland type is forested wetlands or swamps. Forested wetlands provide excellent habitat to a wide range of wildlife species and excellent environmental benefits. The presence of large open water hemi-marshes within forested stands provides excellent breeding habitat for waterfowl. Historically, forestry practices ignored the importance of the riparian forest and did not protect large open water marshes from the impacts of harvesting. Ducks Unlimited Canada (DUC) recognized early on that its efforts alone cannot conserve Canada's wetlands. Greater public awareness of wetland loss and the implementation of public policy initiatives must occur in order to conserve these precious resources.

Although DUC has many projects across the country including Atlantic Canada, many of these projects are not easily accessible to the public; therefore, making it extremely difficult to educate the public and secure public support for wetland conservation and sustainable forestry initiatives. This partnership between DUC, Bowater Mersey Paper Company Ltd, and the communities of Liverpool, Brooklyn and Milton, NS will allow for the enhancement of a culturally important wetland that will benefit both wildlife and society.

Since the mid 1980's, DUC has been working in partnership with Bowater Mersey Paper Company Ltd (Bowater Mersey) to restore and conserve wetlands on their land and in turn protect riparian areas surrounding these waterfowl and wildlife habitat gems. Over the next few months, DUC and Bowater Mersey will be working together to redefine the boundaries of the conserved habitat for wildlife and sign new conservation agreements on Bowater Mersey's lands for long term protection. In 1988, DUC restored a five acre wetland within Pine Grove Park in the community of Milton, NS by building a dyke and placing a water control structure to regulate water levels within the marsh area. Since that time, the wetland has flourished and Bowater Mersey has deemed the area part of their Unique Areas Program and it is now a 57 acre public park within the community. Pine Grove Park is vital to the surrounding communities of Liverpool, Brooklyn

and Milton as it is estimated that it receives over 5,000 visitors a year. To ensure the wetland infrastructure is viable for the next 40-50 years and provides wildlife habitat the structure needs to be enhanced. While completing this activity, nest shelters and interpretative signage will be added to the community wetland.

Project objectives:

Approximately 25 percent of the world's wetlands are found in Canada. These productive wetlands are critical in supporting over 600 species of plants and animals in this country. To conserve our wetlands and forested riparian areas we need to develop innovative conservation measures as proposed in this ***Pine Grove Community Wetland Project*** and communicate these wildlife habitat benefits so that wetland conservation will be implemented throughout Nova Scotia through industry lead BMPs. This proposal addresses two of the current topics of importance to the Sustainable Forestry Initiative (SFI), firstly, improved wildlife habitat management and conservation of biodiversity and secondly, it is a community based project that will address the management of culturally important lands owned by Bowater Mersey used by three small rural communities in Nova Scotia.

This project will:

- 1.) *Ensure* that the 5-acre wetland is maintained for future wildlife habitat within Pine Grove Park that is on land that is owned and managed by Bowater Mersey. The replacement of the steel pipe with a plastic pipe will ensure that the wetland and water control structure will last an additional 40 – 50 years. This wetland adds habitat diversity and is extremely important for the staging and breeding of waterfowl, such as American black duck, mallards, ring neck duck, green winged teal, etc. It will also showcase wildlife diversity, as it supports a diverse avian and amphibian community.
- 2.) Further *enhancement* of the wetland habitat will be made through the installation of 20 nest boxes for cavity nesting waterfowl (common goldeneye, wood ducks, hooded mergansers) and have been known to provide habitat for flying squirrels, bats, and swallows. The materials and supplies will be bought by DUC and local community groups / volunteers / scouts will be involved in the production, installation and long term monitoring of the nest boxes with technical guidance provided by DUC and/or Bowater staff.
- 3.) *Communicate* with the visitors of the Pine Grove Community Wetland through two interpretative signs stating the importance of wetlands, wildlife in the area and the importance of forested riparian buffers and sustainable forest management (refer to sketch plan at end of proposal for tentative sign locations in Pine Grove Park).

Project Goals	Activities	Tangible Outcomes	Measures of Success	Grant Funds Portion
Goal 1: Sign Conservation Agreements with Bowater Mersey to conserve three wetlands on Bowater's lands	Signing Conservation Agreements will ensure the protection of important waterfowl habitat and the riparian forests.	Over 200 acres of wetland habitat and over 70 acres of riparian forest will be conserved.	A new Conservation Agreement is signed for DUC projects on Bowater lands.	none
Goal 2: Install a new plastic pipe in the water control structure at Pine Grove Marsh to restore waterfowl habitat	DUC will apply for permits and install a new plastic pipe in the water control structure.	Water levels in Pine Grove Marsh will provide waterfowl habitat for the next 20 years.	New pipe installed and stable water levels achieved. Trail access restored to community.	66%
Goal 3: Installation of cavity nest boxes within the Pine Grove Marsh/Park	DUC and Bowater Staff will work together to build and install cavity nest boxes in Pine Grove Marsh/Park.	Ten cavity nest boxes are built and deployed in the 57 acre Pine Grove Park.	Twenty cavity nest boxes will provide nesting habitat for an additional 20 breeding waterfowl such as Common Goldeneye, Wood Ducks and Hooded Mergansers.	17%
Goal 4: Install two wetland interpretation signs at Pine Grove Marsh	Graphic designer will design two wetland interpretative signs to be installed within Pine Grove Marsh.	Sign on importance of forested riparian areas and one sign on benefits of wetlands/waterfowl species in forests installed along trail for community of Liverpool and visitors.	Project partners are highlighted and the importance of sustainable forestry activities for the benefit of waterfowl/wildlife habitat is expressed to the community of Liverpool.	17%

Project Timeline

- DUC to negotiate and sign Conservation Agreements with Bowater in March – April of 2011
- Apply for environmental permits to complete enhancement work April 2011
- Commence water control structure pipe replacement between June 1st – September 30th
- Build nest boxes late May or June
- Install nest boxes in early fall 2011
- Design and print interpretative signs in summer 2011
- Install signs in fall 2011
- External communications of project successes and milestones ongoing throughout 2011

Project Budget

(Note: all expenditures are listed in the table below in CDN\$)

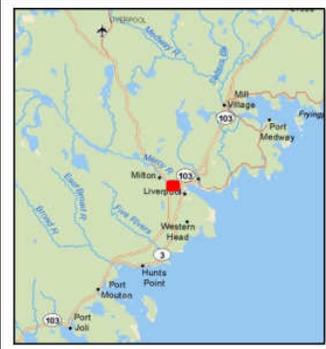
Expenditure	Amount	Requested from SFI	Matching Funds (DUC)	In-Kind Contributions
Staff Salary and Benefits				
DUC WAM	1 person at \$600 / day for 15 days			9,000
DUC MCP	1 person at \$600 / day for 3 days			1,800
DUC M&C	1 person at \$600 / day for 3 days			1,800
Bowater Mersey	1 person at \$600 / day for 5 days			3,000
Operating Costs				
Education & Outreach				
Communications	\$1,000 per sign	1,000	500	500
Materials & Supplies		5,000	5,000	1,000
Total		\$6,000	\$5,500	\$16,100

Budget Explanation:

- Salaries, benefits and travel: Head of Wetland Asset Management to supervise the wetland restoration component and the nest box placement
- Salaries, benefits and travel: Manager of Conservation Programs to negotiate the Conservation agreements, financial administration of the full project
- Salaries, benefits and travel: Communications Coordinator to complete media relations and design of the interpretative signs
- Salaries, benefits and travel: Bowater Mersey Environment Superintendent to coordinate Conservation agreements and all activities on Bowater Lands
- Communications: Design and installation of two interpretative signs at Pine Grove Marsh / Park, media releases and media events
- Materials and Supplies: Brand new plastic pipe (4 ft diameter – 48ft long), excavator/machine rental, mobilization of equipment, on site construction supervisor, supplies and materials for nest boxes, erosion control, trail repair after construction, etc.



Note: Wetland boundaries are approximate



PROJECT INFORMATION:
 Topo: 21 A/2
 County: Queens
 Province: Nova Scotia
 Project Type: Wetland Restoration
 Year Built: 1988
 Lat: 44.04832
 Long: -64.737011
 Wetland Area: 5 acres



PINE GROVE



Proj # 6589

2011 SFI Inc. Conservation & Community Partnerships Grant Application

Organization Information and Project Overview

Lead Organization:

Indiana SFI State Implementation Committee (Indiana SIC)
3600 Woodview Trace, Suite 311
Indianapolis, IN 46268
1-800-640-4452



Project Director:

David James
Indiana SIC Chairman
david.james@domtar.com
(270) 927-7203

Lead Organizational Mission Statement:

Effectively facilitate or manage Indiana programs and alliances which support the growth of sustainable forest management through the SFI program.

References:

- 1.) Sam Bond, C.S. Bond Forest Management, sambond4ster1@gmail.com, (812) 275-4815
- 2.) Shaun Cook, C.C. Cook & Son Lumber, cooklbr@ccrtc.com, (765) 672-4600
- 3.) Ray Moistner, Indiana Hardwood Lumbermen's Association, raym@ihla.org (800) 640-4452

Confirmed Project Partner:

Indiana Department of Natural Resources, Division of Forestry

Project Title:

Habitat & Biodiversity Training for Forest Stewards

Amount Requested:

\$23,000

Total Project Budget:

\$41,000 - including match and in-kind contribution

Brief Project Summary

This cooperative project uses web and field-based trainings to deliver skills to on-the-ground stewards (landowners, foresters and loggers) involved in forest management decision making that impacts the quality and availability of key habitat features in retaining and enhancing biological diversity while promoting best practices to protect threatened and endangered species.

SFI 2010-2014 Program Elements

This project addresses the following elements of the SFI 2010-2014 Program:

- Objective 4 – Conservation of Biological Diversity including Forests with Exceptional Conservation Value
- Objective 6 – Protection of Special Sites
- Objective 8 – Landowner Outreach
- Objective 10 – Adherence to Best Management Practices

Project Details

Assessing, understanding and monitoring wildlife habitat availability and use is essential to the sustainable management of forests. Healthy, productive forests provide a wide variety of habitats for a diverse array of species. This project seeks to insure that forest stewardship and timber management in Indiana is conducted according to a process that is informed by best available local and landscape scale scientific knowledge regarding conservation of biological diversity and ecological exceptionality. The Habitat & Biodiversity Training for Forest Stewards project will target on-the-ground decision-makers (landowners and forestry professionals) and train them in a systematic manner to consider their impacts on biologic diversity, threatened and endangered species and unique ecological situations at the parcel or stand level while also providing the tools and skills necessary to understand and incorporate landscape scale factors in forest management. This project will also complement the existing Indiana Department of Natural Resources initiative ([Indiana Statewide Forest Strategy 3.1](#)) to develop, introduce and implement an expansion of voluntary forestry best management practices that includes threatened and endangered species and will include decision-makers from that government agency as confirmed project partners.

The Habitat & Biodiversity Training for Forest Stewards project will improve the implementation of the SFI Standard by directly addressing [SFI 2010-2014 Standard](#) Objective 4 – Conservation of Biological Diversity including Forests with Exceptional Conservation Value, Objective 6 – Protection of Special Sites, Objective 8 – Landowner Outreach and Objective 10 – Adherence to Best Management Practices (BMPs).

This project will improve the implementation of the SFI Standard by accessibly enabling Indiana’s forest decision-makers to “manage the quality and distribution of wildlife habitats and contribute to the conservation of biological diversity” as stated in Objective 4. It offers systematic, in-depth, up-to-date and comprehensive training and resources to equip users with the knowledge and awareness to promote conservation of native biological diversity, species, habitats and communities, protect threatened and endangered species, locate and protect ecologically unique sites and incorporate landscape scale considerations. The Habitat & Biodiversity Training for Forest Stewards project will also improve the implementation of Objective 6 by providing regionally appropriate guidance on the identification, selection and management of ecologically unique sites.

Outreach is a major component of this project and though the project identifies two unique user groups and will provide a tailored approach toward the training and education of each, the implementation of SFI Standard Objective 10 will certainly be enhanced as landowners will be supplied regionally appropriate information concerning items addressed in Indicator 1, “conservation of critical wildlife habitat elements, biodiversity, threatened and endangered species, and Forest with Exceptional Conservation Value,” among the things listed above.

Further, implementation of the SFI Standard will be improved as training and recourses will incorporate to-be-developed additional voluntary Indiana Forestry BMPs that address threatened and endangered species, broadening the practices described in Objective 10.

20 managing habitat and biodiversity training sessions will occur at multiple locations throughout Indiana over the two year project period and session information will include information SFI

involvement in the project. SFI involvement will also be included in advertisements for session enrollments and partner communications.

Certain of these sessions will be conducted with web-based/webinar component that will be recorded and made available for viewing on a unique Department of Natural Resources website that also includes relevant resources and information. This website will also prominently relate SFI involvement.

If this project is selected for funding, project partners will issue a press release detailing Habitat & Biodiversity Training for Forest Stewards and SFI involvement.

Project partner, Indiana Department of Natural Resources, Division of Forestry is an SFI Program participant with approximately 150,000 state forest acres certified according to SFI Standards. Also, the Division of Forestry holds a Tree Farm Group Certificate which encompasses approximately 500,000 certified private forest acres. In 2011, the Division of Forestry is preparing documents and will hold a group SFI chain-of custody certificate for participating industry members. The Indiana Division of Forestry staff is uniquely qualified to provide professional and expert level assistance in the development and facilitation of this project. John Seifert, State Forester, jseifert@dnr.IN.gov, (317) 232-4116 will be responsible for Division of Forestry cooperation on this project.

Mr. Seifert began employment with the Division of Forestry in 2005 when he was hired as State Forester and Director of the Division of Forestry. Previously he served as Extension Research Forester for Purdue University from 1979 to 2005 where he did applied research in plantation and natural stand management. He provided continuing education for professional foresters and woodland owners for 27 years, impacting thousands of landowners and authoring more than 50 research publications. He oversees certification of state and private forestlands under multiple North American and international sustainability “green” standards, and is active with the Indiana Tree Farm program, the Indiana Woodland Owners Association, the Indiana Hardwood Lumbermen’s Association and the Indiana Forest Industry Council. Mr. Seifert earned his forestry degrees from the University of Missouri.

Project Goal 1: Develop systematic, up-to-date, in-depth and comprehensive resources, information and training program for unique user groups: forestry professionals (foresters, loggers) and landowners.

This project goal will be accomplished by utilizing Indiana Department of Natural Resources, Division of Forestry partner professionals and experts in regional forest and biological sciences to collaborate and develop a unique resource set and agreed upon curriculum for training user groups.

Elements to be included in resources and training program include but are not limited to the relationship of forest management in Indiana to: conservation of biological diversity, threatened and endangered species, ecologically unique and special sites, related forestry BMPs, threats to native biodiversity including invasive species, corridors and genetic dispersal, snag and cavity trees, roost and cavity/den trees, downed woody material, riparian/aquatic components/wildlife pools and ponds, and mast trees and shrubs/fruit producing vines.

Activities:

- Recruit and assemble experts
- Develop resource materials and science-based curriculum
- Design training session agenda, presentation and hard copy resources lists
- Develop web platform to house session information, resources and recorded presentations

Tangible Outcomes:

- Expert panel meeting notes and action plan
- Resource materials (hard copy and web based links and PDFs)
- Working internet site with unique URL, housing downloadable resource materials and project and session information

Measure Success: The success of Project Goal 1 will be measured by review of tangible outcomes described above, testing accessibility and functionality of website. The internet site will be equipped to register unique visitors, originating site, and duration of site visit.

Grant Funds: Grant funds will be used to pay salary for partner staff time associated with coordination, execution and development of tangible outcomes. Grant funds will also be used to pay meeting facilitation fees associated with assemblage of experts.

Project Goal 2: Provide 500 forest stewards location-based training to manage habitat and biodiversity (250 landowners, 250 professionals) through the delivery of 20 sessions offered throughout Indiana. Also provide 200 forest stewards web-based training to manage habitat and biodiversity (100 landowners, 100 professionals) through the delivery of 2 webinars offered in conjunction with location-based trainings.

This training will be offered for no charge to users and recorded information will be publicly available for download.

Activities:

- Determine location and schedule for training sessions, create user evaluation forms
- Advertise session availability and register users for session
- Execute training
- Institute changes based on user evaluations

Tangible Outcomes:

- Specific number of professional forest stewards trained
- Specific number of landowners trained
- Recorded webinar posted to website
- Website with complete training sessions and resources available

Measure Success: Success on Project Goal 2 will be measured by the number of users trained and session evaluation forms received. Over a 5 year period, all 150,000 State owned acres and 500,000 private forest acres will be impacted by the program. Currently the Division is adding approximately 10-12,000 new private woodland acres to certification each year.

Project Timeline

Project Goal 1 is expected to be accomplished within 4 months from the inception of the project. Training session components of Project Goal 2 will be offered in a measured manner through the remainder (20 months) of the two year project. It is anticipated that there will be thus one session offered per month. Recorded webinar sessions will occur in the second year of the project and the fully equipped website with recorded sessions will also be available in the second year.

Project Budget 2010-12

Expenditure	Amount	Matching Funds*	In-Kind Contributions*
Staff Salary and Benefits	\$ 10,000		\$5,000
Operating Costs			
Research Activities			
Meetings	5,000	2,000	2,000
Travel	2,000		
Education & Outreach	2,000	2,000	3,000
Communications	2,000		2,000
Contractual Teaching	<u>2,000</u>	<u>2,000</u>	
Total	\$23,000	\$6,000	\$12,000

Agreement to Public Communications

I, John R. Seifert, Indiana State Forester, as a representative of Indiana Department of Natural Resources, Division of Forestry and a Partner in Habitat & Biodiversity Training for Forest Stewards, hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Indiana Department of Natural Resources, Division of Forestry to sign this agreement.

Signed:



John R. Seifert
Name

State Forester
Title

Indiana Division of Forestry
Organization

2-14-11
Date



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.™

SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, David D. James, SIC Chair, as a representative of The Indiana SFI Implementation Committee and a Partner in Training Forest Stewards to Manage Habitat and Biodiversity, hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by The Indiana SFI Implementation Committee to sign this agreement.

Signed:

David D. James
Name

SIC Chair
Title

The Indiana SFI Implementation Committee
Organization

2/15/2011
Date

Grant Application

Lead Organization Name and Address	Maine TREE Foundation PO Box 5470 Augusta, Maine 04332
Name, phone and email for Project Director	Sherry F. Huber (207) 797-4454 dhuber2@maine.rr.com
Lead Organizational Mission Statement (25 words or less)	The Maine TREE Foundation educates and advocates for the sustainable use of the forest and the ecological, economic, and social health of Maine's forest community.
Lead Organization Annual Operating Budget	\$284, 500.00
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	Kevin McCarthy Sappi Fine Paper North America Kevin.McCarthy@SAPPI.com (207) 238-3067 Gordon Gamble Wagner Forest Management Ltd. gsgamble@wagnerforest.com (207) 369-9759

Project Overview

Confirmed Project Partners (list organization name only)* Maine SFI SIC Plum Creek Timber Co.	Project Title Teachers' Tours Handbook	Amount Requested \$50,000.00	Total Project Budget \$75,000.00	Brief Project Summary (50 words or less) Maine TREE will use Teachers' Tours to make certification more understandable and show how sustainability has gained importance with the forest community. We will publish and disseminate a "Teachers' Tours Handbook" to help others use this effective means of communicating	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s)) Objective 17 Maine TREE Teachers' Tours support and assist Performance Measures 17.1 (all indicators) and Performance Measure 17.2 (Indicators 1., a., b., d., & e.)
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				with these respected professionals and through them, the general public.	

*For each partner organization, please list below the contact name, title, email, phone number and include a summary of the individual and organizations qualifications and experience as it relates to your project. Also you must include a copy of the Agreement to Public Communications, which can be found at the end of this document, for each Project Partner.

Maine SFI SIC
 Patrick Sirois, Director
psirois@maineforest.org
 (207) 622-9288

Pat has worked with Maine TREE on the SFI SIC Education and Outreach Committees as we communicate the importance of certification to our audience of teachers and the general public.

Plum Creek Timber Company
 Mark Doty, Community Affairs Manager
mark.doty@plumcreek.com
 (207) 453-2527 ext. 113

Mark has helped arrange many of our Teachers' Tours and Tours for the public on Plum Creek land with me over the years. He has been the forester on the ground on several of these Tours.

Project Details

The following elements characterized by SFI Inc. as "desirable considerations" are included in this proposal:

- Maine TREE has secured matching funds for the Project.
- Maine TREE and the PLT Maine Coordinator are willing to speak regarding the Project in public venues. (Maine TREE sponsors PLT in Maine.)
- The Project demonstrates how SFI certification complements existing government initiatives and includes involvement from decision-makers at government agencies. The Maine Forest Service has provided personnel on the Teachers' Tours since their inception in 1998. We have had a State Forester in residence on every Tour for its duration, allowing for discussion and Q & A throughout. Many state foresters are also trained facilitators for the Project Learning Tree program and volunteer many hours for workshops as well as Tours. The Handbook will discuss this connection to the Maine Department of Conservation as well as the PLT Maine Coordinator's work to develop Maine's Environmental Education Literacy Plan and the strong support for conservation of working forests which Maine TREE has integrated into each of the Teachers' Tours over the years.

The Maine TREE (Timber Research and Environmental Education) Foundation is poised to welcome educators from all over the state to embark on its fourteenth season of conducting Teachers' Tours of Maine's Forests and Mills. Begun in 1998, these tours have hosted more than 800 teachers from Maine and New England states to see for themselves the natural and human interaction on Maine's working forests and wood processing plants of all kinds, from pulp and paper to increasingly efficient sawmills specializing in dimension and/or finger-jointed lumber to OSB, optimizing equipment, chips, recycled paper, furniture, pellets and biomass. We have seen everything on the land from conventional logging with chain saw, thinning by hand, tilling and hand planting (only occasionally, due to the natural regeneration of Maine's forests), protection of vernal pools, lakes, rivers and streams, regenerated clear cuts and clear cutting to provide woodcock habitat on Moosehorn National Wildlife Refuge.

Our Teachers' Tours have been welcomed enthusiastically by landowners, foresters, loggers, wildlife biologists and other scientists, recreation providers, state officials and their land managers, mill owners and managers and their employees. All these people who make their living from the forest resource have given freely of their time and expertise to help teachers and through them their students, their colleagues and neighbors and the general public understand and appreciate the working forest, the natural forest environment and the forest community that depends on this vital renewable resource. These teachers, already respected professionals in their communities, become Ambassadors for the forest and for the people who are connected to it.

As certification of Maine forests has become more widespread, virtually all our Tours take place on certified land. The subject of certification is discussed at length on the Tours and teachers are quick to grasp the significance of the standards.

The following quotes are indicative of the experience offered by Maine TREE with the support and expertise of the forest community:

"The Teachers' Tour ...was outstanding. The outdoor experiences, guest speakers, lodging, meals, camaraderie – every aspect was more than I expected. The woods industry, culture, people and personal experiences will all be carried back into the classrooms in different ways. Thank you again for a top notch experience and all the resources. All professional development should be as well designed as these Tours."

"This workshop will forever change the way I look at the forest and especially the way that I look at forestry. Prior to my visit I had a very limited understanding of forestry. I am coming away with wonderful information and I cannot wait to put it to use in my classroom and lifestyle. This visit was very much about stewardship and it clarified many misconceptions about the wood pulp industry."

The Maine TREE Foundation, with the support of its Project Partners, will develop a Teachers' Tour Handbook over the next two years to show a larger audience outside Maine, one that is regional and even national, how to plan and carry out the activities of the Tour, how to market them to an audience of respected professionals and how to enhance the use of the information gained by their experience once the teachers have returned to their classrooms and their communities. We do not know of any similar effort to describe the best ways to connect educators or anyone else, for that matter, to the forests and mills of our country.

Maine TREE will document and describe how it determines a suitable location for upcoming Tours, how it balances the different activities, how it makes the experience interesting and enjoyable for the participants, how it maximizes the information sharing between resource professional such as foresters and the educators, how it integrates the Project Learning Tree (PLT) curriculum and initial workshop into activities throughout the Tour and how the PLT facilitators prepare and encourage the teachers to use the material and their experience in their teaching and in their personal life. National PLT will collaborate with Maine TREE to market the Handbook and to introduce it to PLT coordinators in all fifty states and the Maine PLT Coordinator will present a workshop on the Handbook at a National PLT Conference and other venues.

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Conduct four Teachers' Tours in 2011 & 2012, discuss SFI and the benefits of certification and solicit feedback	Visit working forests and mills in the company of resource professionals	Specifically gain information to include in a Teachers Tour Handbook. Solicit and utilize teachers' evaluations in the handbook	Conduct Tours, Compile information	\$38,000.00
Goal 2: Contract with a professional writer to produce the Handbook Goal 3: Market the Handbook in hard copy and electronically with help from environmental education and conservation organizations, forest products associations and national PLT	Work with writer, teachers and others to produce the Handbook Market the Handbook with help of organizations and PLT	Produce Teachers' Tour Handbook to give practical guidance to those in other states about giving this important group of professionals good information about certification and other forest values. Promote at Conferences, electronically, etc.	Organizations in other states recognize the benefit of connecting educators with the forest resource and certification standards. Teachers' Tours take place in other states.	\$12,000.00 (Goals 2 & 3)

Project Timeline

The Project will take place over 20 months, April 2011-December 2012. Goals and Outcomes 1 & 2 will be delivered by 12/31/12. Goal 3 will be ongoing.

Project Budget

Expenditure	Amount	Matching Funds*	In-Kind Contributions*
Staff Salary and Benefits	Executive Director \$3,500.00 Maine PLT Coordinator \$1,000.00 Administrative Assistant \$500	\$5,000.00 Plum Creek	\$5,000.00 Maine TREE
Operating Costs			
Research Activities Including actual Tours (2 Tours each summer; four days each; 50% covered by SFI Grant	\$30,000.00	\$20,000.00 Plum Creek	\$10,000.00 Maine TREE
Meetings	\$1,000.00		
Travel	\$1,500.00		
Education & Outreach	\$3,000.00		
Communications (including printing)	\$4,500.00		
Contract for Writing Manual	\$5,000.00		
Total	\$50,000.00	\$25,000.00	\$15,000.00

*list sources and amounts of any matching funds or in-kind contributions

Sustainable Forestry Initiative, Inc.

900 17th St. NW, Suite 700

Washington, DC 20006

Attention Allison Welde

Director, Conservation Partnerships and Communications

Phone: **202.5 . 52**

E-mail: Allison.Welde@sfiprogram.org

Grant Application

Application Requirements

- *Proposals must follow this application format.*
- *Applications cannot be longer than 10 pages (Project Partner signed agreements and Lead Organization proof of non-profit status do not count towards the 10 page maximum).*
- *You may delete all text that precedes this section and any text in italics throughout the application.*

All applications must address the following items:

Organization Information

Canadian Charitable number 1 012 0001

Lead Organization Name and Address	Mersey Tobeatic Research Institute, 9 Mount. Merritt Road, Kempton, Nova Scotia, B0T1B0 Charitable
Name, phone and email for Project Director	Brad Toms, 1-902-682-2371, brad.toms@merseytobeatic.ca
Lead Organizational Mission Statement (25 words or less)	We are a non-profit research institute and co-operative that promotes sustainable resource use and research collaboration in the NESCO Southwest Nova Biosphere Reserve (SNBR).
Lead Organization Annual Operating Budget	\$350,000
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	Frances Anderson, Research Associate, NS Museum of Natural History, fanderso@glinx.com 1 902-543-0494 Rob Cameron, Ecologist, Nova Scotia Department of Environment, camerorp@gov.ns.ca , 1 902-758-1637

Project Overview

The Project must relate to or support one or more elements of the SFI 2010-2014 Program. You can download a copy of the Standard and supporting documents on our [website](#).

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
Nova Scotia Department Natural Resources, Newpage Port Hawkesbury Other partners from the past are yet to be confirmed as partners for 2011.	Getting ahead. Working with stakeholders to protect Boreal Felt Lichen and its habitat	20,000	\$96,037 per year (not including potential SFI funds of 10,000 per year)	Potential habitat for Boreal Felt Lichen (BFL) has been modeled and mapped. This project aims to partner with harvesters to survey stands of potential habitat that are scheduled for harvesting. The goal is to get ahead of harvesting plans. When BFL is found a buffer is left around the stand.	Objective 4: Indicators 1 and 2 Objective 6: Indicators 1 and 2

*For each partner organization, please list below the contact name, title, email, phone number and include a summary of the individual and organizations qualifications and experience as it relates to your project. Also you must include a copy of the Agreement to Public Communications, which can be found at the end of this document, for each Project Partner.

o a Scotia epartment of atural esources, Species at Risk Biologist, Mark Elderkin, 136 Exhibition Street, Kentville, Nova Scotia, B0S 1M0, elderkmf@gov.ns.ca. Mark Elderkin has been the species at risk specialist for the province of Nova Scotia for many years. Mark is the chair or co-chair of many recovery teams and sits as a member of others. Mark also advises funding bodies such as the Habitat Stewardship Program of environment Canada and the Nova Scotia Species at Risk Fund. Mark also works in partnership with Regional Biologists in Nova Scotia that oversee activities pertaining to sustainable forestry.

e page ort a esbury, Andrea Doucette, PO Box, Leader Sustainability and Outreach, PO Box 9500, Port Hawkesbury, Nova Scotia B9A 1A1. As the sustainability leader for Newpage Corp. Port Hawkesbury Andrea has been instrumental in the partnership that has resulted in MTRIs lichenologist finding several new sites where Boreal Felt Lichen exists on lands that were slated for harvesting. One of which contained almost 20 percent of the entire population of Boreal Felt Lichen in Nova Scotia with over 50 thalli.

ote Several partners from previous years were not able to confirm their participation for 2011 or were not able to sign the public communications agreement in time for the deadline. They are likely to be partners but are not able to confirm until the beginning of their next fiscal year (April 1 2011). These partners and the details of their anticipated participation are listed in the budget section of this application.

Project Details

The Mersey Tobeatic Research Institute (MTRI) is a non-profit research co-operative that operates a field station in Kempt, Nova Scotia with the goal of promoting collaborative research throughout the Southwest Nova Biosphere Reserve. MTRI employs a lichenologist who is currently one of the leading authorities on Boreal Felt Lichen in Nova Scotia (Tom Neily). Tom is also mentoring volunteers and staff in lichen identification and monitoring.

Since 2007 MTRI has been the leading organization in Nova Scotia working toward the protection of rare lichens and their habitats in Nova Scotia through education and stewardship. Through the Boreal Felt Lichen Recovery Team partnerships have been developed between forestry companies and NGOs such as MTRI to ensure the protection of Boreal Felt Lichen (*Erioderma pedicullatum*) (BFL). BFL is listed by the International Union for the Conservation of Nature (IUCN) as critically endangered. This is the most imperiled status that a species can receive from that organization. There are only two critically endangered species in eastern Canada and the other (the Eskimo Curlew) has not been seen in nearly fifty years. The last large and healthy populations of BFL in North America exist in Nova Scotia and Newfoundland Canada. While the Newfoundland population has been stable and relatively free of threats the Nova Scotia population has faced many threats and has experienced a large decline. Of the 46 historic sites that were known before 1996 only one still contained BFL as of 2006. Since then the work of MTRI, the recovery team and forestry companies has resulted in dozens of new sites being found and protected including the 'Supertree' that contains 51 individuals (thalli) (nearly a quarter of the Nova Scotia population) and was featured in Canadian Geographic. In 2010 the close relative of Boreal Felt Lichen, Vole Ears (*Erioderma mollissimum*) was listed by COSEWIC (Committee on the Status of Endangered Wildlife in Canada) as 'endangered' and is scheduled to be added to the list of species protected under the federal Species at Risk Act (SARA). This species is often in the same habitats as BFL. Boreal Felt Lichen is listed as endangered by federal and provincial legislation. A recovery plan has been completed and an action plan is currently in draft form. MTRI has held several public workshops that were well attended by naturalists, foresters and biologists teaching practical lichen identification skills.

1. This project brings together the need of the forest industry to harvest timber and the protection of a critically endangered species that is globally imperiled. MTRI and Newpage Port Hawkesbury and Northern Pulp have successfully partnered to ensure that these two goals can be achieved side by side. The use of a non-profit research institute allows the surveys to be conducted in a manner satisfactory to the Government and the Recovery Team that there is no observer bias when searching for Boreal Felt Lichen. Through support from Environment Canada and the Government of Nova Scotia and Newpage significant habitats at several sites were identified and preserved with a no harvest buffer around the site (Objective 4 and Objective 6). Communities that contain Boreal Felt Lichen are also generally important sites with a high diversity of lichens, (particularly cyanolichens). These sites are also near treed bogs, wetlands and brooks and their preservation also supports the protection of these unique community types important to species across several taxa (birds, mammals, vascular plants etc). By working to preserve these unique species and habitats by pro-active measures required by certification standards Newpage and Northern Pulp are able to fulfill objectives of the SFI standard.
2. The Mersey Tobeatic Research Institute offers the service of an experienced and professional field Lichenologist at a reasonable rate to the forest industry in Nova Scotia. The lichenologist will survey the site for the presence absence of Boreal Felt Lichen, Vole Ears and other rare lichens. MTRI staff will provide prompt reporting of their findings to both the harvester and the government to ensure that. Newpage Port Hawkesbury staff will use GIS to determine what stands scheduled for harvest overlap with potential BFL habitat. They will produce maps and co-ordinate with MTRI staff to implement the surveys of those areas that overlap. Nova Scotia Department of Natural Resources staff will use GIS to determine areas where BFL habitat overlaps with areas of Crown Land (provincially owned land) that area scheduled for harvesting so that they can be surveyed by MTRI staff to determine the presence or absence of BFL. Northern Pulp will also ensure that lands.

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Survey all sites scheduled for harvest that have modeled Boreal Felt Lichen Habitat	GIS analysis. Map making. Surveying	Stands can be harvested with assurance that there is a low probability of disturbing or destroying any Boreal Felt Lichen	Sites identified by partners are surveyed.	15000
Goal 2: Collect habitat data	Collect data on forest parameters on sites with Boreal Felt Lichen. Collect data on size and placement of Boreal Felt Lichen thalli on trees	Data will be collected and shared with the provincial government to further refine the predictive habitat model	Data is collected and entered into a secure relational database. Habitat model is further refined as new data is presented to the recovery team.	5000
Goal 3: Protect stands where Boreal Felt Lichen is found	Inform companies and province of sites with Boreal Felt Lichen to initiate protection of the site.	Sites are protected from harvesting and regularly monitored for the presence/health of Boreal Felt Lichen	Companies set aside a number of 'no harvest' buffers equal to the number of sites confirmed to have Boreal Felt Lichen on their harvest blocks	0

Project Timeline

Work on the project will commence in June of 2011 and finish in November of 2012 over two seasons of work. The majority of the survey work will take place in July to November each year and the project co-ordination and other aspects take place from September to March each year.

Project Budget

Expenditure	Amount	Matching Funds	In-Kind Contributions
Staff Salary and Benefits			
MTRI Lichenologist	15,000 FSI (7500 year one, 7500 year two) (30days *\$250 a day for lichenologist * 2 years)	17000 (HSP fund, Environment Canada)	
DNR on-site field support and habitat work by a technician and summer student			13860
Project Manager and Project Coordinator (HSP fund, Environment Canada)		13824 (\$38/hr*7h/day*30 days, \$14/h*35h/week*12 weeks)	
Project Mentee (HSP)		7552 (\$126/day *	

fund, Environment Canada)		60 days) (3952 HSP Fund, 3600 MTRI Cash)	
Search time and assistance forest company personnel (Newpage and Northern Pulp)			7550 (\$25/h*302h)
DOE Ecologist to refine predictive habitat model (NS Department of Environment)			5000 ((\$250/day * 20days)
Forest company coordinators to supply harvest plan information (Newpage and Northern Pulp)			3900 (Forest Company Coordinators, \$25/hr *156h)
Project mentoring and GIS support from NSDNR staff (NS Department of Natural Resources)			1386 (NSDNR Support \$38/hr*32hrs 1216 and \$34/hr * 5 170
Operating Costs			
Research Activities			
Meetings (two Boreal Felt Lichen Recovery Team meetings) (several government industry and non government sources make up the recovery team)			4200 (BFL Recovery team members input 12 members @ 175 \$/day/member)
Travel (travel for fieldwork)	5,000 FSI (2500 year one, 2500 year two) (6250km/year*0.40 c/km)	16 065 Mileage HSP fund Environment Canada (14500km/year*0.40 c/km) Accommodations and meals (1200/week*10 weeks)	

Education & Outreach (microscopes for workshops mentioned below)			2200 (Field and lab equipment and desk space from MTRI (\$1000) Parks Canada use of Hand Lenses (\$750) Acadia University use of microscopes for training (\$450)
Communications (2 * 1 days training workshops in Cape Breton on lichen identification and biology for forest workers and naturalists)		1000 HSP fund Environment Canada (For workshop facilitator)	2500 Cape Breton University (use of space, projector, advertising and training support from volunteers)
Total	20 000 10 000 year	55 1	0 5

Note: Requested amounts from SFI reflect two years while the in kind and matching funds reflect only one year. This is the result of MTRI not having a project budget for 2012. The amounts for 2012 will likely be similar to those of 2011 and the budget will be made as funding sources and partners are confirmed.

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:

I **Brad Toms**, Wildlife Biologist, as a representative of **the Mersey Tobeatic Research Institute** and a Partner in **Getting Ahead** hereby give the Sustainable Forestry Initiative (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by the **Mersey Tobeatic Research Institute** to sign this agreement.

Signed:



Brad Toms

Name

Wildlife Biologist

Title

Mersey Tobeatic Research Institute

Organization

February 15 2011

Date



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.™

SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, Mark Edgerkin (Name, Title), as a representative of NS DNR (Organization Name) and a Partner in Getting Ahead (Name of Project), hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by NS DNR (Organization Name) to sign this agreement.

Signed:

Mark S. Edgerkin

Name

Spice-at-Rest Biologist

Title

N.S. Dept. of Natural Resources

Organization

February 14 / 11

Date



**SFI Inc. Conservation and Community Grant Program
Agreement to Public Communications**

I, **Andrea Doucette – Leader, Sustainability and Outreach**, as a representative of **NewPage Port Hawkesbury Corp** and a Partner in **Getting Ahead** hereby give the Sustainable Forestry Initiative (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by **NewPage Port Hawkesbury Corp** to sign this agreement.

Signed:

Name

Leader, Sustainability & Outreach

Title

NewPage Port Hawkesbury Corp.

Organization

February 11, 2011

Date

Grant Application

Organization Information

Lead Organization Name and Address	Mississippi State University Extension Service
Name, phone and email for Project Director	H. Glenn Hughes, 601-794-0671 ghughes@ext.msstate.edu
Mission Statement for the Mississippi State University Extension Service	MSU-ES provides research-based information, educational programs, and technology transfer on issues and needs of the people of Mississippi, enabling them to make more informed decisions.
MSU-ES Annual Operating Budget	Approximately \$50 million (federal, state, other sources)
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	Dr. Tom Monaghan, Mississippi Forestry Association; Email: Tom Monaghan <tommm@msforestry.net> ; Phone: (662) 325-1785. Mr. Wayne Tucker, Mississippi Forestry Commission; Email: Wayne Tucker <wtucker@mfc.state.ms.us> ; Phone: (662) 312-9833.

Project Overview

Confirmed Project Partners	Project Title	Amount Requested	Total Project Budget	Brief Project Summary	What elements of the SFI 2010-2014 Program does your project address
LSU AgCenter MS SFI/SIC LA SFI/SIC	Identifying Linkages Between Certified Forests and Emerging Biomass Markets in Mississippi and Louisiana	\$115,327	\$212,261	Biomass markets are increasing across the nation. This project focuses on identifying the need to provide sustainably managed (certified) forests to meet current and projected demand for this emerging market. Focus will be on certification of private lands through the Tree Farm system. (Most industrial forestland is certified through SFI).	Objective 1- Forest Management Planning Objective 7- Efficient Use of Forest Resources Objective 8 – Landowner Outreach Objective 15-- Research

Project Details

Forestland in Mississippi and Louisiana is valuable to state, local, and individual economies. In Mississippi, total industry output from the forest products industry (direct, indirect, induced) exceeded \$17 billion per year, and accounted for almost 124,000 jobs, or 8.5% of the jobs within the state (Henderson et al., 2008). According to the LSU AgCenter (2009), in 2008 Louisiana's payroll and income generated by the forestry and wood products industry totaled an estimated \$3.2 billion. The gross farm income produced by all forestry-related products, such as timber, pine straw and Christmas trees totaled \$952.4 million in 2008 and the value added through further processing and delivery was \$2.3 billion; the total value of the forestry industry in Louisiana was estimated to be nearly \$3.3 billion in 2008. The industry also employs an estimated 28,000 people including manufacturing and forest operations (Frey 2006).

Because most forestland in these states is held by non-industrial private forest (NIPF) landowners, it represents a significant family asset. At the same time, landowners and society derive considerable non-timber value from this land, with an asset for heirs, recreation, wildlife habitat, and escape from everyday life among the many such benefits given for owning land. This mix of benefits, and the need to modify management strategies to accommodate the wishes and desires of the landowners, requires creative management to optimize the mix of benefits.

While markets for traditional forest products have suffered for several years, there is increased interest nationwide in renewable energy. In the South, woody biomass ranks as one of the most abundant, most flexible, and least costly sources of renewable energy. As such, there is considerable interest in converting woody biomass to a variety of energy products including transportation fuels, pellets, electricity, chemicals, and other uses.

The biomass market is an emerging market, and it is unclear which conversion technologies and end products will provide the greatest benefits with the least costs. The market, as of yet, has not determined "winners" because much R&D is still ongoing, with production costs coming down every year. Nonetheless, it is clear that renewable energy is here to stay, and that biomass will play a large role in renewable energy in the South (Milbrandt, 2005).

Keeping pace with the biomass industry is challenging for foresters, and even more so for forest landowners not as involved in this arena. However, landowners are interested in the future of renewable energy, and how they can serve as a source of wood for new industries that have or may come into their area.

At the same time, conversations with these industries reveal that they are interested in sustainable supplies of timber. Having wood sourced from certified forests is particularly important if the wood is being exported to Europe, as they are operating under the Kyoto Protocol. But personnel in this new industry often are not familiar with wood production and procurement, and have even less experience procuring wood from large numbers of small landowners, a situation found throughout the South. This situation poses challenges for producers, buyers, and the emerging industry.

This project will address several topics important to NIPF landowners and related to supply of certified woody biomass for renewable energy. These topics include:

1. How biomass industries source (or plant to source) wood for their plant, and how important certified wood is in their procurement strategy;
2. Steps that existing Tree Farmers can take to position themselves as a provider for the biomass market;
3. Why becoming a Tree Farm is important in being a supplier of certified wood for the biomass industry as well as traditional forest products industries; and
4. The important and symbiotic relationship between SFI and Tree Farm programs.

The proposed effort is primarily a conservation project. Goals and related information are in the table below. One goal seeks to obtain information about how biomass industries will source wood. A second goal seeks to increase the certified acres owned by NIPF landowners in Mississippi and Louisiana. Such an increase, by providing professional forestry expertise and a written management plan, will have obvious conservation benefits to both timber and non-timber resources. The third goal seeks to clarify for landowners the important linkage between SFI and Tree Farm, as the systems are complementary.

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Better understand how emerging biomass markets are or will source wood-based feedstock.	1. Develop and conduct a mail survey to all existing companies in the US that utilize or could utilize forest/wood-based cellulosic feedstock for bioprocessing for biofuels and bioenergy to determine what characteristics they do or would prefer if/when sourcing forest-based woody feedstock. 2. Conduct phone interviews with the top 20 companies in the US that currently use (forest) wood-based feedstock for bioprocessing for biofuels and bioenergy. These discussions will probe further into sustainability and certification issues.	1. An Extension/ Outreach report summarizing research results focusing on criteria that biomass markets are looking for in procuring forest-based feedstock. The report will be disseminated to corporate, policy maker, certification programs, and government stakeholders in Louisiana, Mississippi and other national stakeholders through web sites at LSU and MSU, Listservs, and other focused mailing lists for maximum exposure. 2. Peer-reviewed article in the Journal of Forestry. 3. Publication of a compendium of existing and potential forest/wood cellulosic bioprocessors in the US disseminated through the same venues as listed for survey result report.	1. 80% response rate in mail survey research. 2. Securing information to produce a compendium of US cellulosic biomass feedstock bioprocessors.	\$46,450
Goal 2: Increase awareness and provide information on potential opportunities for NIPF landowners.	1. Plan, promote, and conduct 10 workshops in Mississippi and Louisiana (5 in each state). 2. Provide information packet on wood-based bioprocessors and landowner opportunities. 3. Increase the number of acres of certified forests.	800 workshop participants including a) existing NIPF and industrial landowners certified by Tree Farm or SFI; b) NIPF landowners not currently certified; c) government and other policy makers and d) representatives from the bioprocessing industry.	1. Positive ratings on value received from workshops using post-meeting evaluation surveys. 2. 50 additional NIPF landowners certified through Tree Farm.	\$61,416

The first part of this project will involve research using a mixed-mode mail and phone survey process targeting all US companies that could potentially use forest/wood-based cellulosic feedstock for biofuel/bioenergy production. The surveys will be national in scope to gain the widest possible perspective of the existing or potential woody biomass requirements of these industries. Particular attention will be focused on whether or not certified wood will be required, and if so, the types of certification systems accepted. Research results will be disseminated nationally through web-based content and print media. This component addresses Objective 15 of the SFI Standard pertaining to Forestry Research, Science, and Technology, as well as Objective 7, Efficient Use of Forest Resources.

The second phase of the project will consist of ten half-day workshops, 5 each in Louisiana and Mississippi. Workshops will target the following audiences: a) existing NIPF and industrial forest landowners certified through the Tree Farm or SFI system; b) NIPF landowners not certified by either Tree Farm or SFI; c) governmental and other policy makers; and d) representatives from the bioprocessing industry. This component addresses Objective 8 (Landowner Outreach) of the SFI Standard.

At each workshop we will:

- provide perspectives from the emerging biomass markets and current suppliers of forest-based materials to this sector;
- provide results from the biomass industry survey, particularly as it relates to the use of certified wood;
- address certification in general and the symbiotic relationship between the SFI and Tree Farm program;
- provide a history and update of the Tree Farm program, including information on the 3rd-party assessment of Mississippi's and Louisiana's Tree Farm programs, conducted in 2011;
- address how landowners interested in Tree Farm can get into this program, and the benefits to both timber and non-timber resources; and
- provide applications to the participants as well as a list of Tree Farm Inspectors in their area, allowing them to get involved promptly. This component addresses Objective 1 of the SFI standard pertaining to Forest Management Planning, as we will focus on the importance of getting a written management plan as a critical element in obtaining certification.

A key element of the workshops, noted above, is to convey information on certification and sustainability and the linkages to the bioprocessing industry. We currently have active logger education programs in both states, and the complementary goals of SFI and Tree Farm will be highlighted. We will have a representative from the SFI State Implementation Committee (SFI/SIC) speak at each workshop.

The woody biomass industry, though suffering due to the economic crisis, is nonetheless well-positioned to increase rapidly when the economy recovers. There is considerable interest and activity in biomass in both Mississippi and Louisiana. These workshops will answer questions people have about this industry, and identify ways to become involved as a provider of wood to the bioenergy/biofuel sectors.

Project Timeline-Management Plan

Tasks	Project Period Months						Deliverables
	1-4	5-8	8-12	13-16	17-20	21-24	
1. Identify US bioprocessing industry members-survey recipients.							Survey management database
2. Develop and refine survey instrument for mail survey.							Survey instrument
3. Pre-test and execute mail survey.							Respondent database
4. Phone Interviews							Research Results Report
5. Plan workshops, Develop materials, Book venues, Secure presenters, Invite participants, Promote workshops							Workshop Schedule
6. Workshops 1-6 in Louisiana and Mississippi							Workshop Evaluations
7. Workshops 7-10 in Louisiana and Mississippi							Workshop Evaluations
8. Finalize materials for web site and listserv dissemination							Web site content; Final Report

Project Budget

Expenditure	Amount	Matching Funds	In-Kind Contributions	% MSU	% LSU AgCenter
Staff Salary and Benefits					
Hughes	22,380		22,380	100%	
Vlosky	16,198		16,198		100%
Graduate student	36,000				100%
Waived overhead			58,356		
Operating Costs					
Research Activities	4,730				100%
Planning Meetings	2,474			30%	70%
Travel	2,895			50%	50%
Education & Outreach	21,450			33%	67%
Communications	8,000			50%	50%
Conference	1,200				100%
Total	115,327		96,934		

Matching and In-kind contributions:

Drs. Glenn Hughes and Rich Vlosky will have an institutional in-kind match for a portion of their time committed to the project. Dr. Hughes, as overall PI, will allocate 20% of his time to this project. Of that, 10% will be paid for by the project, and the remaining 10% will be contributed by MSU. Dr. Vlosky, overseeing the Louisiana effort, will have 5% will be paid by the project and 5% of his time contributed by the LSU AgCenter. In addition to their time,

overhead costs, which are not allowed to be paid by project funds, are contributed by their respective universities. Last, both the Mississippi and Louisiana SFI State Implementation Committees support this project, and will participate as speakers at each workshop. Their estimated contributions are estimated to be \$4,200 (($\$40/\text{hr.} \times 8 \text{ hrs. preparation/speaking} \times 10 \text{ workshops}$) + ($\$1,000 \text{ travel for } 10 \text{ workshops}$)), but are not included in the project budget.

Budget Justification **Glenn Hughes: Mississippi State University**

Salary and fringe benefits—Project will fund Dr. Hughes for 10% of his salary and fringe benefits for the length of this project. Dr. Hughes will be involved in all phases of the project and bear primary responsibility for the Mississippi workshops. He will work with Dr. Vlosky, other partners, and MSU Extension personnel to establish locations, times, and dates for workshops. He will coordinate and attend all MS workshops and present serve as a speaker.

Workshop Associated Expenses—These costs are the estimated expenses necessary to plan, promote, and conduct a series of 5 workshops in Mississippi. Preliminary locations for the workshops are Hattiesburg, Raymond, Meridian, Columbus, and Grenada, assuring a fairly even distribution of the workshops in the more heavily forested counties of Mississippi. Workshop expenses are detailed below.

- Mileage—We anticipate that arrangements for each workshop plus conducting the workshop will require at least 2 trips by Dr. Hughes. This will result in a total of 2800 miles traveled for the 5 workshops. Cost = $2800 \times \$0.51 = \$1,428$
- Publicity--Intensive publicity will be required for each workshop to reach forest landowners. Publicity costs include 1) direct mail to forest landowners in each county (using existing tax roll information), 2) color brochures describing the workshop agenda and details, 3) color posters to be placed in highly visible locations for the target audience (feed stores, extension/USDA offices, other locations deemed appropriate), and 4) newspaper ads to publicize each workshop. Cost = $\$800 \times 5 \text{ workshops} = \$4,000$.
- Facilities rental—We are projecting a \$200/workshop facilities rental fee. This will cover the cost of renting a facility large enough to accommodate workshop participants. Cost = $\$200 \times 5 \text{ workshops} = \$1,000$
- Invited Speaker Fee—The “biomass to energy” field is an emerging and dynamic market. We will invite and pay a speaker familiar with existing research and applications in the woody biomass sector to each workshop in MS. Cost = $\$250 \times 5 = \$1,250$.

Budget Justification **Richard Vlosky: LSU AgCenter**

Year 1:

Salary and fringe benefits—Project will fund Dr. Vlosky for 5% of his salary and fringe benefits of 36% for the length of this project.

Masters level graduate student; Dr. Vlosky-advisor ($\$18,000/\text{year}$) = $\$18,000$

Mail Survey: \$4,730

Postage/Printing

500*2 mailings*\$1.75/envelope

500*2 mailings*\$0.25/postcard

500*\$0.22/return envelope-survey

Copying

500*2 mailings*6 pages*\$0.37/copy

Envelopes-Printed and Purchased

500*2 mailings*\$0.25/large envelope purchase-includes printing

500*2 mailings*\$0.15/return envelope purchase-includes printing

Investigator meetings in Mississippi (2 trips): \$940

Travel (600 miles @\$0.48/mile)*2

Lodging (1 person @ \$110/night)*2

Per-diem (\$36/day for 2 days per trip)*2

Year 2:

Salary and fringe benefits—Project will fund Dr. Vlosky for 5% of his salary and fringe benefits of 36% for the length of this project.

Masters level graduate student; Dr. Vlosky-advisor (\$18,000/year) = \$18,000

Workshops in Louisiana (5)

Catering (5 LA meetings, 80 people per meeting, \$3/person refreshments, \$12/person lunch) = \$6,000

Notebooks--We estimate that 80 people will attend each workshop, and that notebook materials to participants will cost \$10 each. The LSU AgCenter will produce all notebooks and ship to the appropriate locations in both MS and LA. Cost - \$10 x 80 x 10 sites = \$8,000

Shipping—Workshop materials will be compiled at the LSU AgCenter for all workshops then sent to the appropriate location. Cost: \$40 x 10 = \$400.

Publicity of Workshops -- \$4,000

Travel-5 Workshops in Louisiana: \$1,656

Miles: \$708

Alexandria (228 miles @ \$0.48/mile):

DeRidder (344 miles @ \$0.48/mile):

Monroe (374 miles @ \$0.48/mile):

Shreveport (530 miles @ \$0.48/mile):

Baton Rouge: (local travel)

Lodging: \$660

Alexandria lodging (1 night for 1 person @ \$110/night)
DeRidder lodging (1 night for 1 person @ \$110/night)
Monroe lodging (1 night for 1 person @ \$110/night)*2
Shreveport (1 night for 1 person @ \$110/night)*2
Baton Rouge: (none)

Per-diem: \$288
Alexandria (\$36/day for 2 days)
DeRidder (\$36/day for 2 days)
Monroe (\$36/day for 2 days)
Shreveport (\$36/day for 2 days)
Baton Rouge: (none)

Investigator meetings in Mississippi (2 trips): \$940

Travel (600 miles @\$0.48/mile)*2
Lodging (1 person @ \$110/night)*2
Per-diem (\$36/day for 2 days per trip)*2

Conference Travel (\$1,200) to present paper at national meeting

Investigator Bios

H. Glenn Hughes, Ph.D., (PI)

Extension Forestry Professor, Mississippi State University Extension Service, P.O.Box 348,
Purvis, MS 39475.

Phone: (601) 704-0671; Fax (601) 794-0676; Cell: (601) 270-8729

Email ghughes@ext.msstate.edu

Glenn Hughes is responsible for various forestry educational programs in the southeast Mississippi. Specific responsibilities include developing and conducting educational programs for private forest landowners, County Forestry Associations (CFAs), Youth and 4-H, teachers, professional foresters and other natural resource professionals, Extension personnel, and the general public. He work with other state forestry and other natural resources personnel on topics of mutual interest. Dr. Hughes writes forestry publications for a variety of technical and non-technical audiences. This includes peer-reviewed publications, Extension publications, articles for general magazines and newspapers, and other sources. He works closely with County Extension personnel to develop, promote, conduct, and evaluate educational activities. Most activities center on working with private landowners and landowner groups to further sustainable management of Mississippi's forests. Specific areas of interest include longleaf pine management, forest certification, invasive species, and woody biomass utilization as a renewable energy source. Glenn currently serves on the Executive Committee of the Mississippi Forestry Association, and is Past-president of the Mississippi Association of County Agricultural Agents.

Richard P. Vlosky, Ph.D., FIWSc. (co-PI)

Director & Professor, Louisiana Forest Products Development Center

Crosby Land and Resources Endowed Professor in Forest Sector Business Development
Louisiana State University Agricultural Center
Baton Rouge, LA 70803 Phone: (225) 578-4527; Fax: (225) 578-4251; Cell: (225) 223-1931
Email: rvlosky@agcenter.lsu.edu

Richard Vlosky is Director of the Louisiana Forest Products Development Center and Crosby Land and Resources Endowed Professor in Forest Sector Business Development at the Louisiana State University Agricultural Center in Baton Rouge. He received his Ph.D. in Wood Products Marketing at Penn State University, an M.S. in International Forest Products Trade from the University of Washington and a B.S. in Natural Resources and Forest Management from Colorado State University. His areas of research and consulting include: certification & green marketing, biofuels/bioprocessing & bioenergy, domestic and international forest products marketing and business development, eBusiness and eCommerce. He has authored or co-authored over 130 refereed publications, 13 book chapters and 2 books. Dr. Vlosky has made over 350 presentations in the U.S. and 24 countries. Dr. Vlosky previously was: Vice President Sales and Marketing, Optical Data Systems, Inc., Vancouver, B.C.; General Manager, Bar Tech International Coding Systems, Inc., Vancouver, B.C.; Product Line Marketing and Planning Manager, Plum Creek Timber Co, Seattle, WA, and; Database Manager, Center for International Trade in Forest Products (CINTRAFOR) at the University of Washington, Seattle, WA. Dr. Vlosky is President of the LSU Chapter of the Honor Society of Phi Kappa Phi, Faculty Advisor for the International Student Association at LSU, member of the Board of Directors, International Cultural Center at LSU, and Sector Leader-Wood Products for the Louisiana Institute for Biofuels and Bioprocessing (LIBBi), and member of the Board of Directors for the Louisiana Forestry Association. Internationally, he is Team Leader for the Team of Specialists for Forest Products Marketing-United Nations Economic Commission for Europe/FAO in Geneva and United States representative for the International Union of Forest Research Organizations Working Group on Forest Products Marketing and Business Development.

Certification-Related Research Funding Organizations

1. Boise Cascade Corporation
2. Georgia-Pacific Corporation-Environmental and Governmental Affairs
3. Hampton Affiliates
4. Louisiana-Pacific Corporation
5. Lowe's Companies, Inc.
6. Lumbermen's Merchandising Corporation
7. John D. and Katherine T. MacArthur Foundation
8. Metafore
9. Norbord, Inc.
10. North Pacific Lumber Company
11. Plum Creek Timber Company, L.P.
12. Purdue University
13. Rayonier Corporation
14. SARE: Sustainable Agriculture Research & Education
15. SmartWood/Rainforest Alliance
16. Temple-Inland Corporation
17. Weyerhaeuser Company

Certification-Related Market Research Projects

- Temporal Study of US Certification Attitudes: 1995, 2000, 2005, 2010
- Certified Forests: Preparing Private Landowners for the Future
- Developing a Strategic Framework for Certified Tropical Wood Products in the US
- Environmental Certification Alternative Strategies for Non-Industrial Private Forest Landowners in the Southern US
- Environmental Wood Products Certification Implications for Corporate Strategy
- Forest and Wood Products Certification Perceptions of U.S. Value-Added Manufacturers and Influencers
- Forest Products Environmental Certification NZ Channel Members Perceptions and Willingness to Pay
- Implications of Timber Certification in Central America and Impacts on Sustainable Management of the Tropical Rain Forest

Partner Contact Information:

Mississippi Sustainable Forestry Initiative State Implementation Committee (SFI/SIC); Mr. Arnulfo (AZ) Zendejas, Chair, MS SFI/SIC Committee; Email: arnulfo.zendejas@plumcreek.com, Phone (601) 933-9205. AZ is chair of the SFI/SIC in Mississippi and is familiar with all aspects of SFI in Mississippi. He is a forester with Plum Creek, and he and his fellow SFI/SIC members will attend the sessions and present information.

Louisiana Sustainable Forestry Initiative State Implementation Committee (SFI/SIC). Richard (Dick) Myers, President, Louisiana Forestry Association; Email: dickmyers@boisepaper.com, Phone (318) 443-2558. Dick is President of LFA, and the SFI program in Louisiana operates under the auspices of LFA. Dick is familiar with SFI and its functioning in Louisiana, and has committed to partner in this effort. Dick is a forester with Boise Inc.

Literature Cited:

Frey, P. 2006. 2005 Louisiana Forestry Facts. Louisiana Department of Agriculture and Forestry, Baton Rouge, LA.

Henderson, J.E., I.A. Munn, G. Perez-Verdin, and D.L. Grebner. 2008. Forestry in Mississippi: the impact of the forest products industry on the post-Katrina Mississippi economy—an input-output analysis. Forest and Wildlife Research Center, Research Bulletin FO374, Mississippi State University. 31pp.

LSU AgCenter, 2009. 2008 Louisiana Summary of Agriculture and Natural Resources. LSU AgCenter, Baton Rouge.

Milbrandt, A. (2005) A Geographic Perspective on the Current Biomass Resource Availability in the United States, US National Renewable Energy Lab, TP-560-39181.

Agreement to Public Communications

Lead Organization: Mississippi State University

I, Glenn Hughes, Extension Forestry Professor, as a representative of the Mississippi State University Extension Service and a Partner in “Identifying Linkages Between Certified Forests and Emerging Biomass Markets in Mississippi and Louisiana”, hereby give the Sustainable Forestry Initiative[®] (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI[®] Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Mississippi State University Extension Service to sign this agreement.

Signed:



H. Glenn Hughes, Ph.D
Extension Forestry Professor
Mississippi State University Extension Service
15 February 2011

Co-PI Organization: Louisiana State University Agricultural Center

I, Rich Vlosky, Professor & Director, Louisiana Forest Products Development Center, as a representative of the Louisiana State University Agricultural Center and a Partner in “Identifying Linkages Between Certified Forests and Emerging Biomass Markets in Mississippi and Louisiana”, hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

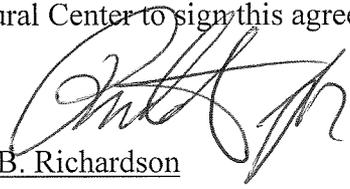
I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Louisiana State University Agricultural Center to sign this agreement.

Signed:


William B. Richardson

Name

Chancellor

Title

Louisiana State University Agricultural Center

Organization

2/14/11

Date

Field Testing a Habitat-based Approach for Addressing At-Risk Biodiversity on Fiber-Producing Lands

Organization Information

The Lead Organization in the Project must be a registered, 501(c)(3), non-profit (or Canadian equivalent) organization. Colleges and universities qualify as tax-exempt organizations. Applicants must submit proof of tax-exempt status with this application.

Lead Organization Name and Address Name, phone and email for Project Director	NatureServe Ms. Leslie Honey Vice President of Conservation Services NatureServe 1101 Wilson Boulevard, 15th Floor Arlington, VA 22209 703-908-1800 Leslie.Honey@natureserve.org
Lead Organizational Mission Statement (25 words or less)	NatureServe's mission is to develop, manage and distribute authoritative information critical to the conservation of the world's biological diversity.
Lead Organization Annual Operating Budget	\$9,387,000.00
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	<p>Brian J. Kernohan Forest Capital Partners, LLC 111 SW Fifth Avenue Suite 3850 Portland, OR 97204 (503) 200-2740 bkernohan@forestcap.com</p> <p>David Hudnall Louisiana Pacific Corporation 414 Union Street Suite 2000 Nashville, TN 37219 (615) 986-5796 David.Hudnall@lpcorp.com</p>

Project Overview

The Project must relate to or support one or more elements of the SFI 2010-2014 Program. You can download a copy of the Standard and supporting documents on our [website](#).

Under sustainable forestry certification programs, such as the Sustainable Forestry Initiative® (SFI), industry must take appropriate steps to protect at-risk biodiversity on fiber-producing lands (specifically, federally-listed T/E species and globally imperiled [G1-G2] species and communities). These private lands take a variety of forms, from concentrated industry-owned lands to multi-state areas where procurement from family forest owners is the norm. There are thousands of at-risk species and communities that could occur on these lands nationwide, but due to limited field inventories, precise locality data may be lacking. Because many at-risk species and communities are difficult to identify, foresters, woods workers, and landowners often find it challenging to consider them during ongoing forestry activities.

During 2010, we conducted a study with support from SFI in three pilot regions, the Southeast (Coastal Plain portions of NC, SC, and GA), Pacific Northwest (Cascades and Coast Ranges of OR and WA), and Great Lakes (Northern forests of MI, MN, and WI), to document habitat associations for at-risk species and communities (Comer et al. 2010). In a Microsoft Access relational database, we documented available information on the relationships between at-risk species / communities and generalized habitats (e.g., broad habitat types (riparian zones, bogs/fens, cliffs, etc.), NatureServe terrestrial ecological systems ([Comer et al. 2003, NatureServe 2010] most of which are mapped regionally and nationally), and Society of American Foresters (SAF) cover types [Eyre 1980]) as well as associations with finer-scale habitat attributes such as successional stages and/or structural condition of the vegetation. If these habitat associations could be reliably discerned in the field or from existing maps and other information sources (e.g., remote sensing, forest inventory systems), it would enhance the ability of SFI participants to efficiently apply SFI standards for conserving at-risk biodiversity. There is a need, however, to validate this proposed habitat-based approach to conserving at-risk species and communities.

We propose, in a specific multi-county location to: 1) identify Federally-listed T/E species or G1-G2 species and communities with high potential for occurrence on lands of interest to forest products industry 2) field test / validate predicted habitat associations; 3) characterize the type of past and current management practices where occurrences of at-risk species / communities are found; 4) develop sample educational material for landowners; and 5) propose a generalized process for implementing this habitat-based approach to addressing at-risk biodiversity that could be applied in any location where industry is active in North America. Accomplishing these objectives would strengthen the ability of SFI participants to implement the SFI standards for biodiversity conservation in a cost-effective manner.

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
Weyerhaeuser NR Company	Field Testing a Habitat-based Approach for Addressing At-Risk Biodiversity on Fiber-Producing Lands	\$60,004	\$105,000	Validate a habitat-based approach to conserving T&E and G1G2 species / communities in a specific multi-county area, and propose a generalized process to apply the approach elsewhere in North America.	Indicators: 4.13, 4.21, 8.1.1d, 8.1.2, 16.1.1d, and 17.1.3
National Council for Air and Stream Improvement, Inc.	Field Testing a Habitat-based Approach for Addressing At-Risk Biodiversity on Fiber-Producing Lands	\$20,000	\$105,000	Validate a habitat-based approach to conserving T&E and G1G2 species / communities in a specific multi-county area, and propose a generalized process to apply the approach elsewhere in North America.	Indicators: 4.13, 4.21, 8.1.1d, 8.1.2, 16.1.1d, and 17.1.3

*For each partner organization, please list below the contact name, title, email, phone number and include a summary of the individual and organizations qualifications and experience as it relates to your project. Also you must include a copy of the Agreement to Public Communications, which can be found at the end of this document, for each Project Partner.

Ms. Leslie Honey
Vice President of Conservation Services
NatureServe
1101 Wilson Boulevard, 15th Floor
Arlington, VA 22209
703-908-1800

Leslie.Honey@natureserve.org

Qualifications: NatureServe is a 501(c)(3) organization that works collaboratively with the Sustainable Forestry Initiative and other certification programs, the forest products industry, NGOs and other scientists to improve sustainable forestry activities through the appropriate use of biodiversity data and conservation practices. Ms. Honey is responsible for the leadership and management of the NatureServe Forest Program focusing on the implementation of conservation services from NatureServe to support various sustainable forestry efforts.

Mr. Tony Melchioris
Director, Timberlands Environmental Research
Weyerhaeuser NR Company
Weyerhaeuser WTC 1A5
PO Box 9777
Federal Way, WA 98063-9777
(253) 924-4972

tony.melchioris@weyerhaeuser.com

Qualifications: Weyerhaeuser Company is a forest products company with more than 6 million acres of forestland certified to the SFI® standard in the U.S. and supports research and management programs to conserve biodiversity across its managed forest landscapes. Mr. Melchioris has collaborated with agencies, conservation organizations, and other industry organizations on studies of forestry-wildlife relationships and biodiversity conservation, including G1/G2 species and communities.

Dr. T. Bently Wigley
Manager, Sustainable Forestry Research
National Council for Air and Stream Improvement, Inc.
PO Box 340317
Clemson, SC 29634-0317
864-656-0840
wigley@clemson.edu

Qualifications: NCASI is a non-profit organization that serves the forest products industry by providing technical information and scientific research needed to achieve the industry's environmental goals and principles. Thus, NCASI has organized and supported myriad projects to strengthen the practice of sustainable forestry. Dr. Wigley has directed a significant portion of this work including several projects designed to assist participants in the Sustainable Forestry Initiative® in their efforts to conserve Forests with Exceptional Conservation Value.

Project Details

Please provide your answers to the following questions to describe your project. You may provide an introductory narrative to your project, but the following questions must be addressed in the requested format.

1. For conservation projects, please explain how your project will improve the implementation of the SFI Standard or will benefit forest management through certification. For community projects, please explain how this Project will strengthen and involve communities in forest management.

Participants in SFI are expected to protect at-risk species and communities (specifically, federally-listed T/E species and globally imperiled [G1-G2] species and communities), and to provide information about protection of at-risk species / communities to landowners and wood suppliers. This collaborative project will test/validate a habitat-based approach to conserving at-risk biodiversity that would help SFI participants allocate scarce resources while ensuring they properly implement the SFI standard. If successfully validated, a habitat-based approach to conserving at-risk species and communities would allow SFI participants to more easily identify where at-risk biodiversity is most/least likely to occur on lands they manage; focus new survey effort more efficiently; focus conservation efforts on selected habitat types or habitat attributes; and supply foresters and landowners with regionally appropriate information for field identification and compatible management practices.

2. What activities will you and your Project partners perform to promote the outcomes of your Project and SFI Involvement in the Project?

We will provide updates and describe project outcomes as appropriate at SFI Annual Conferences, participate in a Webcast for SFI participants to discuss Project results, and communicate findings from the Project as appropriate in outlets such as a NCASI Technical Bulletin or peer-reviewed journal article, or in technical presentations at professional meetings.

3. In the table below, please list the goals for your project. For each goal, please describe the actions you will take to achieve your goal, the corresponding tangible outcomes (e.g. implementation guidance on a component of the SFI Standard, outreach and education to landowners, acres positively affected by the Project) for each goal, how you will measure your success in achieving each goal, and the portion of the requested grant funds that would be used to achieve the goal. Add rows as-needed to address all project goals.

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1:	We will work with NCASI and forest products industry partners to determine a pilot location and use the database developed in 2010 to identify at-risk species and communities likely to occur on forest lands in this pilot location. See additional details below.	Identification of a study area on which a habitat-based approach to conserving G1G2 species / communities can be validated. A list of at-risk species / communities of interest to SFI participants likely to occur in the study area.	Successful identification of a study area and willing cooperators. Successful development of a list of at-risk species / communities of interest to SFI participants likely to occur on the study area.	\$5,358.08
Goal 2:	We will use the habitat characterization database, along with spatial data depicting known locations and habitat variables, to predict locations	Predicted locations within the study area of at-risk species / communities of interest to SFI participants.	Successful development of a list of predicted locations within the study area of at-risk species / communities of interest to SFI participants.	\$48,364.80

	with a high potential for supporting habitats of at-risk species and communities within the study area. Targeted field surveys throughout these known and predicted sites will enable testing and refinement of habitat attributions, and provide an indication of the probability of occurrence for at-risk biodiversity within these habitats. See additional details below.	An assessment of the probability that at-risk species / communities of interest occur within generalized habitat types on the study area and are associated with other habitat attributes.	Submission of a report identifying the probability that at-risk species / communities occur within generalized habitat types on the study area and are associated with other habitat attributes.	
Goal 3	Identify past and current forest stewardship practices in the study area and document their known effects on at-risk species and communities. See additional details below.	An understanding of the extent to which past and current forest stewardship practices conserve at-risk species / communities. If appropriate, a list of additional stewardship practices that could cost-effectively enhance conservation of at risk-species / communities.	Submission of a report characterizing the extent to which past and current forest stewardship practices conserve at-risk species / communities and identifying any additional stewardship practices that could cost-effectively enhance conservation of at risk-species / communities.	\$13,108.89
Goal 4	Develop a sample educational brochure that describes key habitats and their attributes located and evaluated in the study area. The audience for these materials will be forest managers, woods workers, timber purchasers, and family forest owners. See additional details below. Following the field test, propose a generalized process for applying this habitat-based approach elsewhere in North America. This will document the steps taken and their apparent effectiveness. Make any necessary	A sample educational brochure that describes key habitats and their attributes located and evaluated in the study area for use by SFI participants to communicate with forest managers, woods workers, timber purchasers, etc. A description of a generalized process that can be used elsewhere in North America to apply a habitat-based approach to conserving at-risk species / communities.	Submission of a sample educational brochure that describes key habitats and their attributes located and evaluated in the study area for use by SFI participants to communicate with forest managers, woods workers, timber purchasers, etc. Submission of a generalized process that can be used elsewhere in North America to apply a habitat-based approach to conserving at-risk species / communities.	\$13,172.14
Goal 5			Submission of a report describing a generalized process that can be used elsewhere in North America to apply a habitat-based approach to conserving at-risk species / communities.	\$11,904.53
Goal 6		A refined database developed in	Submission of a refined	\$13,091.56

	refinements to the database developed in 2010. This includes the addition of any Federal T & E species that were not captured as G1-G2 species in the 2010 iteration of the database, and as time and funding allows, corrections to species/community/attribute relationships based on what is learned during field testing.	2010 for three pilot areas describing habitat relationships of at-risk species / communities.	database developed in 2010 for three pilot areas describing habitat relationships of at-risk species / communities.	
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Additional Details About Methods for Goals 1-4

1. Determine the pilot location and identify at-risk species / communities of interest. The pilot study area will be located in a one to three-county area where suitable lands owned by willing cooperators are located and access to which can be obtained. Some possible locations include a) lands in North Carolina owned by Weyerhaeuser, Resource Management Service (RMS), and the Hoffman Forest (owned by the College of Natural Resources at N.C. State University), as well as the Croatan National Forest; and b) lands in South Carolina where there are ownerships of MeadWestvaco, the Francis Marion National Forest, and others. A third option includes lands in the coastal or west-side Cascade forests of Oregon and Washington.

Once the study area has been identified, we will use the database developed with SFI support during 2010 to determine the list of at-risk species and community types that will provide a focus for field testing. We intend to share database query results with local experts, especially those most familiar with at-risk invertebrates and non-vascular plants, to ensure that our targeted list is appropriate for the pilot area.

2. Predict locations of at-risk species / communities and conduct targeted field surveys to assess probability of occurrence in generalized habitats. There are at least three general ways in which to approach this, and an initial step will be to finalize the choice of method(s). One option is to use a non-spatial description of habitats for use during field surveys. This provides limited overall efficiency in organizing field surveys, but can provide useful insights for field recognition. We will explore the potential utility of developing dichotomous keys to at-risk biodiversity habitats that will be helpful to end-users (e.g., a key applicable to a given multi-county area).

Second, some attributes described within the habitat-relations database may be mapped using available spatial data. For example, if a given at-risk species is linked to mapped ecological system types, vegetation structural stages, and selected soil types, maps depicting those variables may be combined in a 'deductive model' of that habitat (Scott et al. 2002).

Third, element occurrence records and other field observations may be used as dependent variables in 'inductive' spatial models, using niche-modeling tools such as Maxent (e.g., Peterson et al. 2007; Hernandez et al. 2008). Depending on the at-risk biodiversity habitats to be modeled, the spatial frame of analysis may be expanded to a broader geographic region and/or species may be modeled as habitat-based assemblages. Available spatial data (many layers @ ~ 30m pixel resolution) for this type of modeling include climate variables, landform, soils, drainage, vegetation type, vegetation canopy (height, cover), land use, and landscape condition for biodiversity (Comer and Hak 2009).

Field surveys will center entirely on the accessible lands within the study area. We will first revisit known locations for at-risk species and communities, to document their presence/absence and then using spatial models, complete a systematic sample of these modeled areas to determine the degree to which they

reflect habitat characteristics from the known locations. Field data collection will center on the detection/non-detection of targeted at-risk biodiversity, characterization of key habitat variables, and observations on relevant forest management applicable to landscape and stand levels.

Evaluation of field survey results will include estimated probability of at-risk biodiversity occurrences within predicted habitats, a comparison of habitat modeling approaches, and a summary of practical lessons learned for using this information in targeted field surveys.

3. Identify past / current stewardship practices and relationship to at-risk species / communities. For locations where field surveys are completed, we will document field observations of past and current forest management practices at both landscape (e.g., set-aside zones) and stand scale (apparent silvicultural treatments, road and access maintenance, prescribed fire, etc.). We will establish a check-list of common practices for use in the field. We will then meet with appropriate land managers to compare these field observations with available records and knowledge.

Although project scope limitations will preclude a detailed assessment of the effects of specific practices on the viability / integrity of the targeted at-risk biodiversity, we will seek to summarize any observed or documented effects and offer suggestions for additional efforts that could cost-effectively enhance their conservation.

4. Develop sample educational brochure. We will develop a sample brochure for one or more of the habitat types describing at-risk species/communities of interest, the primary indicators for their recognition, and conservation and management practices that currently address these species/communities. This would be a brochure, in pdf format, as an example of what procurement companies who use this habitat-based approach could do to inform family forest owners. The audience for the brochure is family forest owners and woods workers, and it should be written for this general audience. We will also provide a set of recommendations for the development of similar brochures for SFI participants to use on their own, if they should desire.

Project Timeline

Please provide a timeline for completion of the project. Projects may be multi-year in length, and should be for 9 months at a minimum. The timeline should reflect when you will deliver upon the goals and outcomes as outlined above.

Milestone for the project	projected completion date
Completion of Goal 1:	May 2011
Completion of Goal 2:	October 2011
Completion of Goal 3:	October 2011
Completion of Goal 4:	November 2011
Completion of Goal 5:	November 2011
Completion of Goal 6 and final deliverables:	January 2012

Project Budget

Please fill out the table below to illustrate the entire Project budget. SFI Inc. will not award any funds for organization overhead costs, which include but are not limited to, office rent or maintenance, utilities, temporary hires, etc. While some portion of the grant may be used to offset staff salary and benefits, this should be no more than 10% of the requested amount.

You may modify this table to fit your needs, however please ensure your budget addresses the following components:

- 1. Percent of budget allocated to each staff person working on the Project*
- 2. Total Operating costs divided up by relevant topics such as travel, meetings, communications, education & outreach etc.*
- 3. Identify any in-kind support*
- 4. Identify any matching funds allocated to this Project*

Expenditure	Amount (% of Total)	Matching Funds (NCASI)	In-Kind Contributions
Staff Labor			
Vice President - Science (Thomas Brooks)	\$2,588 (10%)	\$7,590	
Scientist V (Pat Comer)	\$2,838 (11%)	\$3,963	
Scientist IV (Milo Pyne)	\$5,988 (24%)	\$14,200	
Scientist III (Carl Nordman)	\$3,869 (15%)	\$12,879	
Scientist II (Lindsey Smart)	\$0 (0%)	\$12,488	
Conservation Database Specialist (Kristin Snow)	\$5,389 (22%)	\$0	
GIS Analyst (Jon Hak)	\$0 (0%)	\$2,999	
Communications Specialist (Marta Vanderstarre)	\$0 (0%)	\$1,682	
Systems Engineer I (Michael Jewell)	\$0 (0%)	\$7,233	
Operations Manager II (David Pasco)	\$0 (0%)	\$4,928	
Science Information Resources (Various)	\$0 (0%)	\$1,400	
Administrative Assistant (Mary-Beth Young)	\$0 (0%)	\$1,286	
TOTAL LABOR	\$20,672	\$70,649	
Operating Costs			
Material & Supplies	\$841	\$88	
Computer Hardware & Software	\$800	\$0	
Telecommunications	\$78	\$55	
Printing	\$700	\$0	
Postage & Delivery	\$21	\$70	
Travel	\$1,884	\$5,024	
Subcontractors	\$0	\$2,559	
TOTAL OPERATING COSTS	\$4,324	\$7,796	
Indirect Costs (20%)*	\$0	\$1,559	
Total	\$24,996	\$80,004	

*Indirect Costs not applied to SFI amount per grant requirements

References

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- Comer, P., D. Faber-Langendoen, S. Gawler, J. Hak, S. Menard, M. Pyne, M. Reid, K. Schulz, and Lesley Sneddon. 2009. Standardized Terrestrial Ecological Classifications and their Application to U.S. National Mapping. Poster presented at the 93rd Annual Meeting of the Ecological Society of America, Albuquerque, NM, USA. NatureServe, Arlington, VA.

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- Eyre, F. H., editor. 1980. Forest cover types of the United States and Canada. Society of American Foresters, Washington, DC. 148 pp.
- Hernandez, P.A., I. Franke, S. K. Herzog, V. Pacheco, L. Paniagua, H. L. Quintana, A. Soto, J. J. Swenson, C. Tovar, T. H. Valqui, J. Vargas, B. E. Young. 2008. Predicting species distributions in poorly-studied Landscapes. Biodiversity Conservation. 17:1353–1366
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- Peterson, A.T., M. Papes, and M. Eaton. 2007. Transferability and model evaluation in ecological niche modeling: a comparison of GARP and Maxent. *Ecography* 30: 550–560
- Scott, J. M., P. J. Heglund, M. L. Morrison, J. B. Haufler, M. G. Raphael, W. A. Wall, and F. B. Samson (eds.) 2002. Predicting Species Occurrence: Issues of Accuracy and Scale. Island Press. 868 pp.

Trees, Insects and Birds: Assessing the Impact of Intensively Managed Plantations on Biodiversity and Ecosystem Processes in the Pacific Northwest

Lead Organization Name and Address	Oregon State University Office of Sponsored Programs 308 Kerr Administration Building Corvallis, OR 97331-2140
Name, phone and email for Project Director	Dr. Matthew Betts, Assistant Prof., College of Forestry 541-737-3841 matthew.betts@oregonstate.edu
Lead Organizational Mission Statement (25 words or less)	Oregon State University promotes economic, social, cultural and environmental progress. This mission is achieved by supporting a search for knowledge and solutions, and maintaining a focus on academic excellence, particularly in Sustainable Earth Ecosystems.
Tax exempt status information for OSU	http://www.ous.edu/contdiv/fpm/tax_exempt_status.php
OSU Annual operating budget	~\$300,000,000
Reference #1 Gary Roloff Assistant Professor Department of Fisheries and Wildlife Michigan State University East Lansing, MI 48824 517-432-5236 roloff@msu.edu	Reference #2 John Marzluff Professor School of Forest Resources University of Washington Seattle, WA 98195 206-616-6883 corvid@u.washington.edu

Principal Investigators

1. Matthew G. Betts, College of Forestry, Oregon State University
2. Jake Verschuyf, NCASI
3. A.J. Kroll, Weyerhaeuser
4. Jeff Miller, College of Agriculture, Oregon State University

Project Overview

Confirmed Project Partners (contact info listed below)	Oregon State University National Council for Air and Stream Improvement Weyerhaeuser Forest Capital Partners Hancock Natural Resource Group Plum Creek Timber Oregon Department of Forestry
Project Title	Trees, Insects and Birds: Assessing the Impact of Intensively Managed Plantations on Biodiversity and Ecosystem Processes in the Pacific Northwest
Amount Requested	\$148,056
Total Project Budget	\$261,656 plus \$500,000 acquired from USDA for related research (see budget detail section).
Brief Project Summary (50 words or less)	This will be investigate the effects of intensive forest management on multiple measures of biodiversity across trophic levels. Private and state forests will be used to assess arthropod, bird and

	vegetation response and to an experimental gradient of forest management intensity.
What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))	Objective 2 (Forest Productivity), Objective 4 (Conservation of Biological Diversity including Forests with Exceptional Conservation Value). Objective 15 (Forestry Research, Science, and Technology)

Partner Contact Information:

<p>Jake Verschuyl Biodiversity Research Coordinator National Council for Air and Stream Improvement (NCASI) (360) 293-4748 jverschuyl@ncasi.org Qualifications: NCASI is an independent, non-profit research institute that focuses on environmental topics of interest to the forest products industry. Established in 1943, NCASI is recognized as the leading source of reliable data on environmental issues affecting this industry, and has more than 75 member companies throughout the US and Canada. NCASI has supported a vast quantity of research related to refining the practice of sustainable forestry. Dr. Verschuyl directs research related to studies of biological diversity in managed forests of the Pacific Northwest. His recent work includes a review of the effects of biomass harvesting on biodiversity and a regional assessment of the drivers of biodiversity.</p>	<p>A.J. Kroll Wildlife Research Biologist Weyerhaeuser, Inc. (253) 924-6580 aj.kroll@weyerhaeuser.com Qualifications: Weyerhaeuser Company is a forest products company with more than 6 million acres of forestland certified to the SFI® standard in the U.S. and supports research and management programs to conserve biodiversity across its managed forest landscapes. Dr. Kroll conducts research, in conjunction with state and Federal regulatory agencies as well as university and non-profit partners, on wildlife and biological diversity of managed forests of the Pacific Northwest.</p>
<p>Jeff Light Forest Hydrologist Plum Creek Timber Company (541) 336-6227 jeff.light@plumcreek.com Qualifications: Plum Creek is the largest and most geographically diverse private landowner in the nation. Plum Creek has long conducted its business with a strong commitment to the environment. The SFI® Principles and our manufacturing standards guide our activities in the forest and in our manufacturing facilities in the Northwest. Jeff Light is a biologist and forest hydrologist with over 20 years of experience with research on the effects of forest management on fish, wildlife, and water quality. He has helped develop new methods for assessing watershed conditions and for tailoring forest practices to fit these conditions. He has been a strong advocate for unbiased research on effectiveness of forestry best management practices.</p>	<p>Brian Kernohan Director of Policy Forest Capital Partners, LLC (503) 200-2730 bkernohan@forestcap.com Qualifications: Forest Capital Partners is a private landowner, financial manager, and steward of large-scale working forests across North America for long-term sustainability. Forest Capital Partners actively manages approximately 2 million acres of forests under sustainable forest management guidelines set forth by the Sustainable Forestry Initiative® (SFI) and is a leading grower of environmentally certified timber and active participant in non-timber forest markets. Brian Kernohan is Director of Policy at Forest Capital Partners and is responsible for policy development & advocacy, public relations & communications, and environmental compliance and management across all of Forest</p>

Capital Partners ownership and investments; including administration of Forest Capital's SFI program. Mr. Kernohan is a certified wildlife biologist and currently serves on SFI Inc.'s Resources Committee, Interpretations Committee, and is Chair of SFI's Bioenergy Task Force.

Tim McBride

Wildlife Biologist
Hancock Forest Management
(360) 866-8068
timcbride@hnr.org

Qualifications: Founded in 1985, Hancock Timber Resource Group develops and manages globally diversified timberland portfolios. As of September 30, 2010, assets under management totaled \$8.5 billion. Hancock Forest Management is committed to meeting the highest standards for timberland property management through a combination of leading forest management techniques and outstanding environmental stewardship. Every property managed in North America is certified using the SFI® (Sustainable Forestry Initiative) standard. This certification signifies that Hancock upholds environmental principles and performance measures integrating growth, harvest and reforestation of trees with protection of wildlife, plants, soil and water quality. As a wildlife biologist with HFM, Mr. McBride is responsible for the oversight of Hancock Forest Management's regulatory compliance and management of wildlife issues. He provides representation for Hancock Forest Management on wildlife concerns regarding regulation development and guides direction of wildlife research being done by trade associations.

Mitch B. Taylor

Reforestation Unit Forester
Oregon Department of Forestry
503-359-7444
mtaylor@odf.state.or.us

Qualifications: Oregon Dept. of Forestry (ODF) is a state government agency with a statutory mission to protect, manage and promote stewardship of Oregon's forests to enhance environmental, economic and community sustainability. ODF provides assistance to the Oregon Board of Forestry in the board's role to define sustainable forestry policy for all forest landowners in the state. Maintaining biodiversity on both private and state-owned forestlands has long been a key objective of ODF in its roles as: manager of 848,000 acres of public forest, enforcer of the Oregon Forest Practices Act, and technical assistance provider to private forest landowners. To inform the policies of the Board of Forestry as well as the management plans of the department, ODF has commissioned numerous studies through various universities and conducted its own research in concert with Oregon Dept. of Fish and Wildlife, USDA Forest Service and other entities.

I. Introduction

Global demand for wood resources is expected to double within the next 25 years (WRI 1999), requiring approaches that maximize timber production on a limited land base. Intensive forest management (hereafter IFM), which relies upon such practices as mechanical and chemical site preparation (i.e., herbicides), fertilization, and planting of genetically improved trees, has become ubiquitous worldwide. These practices reduce rotation ages and provide high internal rates of return on capital (Wagner et al. 2006). In addition to the economic benefits they provide, intensive plantation forests are considered beneficial to the global carbon cycle (Dixon et al. 1994), sequestering as much as 10% of the current global fossil fuel carbon emissions in northern regions (Gough et al. 2008). Further, cellulose-based biofuels may be more efficient than the traditional agricultural crops (Groom et al. 2008), prompting the United States and other countries to focus on implementing biofuel production from plantation forests (Betts et al. 2005). Finally, it has been proposed that IFM can be beneficial to regional conservation goals because intensive management practices can reduce the overall amount of area needed to produce the same amount of wood fiber, thus allowing larger areas to be set aside as ecological reserves (Foley et al. 2005). However, the potential ecological costs of IFM are poorly understood; intensive management practices may lead to species loss and the degradation of ecological communities and biodiversity (Stephens and Wagner 2007). For instance, populations of several Pacific Northwest songbird species have declined rapidly (Sauer et al. 2007); one prominent hypothesis for these declines is the increasing scarcity of floristically diverse early-seral forest that likely serves as breeding

habitat (Hagar 2007). Structurally and compositionally diverse early seral forest habitat is now the scarcest habitat in the region (Thomas et al. 2006).

Despite assertions that intensive forestry can have substantial negative impacts on biodiversity and ecosystem services, the empirical basis for these statements is weak as manipulative experiments to evaluate different hypotheses have not been conducted. In addition, most research testing effects of IFM has focused on birds and mammals. Thus the influence of IFM on the vast majority of ‘biodiversity’ remains largely undescribed. Finally, almost nothing is known about the degree to which IFM influences essential ecosystems services such as the potential for birds to control insect populations. **Without strong scientific information on the effect of IFM on biodiversity, it is very difficult to evaluate the major objective of certification – “to promote sustainable forestry practices”.**

We have three major objectives:

1. Determine the effect of intensive forest management (IFM) on insect biodiversity and abundance.
2. Determine the degree to which bird abundance is associated with insect abundance and diversity in intensively managed plantations.
3. Test the effect of birds on insect populations and subsequent rates of insect herbivory on tree growth rates.

Our overall objective is to test for ways to promote conservation of biodiversity in intensively managed forests. Our research will substantially contribute to the stated scientific needs of SFI program participants in the Pacific Northwest (PNW).

To address these objectives, we will sample insects and birds across a manipulated gradient in Douglas-fir plantation management intensity ranging from a high degree of herbicide vegetation control to an herbicide-free control where competing vegetation in plantations is permitted to establish naturally.

II. How this project will improve implementation of the SFI Standard and will benefit forest management through certification.

As the only collaborative, large scale manipulative project exploring the effect of IFM and herbicide applications on several taxa and measures of biodiversity, we can assume that the results will serve as the basis for qualitative improvements to SFI standards and forest management decisions in planted forests in general. We will primarily address SFI’s biodiversity principle (#4) “To manage forests in ways that protect and promote biological diversity, including animal and plant species, wildlife habitats, and ecological or natural community types”. However, our research also has relevance to principle #2 of “Maintaining forest productivity and health” and principle #10 “To support advances in sustainable forest management through *forestry* research, science and technology” (SFI 2010-2014 Standard). Please see Table 1. for a list of specific SFI Objectives and Indicators that will be addressed with this research.

Table 1. Project relevance to SFI 2010-2014 Standard by objective

SFI Performance Measure & Indicators addressed
<i>Performance measure 2.1, Indicator 6. Planting programs that consider potential ecological impacts of a different species or species mix from that which was harvested.</i>
<i>Performance measure 2.2, Indicator 1. Minimized chemical use required to achieve management objectives</i>
<i>Performance measure 2.2, Indicator 4. Use of integrated pest management where feasible.</i>
<i>Performance Measure 4.1. Indicator 1. Program to promote the conservation of native biological diversity, including species, wildlife habitats and ecological community types.</i>
<i>Performance Measure 4.1; Indicator 4. Development and implementation of criteria, as guided by regionally appropriate best scientific information, to retain stand-level wildlife habitat elements such as snags, stumps, mast trees, down woody debris, den trees and nest trees.</i>
<i>Performance Measure 4.2. Indicator 2. A methodology to incorporate research results and field applications of biodiversity and ecosystem research into forest management decisions.</i>
<i>Performance Measure 8.1; Indicator 1d: Program Participants shall supply regionally appropriate</i>

information or services (e.g. information packets, websites, newsletters, workshops, tours, etc.) to forest landowners, describing the importance and providing implementation guidance on: d. conservation of critical wildlife habitat elements, biodiversity, threatened and endangered species, and Forests with Exceptional Conservation Value;
Performance Measure 8.1; Indicator 2: Program to address Forests with Exceptional Conservation Value in harvests of purchased stumpage.
Performance Measure 15.1; Indicator 1d & e. Financial or in-kind support of research to address questions of relevance in the region of operations. The research shall include some of the following issues: d. wildlife management at stand- and landscape-levels e. conservation of biological diversity
Performance Measure 16.2.; Indicator 1d: Participation in or support of SFI Implementation Committees to establish criteria and identify delivery mechanisms for wood producers' training courses that address: d. awareness of responsibilities under the U.S. Endangered Species Act, the Canadian Species at Risk Act, and other measures to protect wildlife habitat(e.g. Forests with Exceptional Conservation Value);
Performance Measure 17; Indicator 3: Support for the development of regional, state or provincial information materials that provide forest landowners with practical approaches for addressing special sites and biological diversity issues, such as invasive exotic plants and animals, specific wildlife habitat, Forests with Exceptional Conservation Value, and threatened and endangered species.

III. Detailed Study Description

In cooperation with four private landowners and Oregon Department of Forestry, we have established 32 study sites, 10-16 ha in size, in the Coast Range region of western Oregon. These sites were clearcut operations in fall 2009 or spring 2010 and planted with Douglas-fir during spring 2011. Our study has followed a randomized complete block design; four plots are located within each of eight blocks, with each plot randomly assigned to one of four treatments of varying management intensity (Fig 1). Two of our treatments represent opposite extremes in IFM: (1) near complete removal of competing vegetation with herbicides, and (2) untreated control. Two other treatments represent intermediate gradients in management intensity and are based on current operational use of herbicides on private timberlands in the PNW. All four stands within each block are >300–<5000 m apart (i.e., spatially independent) but in the same geophysical environment (e.g., elevation, pre-cut vegetation composition). Herbicide spraying took place in the late summer of 2010 and will occur again in spring 2011 in order to coincide within the typical timeframe in which vegetation control takes place on commercial lands.

OBJECTIVE 1. Determine the effect of intensive forest management (IFM) on insect biodiversity and abundance.

Arthropods are useful indicators of biodiversity in forests, reflecting habitat heterogeneity and the development and recovery of forest ecosystems following disturbance (Maleque et al. 2006). Lepidoptera (butterflies and moths) are among the most diverse and taxonomically identifiable groups of insects and have important functional roles in forests as herbivores, pollinators, and prey for migratory birds (Holmes et al. 1979). Also, Lepidoptera are known to respond to forest management practices, and may be excellent indicators of forest health (Kitching et al. 2000) and surrogates for the diversity of other insect groups such as the Hymenoptera (Kerr et al. 2000). Thus, the Lepidoptera comprise a critical fauna for answering questions concerning spatial scale and biodiversity in forests (Summerville et al. 2003)

Though existing research on moths in the PNW is rare, one previous study indicates that (1) moth diversity in this region is very high (e.g., >450 species sampled during the summer months across an age-class gradient in the Oregon Coast Range), and (2) moth diversity and abundance are tied strongly to vegetation diversity and composition (Hammond and Miller 1998). Hardwood stands supported <57% of moth species richness in comparison to 10% in pure coniferous stands. Unfortunately, nothing is known about the abundances of different tree species that are required *within stands* to maintain moth diversity. Our objective is to test for thresholds in moth diversity, evenness, and abundance across the gradient in intensive forest management.

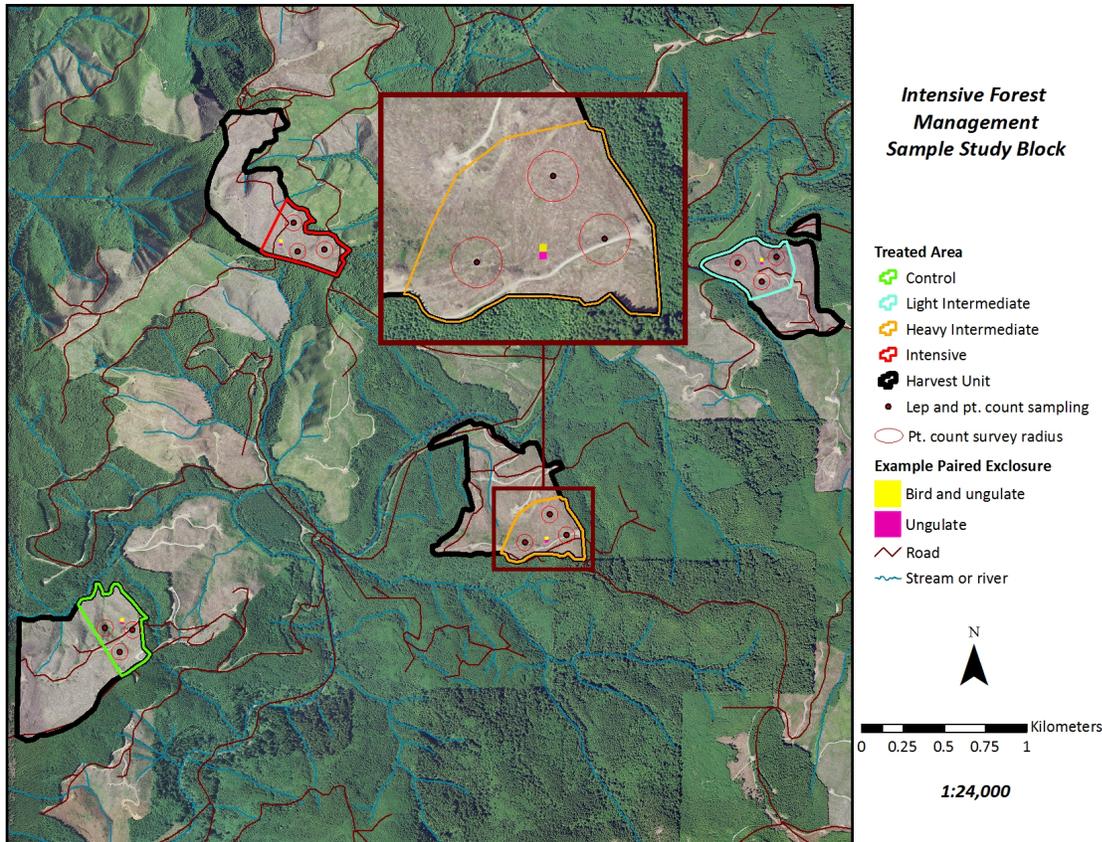


Figure 1. Sample study block with treatment units and sampling locations defined.

Methods – Within forest stand ($n=32$), we will use three 12-W universal blacklight traps (BioQuip Products, Gardena, California) powered by a 12-V (26 Amp) gel battery to sample Lepidoptera (total traps = 96). Three traps will be positioned within the stand so that they are >100 m apart. Blacklight traps are the most commonly used tool for sampling moth communities, although the method is biased toward collecting light-sensitive species. Moths attracted to the UV lights will be killed inside the traps with ethyl acetate and Dichlorvos killing agents. Because weather conditions have an important effect on moth trapping efficiency, we will not sample during rainy periods or when temperatures are < 10°C. Moths will be identified to species when possible based on taxonomic keys and vouchered specimens (Dr. Miller’s lab has extensive experience in identification).

We will use recently developed statistical models that account for imperfect detection of individual species to estimate moth community richness (Zipkin et al. 2009). We will also test for thresholds in the abundance of more commonly captured species (occurring at >10% of sites) as a function of vegetation conditions surrounding the traps (e.g., hardwood canopy cover, tree species diversity; see ‘Vegetation measurements’ below)(for example see Betts et al. 2010).

OBJECTIVE 2: Determine the degree to which bird abundance is associated with insect abundance and diversity in intensively managed plantations.

The extent and quality of early-seral broadleaved hardwood habitat has declined in-step with the intensification of forest management practices in the Pacific Northwest (Thomas et al. 2007). Not surprisingly, concern has arisen over the population viability of organisms that use broadleaved hardwoods as habitat, including several declining songbirds that are now listed as species of conservation concern in the PNW (Sauer et al. 2007). Our existing manipulative study will test whether IFM influences songbird abundance and productivity (see Bird Research Methods below). Our preliminary results indicate that highly intensive management (i.e., hardwood canopy cover <6%) results in decreased bird abundance (Ellis and

Betts In Press). **We are seeking funds to test whether these decreases are due to declines in food (i.e., insect) availability in intensively managed plantations.**

We will quantify invertebrate biomass every week during the breeding season to estimate the availability of insect food resources. Sampling methods for invertebrates will match the foraging substrates used by common bird species in early seral forest of Oregon; malaise traps will be used to sample flying invertebrates available to flycatchers and other aerial insectivores; restricted leaf area searches (see Rodenhouse et al. 2003 for details of sampling procedure) will be used to sample invertebrates on vegetation available to gleaning species such as warblers; and pitfall traps will be used to sample invertebrates used by the thrush and other ground-foraging species (see Cooper and Whitmore 1990). Invertebrate sampling on each plot will take place using a sampling design that is stratified relative to dominant plant type (i.e., Douglas-fir or hardwood). Invertebrate sampling efforts will be focused on point count locations. We will only identify insects to order as our primary interest in this part of the research is insect biomass as a prey base for birds.

Bird Census Methods – Three bird census points will be located with at least 130 m separation between adjacent points. During each survey year, points will be sampled three times during the breeding season (25 May- 4 July). The survey order and observer will be varied throughout the season to avoid associated biases. Data will be recorded consistent with the point count survey guidelines described by Ralph et al (1995) within a 10-min time interval and a 50m survey radius. Observers will record every bird seen or heard with an associated first detection distance from the census point. We propose estimating avian species occupancy and species richness using a multi-species hierarchical modeling approach (Zipkin et al. 2010). This method allows for species occupancy to be modeled while accounting for imperfect detection of species as a way to calculate species richness that includes species that were not detected.

Vegetation Sampling Methods –Vegetation response to treatments will be measured in both years of the study using 400 m² fixed radius (11.3 m) plots. Protocols will be relevant to forest managers and required as inputs to our timber growth projection models (e.g., stem density, ‘stocking’, percent seedling survival) and to songbirds (e.g., broadleaf vegetation cover, shrub biomass). Three 5-m radius vegetation plots will be established within each of our 50 m radius point counts.

Statistical Methods – We will model bird abundance as a function of (1) vegetation structure, (2) vegetation composition, (3) insect biomass using an occupancy modeling approach (MacKenzie et al. 2002). Occupancy modeling takes into account potential biases caused by imperfect detection. We will also test the relationship between biomass of different insect orders as a function of our forest management treatments.

OBJECTIVE 3: Test the effect of birds on insect populations and subsequent rates of insect herbivory on tree growth rates.

Trophic cascades, where effects at one trophic level indirectly impact other levels, can have important implications for the functioning of terrestrial ecosystems (Pace et al. 1999). Some previous work from other systems indicates that birds may decrease insect abundance (Holmes et al. 1979), which in turn can increase plant growth and productivity in diverse terrestrial systems (Mooney and Linhart 2006).

In regenerating forests of the PNW, many species of insectivorous birds require deciduous hardwood species for foraging and/or nesting substrates during the summer breeding season (Hagar 2007; see above). However, these birds and their offspring have diets that include both herbivorous invertebrates and their insect predators, including species that are found on broadleaved hardwoods (Hagar 2007), as well as Douglas-fir saplings (Hagar et al. 2007; Betts, unpublished data). If IFM reduces bird abundance and diversity, and birds play a functional role in reducing insect herbivory, the most intensively managed stands should exhibit the highest rates of tree herbivory. Under this hypothesis, IFM should thus have indirect negative effects on conifer growth by increasing insect herbivory. Our research will directly test this hypothesis. We predict that trees where birds have been excluded will: (i) exhibit greater insect abundance, (ii) show higher rates of insect herbivory, and (iii) have slower growth rates, than controls where birds are allowed access. Differences between bird-excluded sites and controls will be the greatest in the least intensively managed stands.

Methods – On each of the 32 manipulative study plots described above we will place commercial-grade 15-mm mesh netting (JA Grigson Trading Pty Ltd, Lonsdale, South Australia) over 225 m² subplots that will be

randomly placed within the study plot. Out of necessity, ungulates will be excluded from bird exclosures. Therefore we will also erect ungulate exclosures to serve as controls (also randomly placed within our study sites). Netting will be erected on study plots shortly after replanting occurs and prior to the arrival of the arrival of migrant breeding birds (i.e., mid-April). Most previous studies have excluded birds at much smaller spatial scales—typically 0.003 ha or smaller (Holmes et al. 1979). This is problematic because birds outside small exclosures may still exert considerable influences on the number of insects that can potentially colonize a netted tree.

Once the netting is erected, we will sample invertebrates abundance in bird exclosures and controls at one week intervals until the end of the breeding season (ca. 1 August) using the methods described above (Objective 2). Douglas-fir and broadleaved hardwood trees will be sampled for arthropods at 2 m intervals in the exclosures and controls. During the final arthropod sampling, we will also quantify vegetation growth of one Douglas fir and one hardwood at each grid point following the approach used by Mooney (2006).

Objective	Activities	Tangible Outcomes	Measure Success	Grant Funds
Determine the effect of intensive forest management (IFM) on insect biodiversity and abundance.	<ul style="list-style-type: none"> • Build black light moth traps • Conduct moth sampling adjacent to point count locations 3 times during the breeding season 	<ul style="list-style-type: none"> • Scientific Publications • Presentation(s) • Workshop to generate management recommendations 	Produce science-based management recommendations on optimal amounts of IFM to maintain wood supply and biodiversity	\$148,056
Determine the degree to which bird abundance is associated with insect abundance and diversity in intensively managed plantations.	<ul style="list-style-type: none"> • Quantify invertebrate biomass near point count locations every week during the breeding season using a variety of methods. 	<ul style="list-style-type: none"> • Scientific Publications • Presentation(s) • Workshop to generate management recommendations 		
Test the effect of birds on insect populations and subsequent rates of insect herbivory on tree growth rates.	<ul style="list-style-type: none"> • Create 15m² paired exclosures in all 32 stands. • Sample arthropods on Douglas-fir and broadleaved trees in the exclosures 	<ul style="list-style-type: none"> • Scientific Publication(s) • Presentation • Workshop to generate management recommendations 	Produce a management recommendation on optimal density of hardwoods to maintain top-down bird control of insect herbivory.	

IV. Project Timeline

2011:

- *Spring*: Herbicide spray for competing herbaceous vegetation (on high management intensity treatments); Bird exclosure construction.
- *Summer*: Preliminary insect and bird data collection.

2012:

- *Spring*: Herbicide spray for competing herbaceous vegetation (high intensity treatment).
- *Summer*: Insect and bird data collection.

2012-2014:

- Final data analysis, scientific report writing, partner workshops, presentations.

V. Project Budget

Expenditure	Amount	Contributing Funds	In-Kind Contributions*
Staff Salary and Benefits (2011 & 2012)	\$14,600 (10% of project cost)		NCASI: \$33,600
Operating Costs			
Research Activities		NCASI 2011: \$40,000 NCASI 2012: \$40,000	
Moth traps	\$26,400		
Moth ID	\$36,000		
Masters student (0.25 FTE in 2011, 0.5 FTE in 2012)	\$33,693		
Masters student OPE	\$2861		
Tuition (2012)	\$13,166		
	\$8,736		
Field tech (2012)			
Transportation (2011 & 2012)	\$12,600		
Total	\$148,056	\$80,000	\$33,600

* 0.1 % of PI salary + 0.46 in benefits (OPE)

Budget narrative: We request salary for the PI (Betts) at 0.05 FTE each year. Other personnel expenses (OPE) are 0.45 and 0.47 in years 1 and 2. Moth traps required for nocturnal sampling are \$275 each and we will use 96 for a total of \$26,400. We will contract a taxonomy expert at OSU for a flat rate of \$18,000/ year in each year. A Masters student will be in charge of the fieldwork in both years, but we only require funding for 0.25 FTE in 2011 (0.5 in 2012). We request one full year of tuition for the Masters student. One truck will be required (along with gas) for the 3.5 month field season in each year (total = \$12,600). We will also hire a field tech in the second year (\$2600/ mo. over 3 months) to assist with moth trap collection and diurnal arthropod collection. OPE is 0.12 for the field tech for a total of (\$1048).

What activities will you and your Project partners perform to promote the outcomes of your Project and SFI Involvement in the Project?

In addition to peer-reviewed journal articles and standard wildlife/ecology conference presentations, interim and final results will be presented at NCASI regional conferences, and summarized in a NCASI technical bulletin. Both the NCASI conference and technical bulletin venues are designed to reach private industrial forest land owners, many of whom are SFI and NCASI member companies. In the fall of 2012, OSU and NCASI staff will hold a partner workshop to discuss results and management implications of the work with the land owners. We will also work with members of the Oregon Forest Resources Institute (OFRI), Oregon Forest Industries Council (OFIC), and the Washington Forest Protection Association (WFPA) to distribute results in a digestible format to the forest products industry throughout the Pacific Northwest. SFI will be cited as a partner and primary source of funding during any presentation or distribution of study results.

VI. Literature Cited

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Expanding the Role of Forest Certification in Bioenergy Markets

Organization Information

Lead Organization Name and Address	Pinchot Institute for Conservation
Name, phone and email for Project Director	V. Alaric Sample, (202)-797-6580, alsample@pinchot.org
Lead Organizational Mission Statement (25 words or less)	The mission of the Pinchot Institute is to strengthen forest conservation thought, policy and action by: (1) advancing sustainable forest management; (2) developing conservation leaders; (3) providing science-based solutions to emerging natural resource issues. We accomplish this through nonpartisan research, education and technical assistance on key issues influencing the future of conservation and sustainable natural resource management.
Lead Organization Annual Operating Budget	Total Revenue & Support (income from all sources for the most recently completed year): \$1,949,865 Fiscal Year End Date: December 31, 2009
Two references	Reed Wills, President, ADAGE Biopower; reed.wills@duke-energy.com; 610-358-4790 Ed Gee, National Partnership Coordinator; eagee@fs.fed.us; (202) 205-1787

Project team¹

Dr. V. Alaric Sample – President, Pinchot Institute for Conservation. Al has served as President of the Pinchot Institute for Conservation in Washington, DC since 1995. He is a Fellow of the Society of American Foresters, and a Research Affiliate on the faculty at the Yale School of Forestry and Environmental Studies. His research interests are in organizational systems for advancing sustainable forest management, including policy frameworks, market-based systems, and evolving models for forest management planning and decision making. Sample earned his doctorate in resource policy and economics from Yale University (1989). He also holds an MBA and a Master of Forestry from Yale, and a Bachelor of Science in forest resource management from the University of Montana. His professional experience spans public, private, and non-profit organizations, including the U.S. Forest Service, Champion International, The Wilderness Society, and the Prince of Thurn und Taxis in Bavaria, Germany. He specialized in resource economics and national forest policy as a Senior Fellow at the Conservation Foundation in Washington, DC, and later as Vice President for Research at the American Forestry Association.

David Refkin – President, Green Path Sustainability Consultants. As President of GreenPath Sustainability Consultants, David serves a broad base of clients with interests in forestry, recycling, climate change and sustainability in the business sector. David has worked on forestry and sustainability issues internationally for over 20 years. Most recently he led the Heinz Center’s efforts working with the Pinchot Institute on the recently published “Forest Sustainability in the Development of Wood Bioenergy in the U.S. Previously at Time Inc. in both paper purchasing and sustainability roles he was responsible for increasing the percentage of certified fiber in Time Inc’s paper from 25 to over 70% and helped expand the role of certification on private and public lands in the United States, Canada and in Europe. David has interacted with a broad array of stakeholders including government, certification organizations, foresters, landowners and the forest products industry. He served on the Board of Trustees, Treasurer and member of the Executive Committee for the H. John Heinz III Center for Science, Economics and the Environment and served as President of the National Recycling Coalition from 2006 to 2009. David holds a BS in Accounting from SUNY- Albany, an MBA in Finance from Iona College and attended NYU’s Strategic Environmental Management program.

Brian A. Kittler – Bioenergy Project Director, Pinchot Institute for Conservation. Brian’s current work examines the extent to which various approaches to wood-biomass utilization can support renewable energy development, sustainable natural resource-based communities, and the improved management and conservation of forest resources. Over the last few years Brian has helped lead a broad-based multi-sector policy dialogue to identify appropriate mechanisms to help ensure that as markets for wood-based energy develop, they remain closely aligned with principles of sustainable forest management. He

¹ Note of clarification regarding project partners: SFI program participants will be directly involved on the project advisory panel and during related project tasks.

holds a Bachelor of Arts in Environmental Policy from Colby College and a Master of Science in Environmental Management from the Johns Hopkins University.

Dr. Zander Evans – Director of Research, The Forest Guild. The Forest Guild promotes ecologically, economically, and socially responsible forestry as a means of sustaining the integrity of forest ecosystems and the human communities dependent upon them. As Research Director at the Forest Guild, Dr. Zander Evans directs and conducts research that supports on-the-ground implementation of ecological forestry by Guild members across the country. Research at the Guild is a complement to Guild forester's in-depth, place based experience with the land. Zander's current research includes studies on sustainable biomass removal, the carbon impacts of forest management, and management strategies for mixed-conifer forests. He has a strong record of publications in peer-reviewed journals such as *Forest Ecology and Management* and *Climatic Change*. One of his recent journal articles, "A Synthesis of Biomass Harvesting and Utilization Case Studies in US Forests" provides a national context for this project. In addition, he has authored and contributed to numerous reports for the Forest Guild such as *An Assessment of Biomass Harvesting Guidelines* and *Ecology of Dead Wood in the Southeast*. He is the principal investigator on a project funded by the Joint Fire Sciences Program to create a guide to fuel treatment practices in mixed-conifer forests in California and the southwest.

Project Overview

Confirmed Project Partners	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
Pinchot Institute, Green Path Sustainability Consultants, Forest Guild. SEE CLARIFICATION FOOTNOTE ON PAGE 1.	Expanding the Role of Forest Certification in Bioenergy Markets	\$120,000 over two years	\$240,000 over two years	Project will increase the collective knowledge among biomass supply chain participants about the barriers and opportunities for SFI certification to play a significantly expanded role in bioenergy market growth. Project will synthesize relevant literature and stakeholder perceptions, provide consultation to supply chain participants, facilitate a multi-sector dialogue, and develop strategic communications resources.	Project relates to all SFI program standard outputs

Introduction

Demand for energy wood is growing and is international in scope. By 2050 world consumption of bioenergy is expected to increase by as much as four to six times current levels (Faaij *et al.*, 2007; Gurgel *et al.*, 2007). In the U.S., if existing and previously proposed renewable energy goals are to be met, it would require more than a doubling of the current wood harvest in the U.S. (Pinchot Institute and Heinz Center, 2010). In the Lake States stakeholders report that the region's early leadership on forest certification and the development of biomass harvesting guidelines limits the risk of future supply disruptions and potential for controversy over sustainability, helping to minimize risk for energy investors (Pinchot Institute and Heinz Center, 2010).

European demand for biomass from North America continues to expand. Imports already play a significant role in Nordic countries where biomass coming from as far away as British Columbia already accounts for nearly a quarter of the total biomass supply in Finland and Sweden (Nilsson *et al.*, 2004; Swedish Energy Agency, 2008; Junginger *et al.*, 2008). In Britain, two facilities totaling 600 MW of biopower are in the late phases of planning. These plants are projected to consume six million green tons of imported wood chips annually. Some analysts suggested that as much as 20 million tons of biomass could be sourced by the United Kingdom over the next decade if British renewable energy goals are to be met. More than a third of this new British biomass supply is forecasted to come from the southeastern U.S. in the form of woodchips or densified biomass (Pinchot Institute, 2009).

Just as bioenergy markets have emerged, so too have concerns about forest sustainability. Debates continue about different aspects of the sustainability of forest bioenergy. In the U.S. six states have already developed voluntary guidelines for the

harvest and retention of forest biomass to protect soil fertility, wildlife habitat, water quality and other resource values, and more states are considering similar guidelines (Evans *et al.*, 2010). However, as the nation moves to promote the use of forest biomass for energy production, a key piece of the puzzle has been neglected: certified forests.

Certification is frequently mentioned in discussions about sustainability of forest biomass for energy, but has remained on the periphery. There are some indications that this is beginning to change. In the U.S., policy is beginning to call on forest certification systems to ensure the sustainability of forest bioenergy. At the state level, examples include; Vermont now requires all school boilers to use certified fiber and New York State includes certified biomass as an approved approach to ensuring sustainability of new bioenergy projects. At the federal level, the most significant legislative proposal introduced during the last Congress defined certified fiber as a legitimate source of “renewable biomass” that is linked to market-based energy incentives. Some have even pointed to certification as a means to help ensure that bioenergy options remain climate friendly.

At the international level, efforts to develop criteria and indicators to address sustainability concerns related to bioenergy (e.g., the Roundtable on Sustainable Biofuels and IEA task 31) have largely been driven by increased international trade in liquid biofuels from agriculture. Wood has not been a focus of an international dialogue on the sustainability of bioenergy markets despite the fact that these markets are international in scope, and that effective criteria and indicators already exist within certification programs. There is some indication that European renewable energy and climate policies will begin to require that wood in biomass supply chains comes from certified sources. What does this mean for forest landowners in North America looking to meet the expanding demands of Europe? This project will answer this question and address the larger issue of the role of certified forests in the international wood biomass market. We will build off of the Pinchot Institute’s strong background in sustainable wood-based bioenergy and forest certification to focus on the barriers and opportunities for SFI certified fiber in emerging biomass markets.

This Project will focus on the following strategic focus areas:

1. Increasing the percentage of certified fiber in international biomass supply chains
2. Disseminating forest biomass harvesting practices in the U.S.
3. Exploring market opportunities for certified fiber in helping to ensure that bioenergy remains climate friendly

Ensuring forest sustainability during bioenergy development in the U.S.

Between 2008 and 2010 the Pinchot Institute for Conservation and the Heinz Center for Science, Economics, and the Environment convened a policy dialogue involving over 280 expert participants engaged in wood bioenergy markets, and centered on issues of forest sustainability in developing wood bioenergy markets in the U.S. In addition to over 30 contributed papers addressing various aspects of forest sustainability and bioenergy, the dialogue held five policy workshops, a national workshop in February 2009 and subsequent regional workshops in the South, Great Lakes, Interior West, and the Pacific Coast (see full report <http://www.pinchot.org/bioenergy>). Relevant findings that emerged from this dialogue include:

- There is a need for adequate environmental safeguards to address the more intensive type of wood harvesting that is done for energy purposes and nongovernmental forest certification programs have potential to meet this need.
- U.S. and Canadian energy companies generally respond well to the concept of forest certification, but are often unaware of the specifics of what certification programs entail. This knowledge gap has contributed to a limited amount of certified wood entering the energy wood supply chain thus far. Despite this, some energy companies participating in the Pinchot and Heinz dialogue have already begun to write sustainable sourcing requirements (including a preference for certified fiber) into biomass supply agreements.
- Certification auditors report that biomass harvesting guidelines developed by the states provide important benchmarks.
- International demand presents a strategic and immediate opportunity to expand the amount of certified fiber entering bioenergy markets.

Expanding European demand for biomass from North America

In some respects, the most significant growth in global wood bioenergy markets since the 1970s has occurred in Europe, in the Nordic states particularly. Initially, the majority of this growth occurred in response to a desire to increase the viability of

the European forest products sector and to stave off the high costs of fossil fuels. In the last few years, new European demand has emerged and is linked to European climate and energy policy (i.e. a European Union (EU) wide 20% renewable energy portfolio by 2020).

Presently, more than half of the EU's renewable energy comes from biomass, 80% of which is wood. European markets for wood-based energy are mature. Forest-based bioenergy already accounts for over 20% and 27% of total energy consumed in Finland and Sweden respectively. In Finland, 11% of the electricity demand is presently met by wood, with nearly half of the annual Finnish roundwood supply being consumed in bioenergy facilities (Hakkila, 2006; IEA, 2007; Roser *et al.*, 2008). In Finland and Denmark, over half of the population, mostly in dense urban settings, receives their heat from biomass district heating, with 96% of the city of Copenhagen being heated in this way. In Russia, biomass CHP provides over 30% of the nation's power, and in Austria advanced wood combustion, not wind or solar, is considered the renewable energy heavyweight, with over 1000 district heating plants installed (Hinnells, 2008; IEA, 2008; Richter *et al.*, 2009). Markets for biomass, especially densified biomass,² are also expanding into the electricity sector in a significant way with the Netherlands and the United Kingdom investing heavily in biopower and co-firing (Hawkins Wright, 2009).

Global production of wood pellets is expected to increase dramatically in the next few years with the largest increases coming from the two most significant demand sources, North America and Europe, which are projected to increase wood pellet production by an estimated 165% and 65% respectively between 2008 and 2015 (Poyry, 2009). In the U.S., much of the new increase is expected to come from large pellet mills located in the southeast designed to process large volumes of roundwood for servicing international markets, particularly European markets. In 2008 the world's largest wood pellet plant (560,000 tons/year) began operations in Florida, with 100% of product destined to a single importer in Europe. In January of 2010 a 750,000 ton per year pellet mill was announced in Georgia and has claimed that it will source from SFI certified forests (Fayette Front Page, 2010) and in December of 2010 a new pellet plant was announced for North Carolina that would produce 300,000 tons of wood pellets each year with the company reportedly seeking to develop two additional facilities of this scale. Both of these facilities are to produce pellets exclusively for European markets (NC Tech News, 2010). Other smaller pellet plants have also sprouted up in the region, some of which have expressed a commitment to source certified fiber to meet European demand for such material.

Emerging bioenergy markets in North America are intrinsically tied to European demand and vice-versa. The cost of energy is an important factor in the ultimate willingness to procure biomass at higher costs. Since Europeans are already accustomed to paying high prices for their energy and there are early indications that European energy companies are willing to pay more for their fuel. Moreover, European energy and forest policy has called for biomass supplies to come from certified forest. While citizens in the U.S. and Canada may not like sending their renewable energy overseas, European demand does represent a strategic advantage for certified fiber producers in North America. This proposal has several focus areas that will involve market participants in North America and Europe.

Project focal areas

Project focal area 1: Increasing the percentage of certified fiber in biomass supply chains

Biomass energy supply chains can be as simple as a closed loop system involving energy crops being grown, harvested, transported, and processed for the sole use of an energy facility, or as complex as sourcing biomass from multiple primary and secondary wood processing and aggregation facilities. Biomass feedstock procurement is the largest component (over 50%) of the total cost of bioenergy projects, with somewhere between 20% and 50% of the delivered costs of biomass feedstocks come from transport and handling (Altman and Johnson, 2009).

A large component of the cost variability is dependent on the number and type of entities linking supply chains. For example, if long-term supply agreements with biomass aggregators are used as a significant component of a facilities sourcing strategy, the intermediate storage and handling of biomass may add 10% - 20% to the total delivered cost. The U.S. biopower industry has historically been a waste disposal industry, relying on cheap feedstocks such as urban wood waste and forestry residues

² Densifying biomass into pellets or briquettes has five primary advantages: lower moisture content and higher conversion efficiency, higher energy content than un-densified biomass, more homogeneous content that flows better in the conveyors and other conduits of energy facilities, lower transportation costs than un-densified biomass, and densification also offers the potential to process multiple feedstocks together at one facility.

available at delivered costs below \$20/ODT.³ However, as the modern bioenergy market emerges, it is important to note that biothermal, densified biomass, and cellulosic ethanol can all afford to procure biomass at higher costs than biopower facilities, and may more readily embrace certification.⁴ For the planners of most existing or proposed bioenergy facilities, it remains unclear as to whether sourcing certified fiber will raise the delivered cost of biomass to a price point that is out of the range of what is financially feasible.

With slim profit margins in forest bioenergy markets, understanding the cost impact of different supply strategies is essential to understanding the potential for increasing the amount of certified fiber flowing to bioenergy facilities. “The design of logistics [a biomass supply] network is one of the most comprehensive strategic decision problems that need to be optimized for the long-term efficient operation of [bioenergy facilities]” (Lakovou et al, 2010). With the overarching goal being to minimize annual system-wide procurement costs, such decisions determine the sourcing, procurement structure, and purchase of biomass by taking into account the location, capacity, fuel demands, and storage needs of a given facility.

Actively choosing to procure biomass at costs that may be elevated (i.e., associated with certifying a chain of custody) is not intuitive to an industry that historically low cost supply in the form of waste disposal. Still, environmental safeguards will play an increasingly important role along the supply chain as the industry develops as external pressure increases the risk of sourcing biomass. The industry does not always know where to turn for effective and low cost safeguards that are capable of minimizing social, political, and financial risk (Pinchot Institute and Heinz Center, 2010). As more and more bioenergy facilities in the U.S. are opposed by environmental interests, community interests, and others, buyers will be more likely to show a preference for certified fiber. Given the cost structures of the nascent U.S. bioenergy industry, certified forests may play a larger role in meeting European demand in the short term.

Procurement professionals working for bioenergy facilities (either for domestic energy of biomass bound for European markets) seek to build supply networks that must be robust and flexible enough to address changes across the entire supply network. In the U.S., approximately 11% of biopower facilities rely strictly on external procurement entities who coordinate the supply chain logistics. These entities are a bridge between the biomass producers (i.e., loggers, haulers, and aggregators) and the biomass facility (Altman and Johnson, 2009). Another 11% of U.S. biopower facilities rely on internal procurement staff (Altman and Johnson, 2009). While establishing agreements with biomass aggregators can be more expensive, this strategy is becoming increasingly popular because it may reduce the risk of supply chain disruptions. This project will provide companies with a framework to scrutinize the relevance of certification in their supply chain.

- **Strategic objective** – Work directly with firms across the biomass supply chain (i.e., biomass aggregators, wood biomass densification companies, and energy companies) in North America and Europe to increase the collective knowledge about 1) how committing to sourcing biomass from certified forests will affect procurement strategies, and 2) how certification will benefit firms by improving access to overseas markets—both biomass supply and demand. A transatlantic dialogue among key actors will reveal important aspects of European bioenergy markets that are of direct relevance for markets in North America. These include:
 - the current share of certified fiber in European bioenergy markets;
 - the ability of certified sources to compete with non-certified sources in European markets;
 - the prospects for European demand for certified fiber for bioenergy markets; and
 - how established biomass supply chains in Europe may or may not conform with chain-of-custody requirements of forest certification programs.

- **Strategic approach** – Interviews, literature review, supply chain analysis and consultation with supply chain participants.
 - Utilize examples that forest product companies have employed in the past to give preference to suppliers of certified wood to inform the decisions of energy providers;
 - Analyze the potential of individual woodsheds to serve as certified biomass supply areas through interviews with certified landowners, aggregators, timber dealers, and energy companies;
 - Involve key representatives from the relevant sectors in the U.S. and Europe—forest management and policy, forest products, and bioenergy—in interviews and dialogue sessions (face-to-face networking

³ This figure is specific to biopower facilities in the coastal plain of North Carolina and is based on a personal conversation with Marvin Burchfield, Decker Energy International August 26, 2009.

⁴ See Kittler, and Beauvais, 2010 for a description of the procurement cost feasibility of various bioenergy technologies.

meetings) centered on biomass procurement strategies with a focus on Objectives 8 – 20 of the 2010 – 2014 SFI Standard;

- Communicate directly with those using SFI chain-of-custody in woodsheds with a biomass market to detail and document costs and prices along the supply chain. Where necessary the project team will consult with energy companies to relay the specifics of Objectives 8 – 20 of the 2010 – 2014 SFI Standard and identify areas where an abundance of certified land and supply chain linkages could represent a competitive advantage in emerging biomass markets.

Project focal area 2: Disseminating forest biomass harvesting practices in the U.S.

In many instances, forest management guidelines previously recommended disposing, re-distributing, burning, retaining, or masticating material, but biomass guidelines call for more specific and in some cases, different practices to be employed by foresters and loggers. New biomass harvesting guidelines in the U.S., Canada, and Europe have delineated innovative practices that are just beginning to reach the field level, while harvest regimes continue to evolve to serve biomass supply chains (Evans *et al.*, 2010). The success of biomass harvest and retention guidelines is a function of the rate of adoption. If this voluntary approach is to be an effective means of ensuring the sustainability of biomass harvests, information and education systems (training and marketing) used to inform producers at the beginning of the supply chain will be very important.

- **Strategic objective** – Evaluate and develop appropriate mechanisms in accordance with the 2010 - 2014 SFI standard (e.g., master logger training and education modules ,and a summary report/associated communications efforts) to increase the collective knowledge within the certified forest management and logging communities regarding appropriate practices for ensuring forest sustainability during wood energy harvests and the relevance of certification programs.
- **Strategic approach** – Literature review, interviews, summary report, and training modules.
 - Develop a biomass harvesting training program that informs loggers of new biomass harvesting practices and the linkage to certification programs. The SFI Standard’s commitment to training provides an excellent opportunity augment existing training programs. This grant would allow a web-based biomass harvesting training module that is now in development for the northeastern states to be expanded to the southeastern states where both certified forests and biomass markets have a strong presence (see project match from USDA). This training module would be reviewed by the project advisory panel and marketed to state forestry agencies and SFI Program participants.
 - Provide a summary report of relevant scientific research and interviews with forest scientists, this focus of the project could provide a valuable learning opportunity for the 2015 - 2019 SFI Standard revisions. The summary report will also detail how key actors (e.g., SFI auditors and SFI loggers) can use both biomass harvesting guidelines and objectives 1 – 7 and 14 – 20 of the 2010 – 2014 SFI Standard to ensure sustainable biomass removals.

Proposed scope of work and timeline

This project will have six inter-related outputs:

1. **Advisory Panel.** An interdisciplinary/multi-sector advisory panel will be convened by the project team to offer technical advice and first hand experiential data to inform the remaining five outputs throughout the project. The project team has knowledge, expertise, and a network of contacts in the energy and forestry sectors that will be utilized to develop an efficient advisory panel and throughout the interview process. Listed below are both confirmed, invited, and potential participants on this advisory panel. Note that if acceptable/appropriate, the project team would like to involve SFI board members (i.e., Tat Smith and Steve Koehn) on this advisory panel given their unique expertise, knowledge, and experience with these issues. Periodic conference calls will be the main method of communication.

Panel Member	Expertise/role in the market
Dr. Dennis Becker, University of Minnesota	Expert researcher on biomass sustainability and biomass supply chain logistics. (confirmed)
Steven J. Mueller, International WoodFuels	Supplying European and North American markets with

	certified wood pellets and founding member of the Biomass Thermal Energy Council. International WoodFuels has offices in California, Maine, and the United Kingdom, and a 200,000+ ton per year pellet manufacturing facility in Bumpass, Virginia. (confirmed)
Paul DeLong, Wisconsin State Forester	State forester for Wisconsin, a state that has both SFI certified public (state) and private lands, as well as, biomass harvesting guidelines. (invited)
Southern Group of State Foresters	Seeking participation from either the Southern Group of State Foresters or a state forester from a southern state. (confirmed interest, individual southern state forester TBD)
Hillevi Eriksson, Swedish Forestry Agency	Bioenergy expert from the EU and Sweden. (invited)

Other experts and key stakeholders have been suggested for inclusion in the advisory committee. These include representatives from: (1) a European wood importer; (2) Canadian SFI Program participant; (3) Weyerhaeuser; (4) Decker Energy; and, (5) a biomass “aggregator” and/or timber broker. Should we have the opportunity to pursue this work, we would solicit the engagement of these parties.

2. **Literature review.** The project team will compile a comprehensive review of the existing literature on biomass harvesting, biomass procurement and certification that will build upon our previous work in this area (e.g., Evans *et al.*, 2010; Pinchot Institute and Heinz Center, 2010; Kittler and Beauvais, 2010). The Pinchot Institute for Conservation and the Forest Guild are leaders on the issue of sustainable forest biomass. The Forest Guild’s report on existing biomass harvesting guidelines was influential in the dialogue on biomass guidelines and even provided the starting point for an internal working paper for the Southern Group of State Foresters (Evans *et al.*, 2010). Recent Forest Guild work on guidelines for forest types in the Northeast illustrates the power of combining rigorous ecological science with the place-based experience of professional foresters (Forest Guild, 2010). Forest Guild members have been involved in each of the state guidelines drafted to date and the Pinchot Institute recently completed a set of voluntary biomass harvesting guidelines for the state of Maryland, and is currently designing a training module for the states master logger training program associated with the education component of SFI. Our knowledge of the most current scientific literature (e.g., Auld *et al.*, 2008; Riffel *et al.*, 2011) will ground our interviews and will also be used to provide SFI with objective information on the most recent scientific information on biomass harvesting that may fit into future program standard revisions.
3. **Targeted interviews.** The project team will interview a range of actors across biomass supply chains concerning various aspects of their involvement in bioenergy markets and/or forest certification programs. These interviews will serve as a benchmark to inform the dialogue session. The following supply chain participants will be targeted for interview: SFI certified landowners and auditing firms in the U.S. and Canada, biomass aggregators/timber dealers, procurement officers and other representatives of energy/biomass densification companies, supply chain participants from the forest products industry, and European energy fiber importers. Interviewing leading environmental advocacy groups will be equally important since pressure from advocacy groups can influence corporate decisions or legislation, as has already occurred in biomass markets from the northeast, southeast, northwest, and Europe.
4. **Two dialogue sessions.** Interviews will be followed by a series of dialogue sessions that directly engage the energy industry, forest industry, biomass aggregators, other biomass buyers/sellers along the supply chain, the certified landowner community, loggers, and other relevant supply chain participants. Dialogue sessions will be intimate in scale and structured through consultation with the advisory panel and will be used to review the initial findings of the interviews and literature review and allow the advisory panel to interface with dialogue participants. A summary report for each dialogue session will be included in the final report. Initial plans are to hold one dialogue session in the northeast or north central U.S. and another in southeast U.S. For examples of previous dialogue sessions convened and facilitated by the Pinchot Institute, please see: <http://www.pinchot.org/gp/RegionalMeetings>.
5. **Direct consultation with supply chain participants.** During the life of the project both the project team and the advisory panel will provide ad hoc consultation to supply chain participants on potential models for sustainable

sourcing through certification. In addition to the two dialogue sessions, the interview process, and open and transparent nature of the project will allow energy companies and other supply chain participants to readily interface with the project team, and thus the advisory panel regarding technical issues facing supply chain participants and questions about certification.

6. **Communications tools.** These will include tools used to: (A) market to potential project to participants during the project, and (B) communicate the findings, conclusions, and recommendations following the project. Tools developed include: (1) a project fact sheet and social media/web-communications (2) a publically accessible final report that will include a detailed review of the role of certified forests in domestic and international bioenergy markets, (3) a publically accessible webinar to review the findings and conclusions of the study, (4) presentations at various professional and trade conferences by project partners.

	Year 1 (2011)			Year 2 (2012)			
	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Tentative start date – May 15, 2011							
Establish Advisory Panel							
Literature review							
Targeted interviews							
Dialogue session one							
Dialogue session two							
Direct consultation with supply chain participants							
Development of communications tools and final report.							

Project Details

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Increase the percentage of certified fiber in biomass supply chains	<ul style="list-style-type: none"> Perform a literature review and associated analysis of supply chain participants (has relevance to entire SFI program) Establish and facilitate an expert advisory panel (has relevance to entire SFI program) Complete at least 50 targeted interviews (has relevance to entire SFI program, but will be focused on the SFI fiber sourcing objectives 8-20) Plan and facilitate at least two dialogue sessions (has relevance to entire SFI program) Consultation with supply chain participants (will be focused on the SFI fiber sourcing objectives 8-20) Development of communications tools (has relevance to entire SFI program but a portion will focus on the relevance of the fiber sourcing standard and certification programs as having an embedded adaptive management mechanism) 	<ul style="list-style-type: none"> 1 literature review 1 active advisory panel with at least 5 expert panelists from the U.S., Canada, and Europe. Two dialogue sessions that explore effective models of fiber sourcing for the bioenergy industry using the SFI standard. Consultation with supply chain participants on the SFI program and certification more generally. 2 dialogue reports and 1 final report, at least 1 webinar, and various press releases and new media activities. Presentations at professional meetings and journal articles will also be considered. 	<ul style="list-style-type: none"> Successful completion and peer review of literature review by advisory panel Continued participation and interest among advisory panel members Participation in dialogue sessions by participants along the entire supply chain for the trans-Atlantic biomass trade. Number of supply chain participants offered consultancy Publication of reports and associated communications materials 	\$90,000

<p>Goal 2: Disseminate forest biomass harvesting practices in the U.S.</p>	<ul style="list-style-type: none"> • Develop biomass harvesting training program (SFI training provisions will focus on objectives 1-7 and 16, as well as the most current research on biomass harvesting practices, and where available state and/or regional biomass harvesting guidelines) • Dialogue sessions (has relevance to entire SFI program) • Development of communications tools (a portion will focus on objectives 1 – 7 and the adaptive management system embedded in certification programs, as well as the connection to biomass harvesting practices) 	<ul style="list-style-type: none"> • A generalized biomass harvesting training module that links to the SFI program’s training provisions. • Dialogue and associated reporting on sustainable land management and biomass harvesting. • 2 dialogue reports and 1 final report, at least 1 webinar, and various press releases and new media activities. Presentations at professional meetings and journal articles will also be considered. 	<ul style="list-style-type: none"> • Level of participation, as evaluated by Google Analytics for online training module and feedback from trainees. • Participation in dialogue sessions by participants along the entire supply chain for the trans-Atlantic biomass trade. • Publication of reports and associated communications materials 	<p>\$30,000</p>
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Project Budget] Expanding the role of forest certification in bioenergy markets

	Year 1		Year 2		PROJECT TOTAL
	SFI	Match*	SFI	Match*	
Staff Salary and benefits	\$ 5,000	\$ 5,000	\$ 5,000		\$ 15,000
Operating Costs					
Research Activities	\$ 30,000	\$ 7,500			\$ 37,500
Conferences	\$ 10,000		\$ 10,000		\$ 30,000
Travel	\$ 10,000		\$ 5,000		\$ 15,000
Education & Outreach	\$ 30,000	\$ 37,500	\$ 5,000		\$ 62,500
Communications	\$ 5,000		\$ 5,000		\$ 5,000
SFI contribution and current match	\$ 90,000	\$ 50,000	\$ 30,000	\$ -	\$ 170,000
Matching contributions needed		\$ 30,000		\$ 40,000	\$ 70,000
Total Budget					\$ 240,000

Contributions:

SFI - Applied \$ 120,000
 USDA CIG - Received \$ 50,000

Team member % of project team effort

Refkin 21%
 Sample 15%
 Kittler 43%
 Evans 21%

*The Pinchot Institute's previous work on sustainable wood bioenergy received contributions from the Energy Foundation, the Alcoa Foundation, the Ford Foundation, the Doris Duke Charitable Foundation, the Kendall Foundation, the MeadWestvaco Foundation, the Blandin Foundation, the Merck Family Fund, Potlatch Corporation, ExxonMobil Corporation, the Weyerhaeuser Family Foundation, the International Paper Foundation, ADAGE, Hancock Forest Management, Inc., NewPage Corporation, the California Energy Commission, the California Board of Forestry, the USDA Forest Service Office of Research and Development, and the USDA Forest Service State and Private Forestry. Based on this track record, we are confident that there is a high likelihood of successfully procuring match funds for this project.

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**SFI Inc. Conservation & Community Partnerships Grant Program
Guidance and Grant Application for Requests Over \$5,000.00**

Grant Application

Organization Information

Lead Organization Name and Address	TLC "The Land Conservancy" on behalf of the South Coast Conservation Program
Name, phone and email for Project Director	Tamsin Baker Regional Manager, Lower Mainland Region TLC – SCCP Co-Chair TBaker@conservancy.bc.ca P. 604-733-2313
Lead Organizational Mission Statement (25 words or less)	TLC protects important habitat for plants, animals and natural communities as well as properties with historical, cultural, scientific, scenic or compatible recreational value.
Lead Organization Annual Operating Budget (TLC)	\$5,000,000.00
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	B.C. Timber Sales Guy Fried Planning Forester Chinook Business Area Chilliwack B.C. 604-702-5738 Guy.Fried@gov.bc.ca TimberWest, Rick Monchak monchakr@timberwest.com P 250.729-3719 SFI certified company

Project Overview

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
TLC The Land Conservancy of BC (on behalf of the South Coast Conservation Program – SCCP) International Forest Products Limited, (Interfor), Capacity Forest Management (CapFor)	BC's Coast Region – Stewardship and Outreach for Species and Ecosystems of Conservation Concern	\$31,060.00	\$59,260.00	Building on the successfully developed tools from SFI funded 2010 activities, this project will focus on creating 20 additional factsheets and expanded outreach and stewardship training with First Nations and resource management sectors to improve	The project contributes directly or indirectly to addressing the following the SFI2010-2014 objectives: Objective 3. Protection and Maintenance of Water Resources To protect water quality in streams, lakes and other water bodies. Objective 4. Conservation of Biological Diversity including Forests with Exceptional Conservation Value

				<p>conservation and management for species at risk on the Coast Region.</p>	<p>To manage the quality and distribution of wildlife habitats and contribute to the conservation of biological diversity by developing and implementing stand- and landscape-level measures that promote habitat diversity and the conservation of forest plants and animals, including aquatic species.</p> <p>Objective 6. Protection of Special Sites</p> <p>To manage lands that are ecologically, geologically, or culturally important in a manner that takes into account their unique qualities.</p> <p>Objective 10. Adherence to Best Management Practices</p> <p>To broaden the practice of sustainable forestry through the use of best management practices to protect water quality.</p> <p>Objective 11. Promote Conservation of Biological Diversity, Biodiversity Hotspots and High-Biodiversity Wilderness Areas</p> <p>To broaden the practice of sustainable forestry by conserving biological diversity, biodiversity hotspots and high-biodiversity wilderness areas.</p>
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*For each partner organization, please list below the contact name, title, email, phone number and include a summary of the individual and organizations qualifications and experience as it relates to your project. Also you must include a copy of the Agreement to Public Communications, which can be found at the end of this document, for each Project Partner. International Forest Products, SFI certified - Gerry Fraser RPF, Manager, Sustainable Forestry Gerry.Fraser@Interfor.com, p 604.689-6870, TLC "The Land Conservancy" (on behalf of the South Coast Conservation Program - SCCP) Tamsin Baker BSc, Regional Manager, Lower Mainland Region TLC – SCCP Chair TBaker@conservancy.bc.ca P. 604-733-2313 www.sccp.ca, Capacity Forest Management, SFI certified (on behalf of 11 coastal First Nations) Ryan Clark RPF Forestry Manager RyanClark@capfor.ca P 250. 287-2120 ext 309

Project Details

1. This project will benefit forest management on both public and private land on BC's Coast Region through:
 - Implement use of the online factsheet resources on species and ecosystems at risk developed in 2010 (and now available on-line), for use in stewardship training and outreach with the public and resource professionals.
 - Ensuring that content and conservation guidance information in existing factsheets and associated online resources are updated with new information becoming available in 2011-2012.
 - Adding new factsheets to existing online resources to address the growing number of priority species and ecosystems of conservation concern for the Coast Region.
 - Delivery of stewardship training workshops to First Nations, resource and land use professionals and management interests involved with or working with or towards certification on the Coast Region.

2. The outcomes of this project will be promoted through the broader forestry sector community in BC through newsletters, continued outreach and updates to past and new workshop participants, and through collaborative delivery with partners through media releases, e-mail updates and other social networking outreach mechanisms.

3. Project Goals: Existing work has only touched on less than a third of threatened and endangered flora and fauna found on the Coast Region. This project is a key component towards the necessary education, awareness and development of up to date conservation tools to ensure best practices continue to be applied in land use management across the region as a whole.

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Keep existing tools and information on SAR and associated conservation and management guidance resources up to date and relevant with changing research and management requirements.	Review and update the existing SAR factsheets created in 2010. Issues to review include taxonomic/listing changes, management information changes, and replacing the current maps with more fine scale, GIS based imagery.	Existing SAR factsheets currently available online would be current with conservation needs and include more detailed mapping resources into 2012.	All factsheets would be reviewed and updated as necessary by the end of this project and refurbished with higher resolution mapping	\$10,970.00
Goal 2: Continue to expand the high value online resource through addition of further factsheets on priority SAR and ecosystems not currently covered through online resources.	Prioritize which species and plant communities should have factsheets created Prioritization will focus on a number of red-listed plant communities (10) and individual flora and/or fauna species (10) of conservation concern not covered in 2010.	20 new factsheets will be completed based on level of conservation priorities.	20 new factsheets will be completed and uploaded for outreach and use by public and private sector interests.	\$11,760.00
Goal 3: Continue to outreach to the resource sector, First Nations and other land use forested	Using the factsheets as an online training tool and the successful outreach model developed in previous workshops, additional	Three new sessions are being planned for forestry dependent communities on the Coast Region: Squamish,	Success will be measured by the number of workshops completed, by the number of attendees and their feedback	\$8,300.00

land base management interests regarding stewardship of species and ecosystems of conservation concern on the Coast Region.	stewardship training will be provided with a focus on First Nations participation in key areas of the Coast Region not initially reached in 2010 (e.g. West coast of Vancouver Island, Sunshine Coast, Central and North Coast).	Sunshine Coast and Tofino (west side of Vancouver Island).	and learning outcomes from participation. Overall success will be measured by the expanded and continued use of the project tools and resources by private sector and public resource management representatives and land use decision makers.	
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Project Timeline

Updating SAR factsheets:
updates)

Creating new SAR/Plant Community factsheets:

Finished draft and review:

Edited and uploaded to website:

Workshops:

Communications & project networking

Start: July-August 2011 (corresponds to BC Conservation Data Center timing for database

End: September 2011

Start: late April 2011

September 2011

October 2011

Latter part of September through early October 2011.

May – December 2011

Project Budget

Expenditure	Amount	Matching Funds*	In-Kind Contributions*
Staff Salary and Benefits	\$3,000.00 (95% TLC-SCCP, 5% Interfor)		\$10,000.00 International Forest Products mapping updates (contribution of GIS technician), ongoing project partners contributed time for quality assurance, expertise and integration of project goals and deliverables within their respective organizations activities.
Operating Costs			
Research Activities	19,760.00 (85% TLC-SCCP, 15% Interfor)	\$2,000.00 (South Coast Conservation Program	\$3200.00 (Contributed research time by Interfor on rare plant communities and creating supporting image archive).
Meetings			\$2,500.00 update meetings between project partners
Travel	\$1,000.00 (75% TLC-SCCP, 25% Interfor)		\$500.00 CapFor travel for Tofino Workshop
Education & Outreach	\$4,300.00 (75% TLC-SCCP, 25% Interfor)		\$5,000.00 local and project partner contributions for stewardship training workshops.
Communications	\$3,000.00 (75% TLC-SCCP, 25% Interfor & CapFor)		\$5000.00 Partner contributions to printing and workshop material needs, project partner marketing and communications through web and newsletters etc.
Total	\$31,060.00	\$2,000.00	\$26,200.00

*list sources and amounts of any matching funds or in-kind contributions



Agreement to Public Communications

I, Tamsin Baker, as a representative of TLC "The Land Conservancy and Co-chair for the South Coast Conservation Program and a Partner in "BC's Coast Region – Stewardship and Outreach for Species and Ecosystems of Conservation Concern", hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by TLC "The Land Conservancy" to sign this agreement.

Signed:

Name

Regional Manager, Lower Mainland Region TLC – SCCP Co-Chair
Title

TLC "The Land Conservancy" on behalf of the South Coast Conservation Program
Organization

February 14, 2011
Date



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.SM

**SFI Inc. Conservation and Community Grant Program
Agreement to Public Communications**

I, Ryan Clark RPF Forestry Manager, as a representative of Capacity Forest Management and a Partner in "BC's Coast Region – Stewardship and Outreach for Species and Ecosystems of Conservation Concern", hereby give the Sustainable Forestry Initiative[®] (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI[®] Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Capacity Forest Management to sign this agreement.

Signed:

Name

Forestry Manager
Title

Capacity Forest Management
Organization

February 14 2011
Date



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.SM

SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, Gerry Fraser RPF, Manager, Sustainable Forestry, as a representative of International Forest Products and a Partner in "BC's Coast Region – Stewardship and Outreach for Species and Ecosystems of Conservation Concern", hereby give the Sustainable Forestry Initiative[®] (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI[®] Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by International Forest Products to sign this agreement.

Signed:

Name

Manager, Sustainable Forestry

Title

International Forest Products Ltd. (Interfor)

Organization

February 14 2011

Date

[Charities and Giving](#) > [Charities Listings](#) > Search

Canadian Registered Charities - Detail Page

The Charities Directorate has not necessarily verified the information provided by the Charity.

TLC THE LAND CONSERVANCY OF BRITISH COLUMBIA

BN/Registration Number:	889028338RR0001
Charity Status:	Registered
Effective Date of Status:	1997-05-01
<u>Sanction:</u>	N/A
Language of Correspondence:	English
Designation Description:	Charitable Organization
Charity Type:	Benefits to the Community & Other
Category:	Protection of Animals
Address:	301-1195 ESQUIMALT RD
City:	VICTORIA
Province/Territory/Other:	BRITISH COLUMBIA
Country:	<u>CA</u>
Postal Code/Zip Code:	V9A3N6
Charity Email Address:	N/A
Charity Web site Address:	WWW.CONSERVANCY.BC.CA

Registered Charity Information Return: [T3010 Return](#)

Links to Web sites not under the control of the Government of Canada (GoC) are provided solely for the convenience of users. The GoC is not responsible for the accuracy, currency or the reliability of the content. The GoC does not offer any guarantee in that regard and is not responsible for the information found through these links, nor does it endorse the sites and their content. Users should be aware that information offered by non-GoC sites that are not subject to the *Official Languages Act* and to which the CRA links, may be available only in the language(s) used by the sites in question.

[New search](#)

Date Modified: 2008-11-10

Grant Request Proposal
For
SFI Inc. Conservation & Community Partnership Grant Program

New Partnerships in Natural Resource Education for High School Students

Trees For Tomorrow, Inc.
Natural Resources Specialty School
Vilas County
Eagle River, Wisconsin

Maggie Bishop
Executive Director
519 Sheridan St. East
PO Box 609
Eagle River, WI 54521

www.TreesForTomorrow.com
Maggie@treesfortomorrow.com
715-479-6456 ext. 222

Organization Information

Lead Organization Name and Address	Trees For Tomorrow
Name, phone and email for Project Director	Maggie Bishop, Executive Director 715-479-6456 maggie@treesfortomorrow.com
Lead Organizational Mission Statement (25 words or less)	To deliver balanced, objective information on the management and use of natural resources, and to teach knowledge and skills leading to responsible environmental stewardship.
Lead Organization Annual Operating Budget	\$800,000 annually
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	1) Charlie Frisk Luxemburg-Casco High School cfrisk@luxcasco.k12.wi.us 920-845-2336 ext. 430 (during school hours) 2) Pat Arndt, Science Teacher and Environmental Education Coordinator Berlin High School parndt@berlin.k12.wi.us 920-361-2000 ext. 2233 (during school hours) cell: 920-229-9463

Project Overview

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
Appleton Coated, American Transmission Company, NewPage Corporation, Futurewood Corporation (Johnson Timber Corporation), Midwest Forest Products, and Plum Creek Timber Company.	New Partnerships in Natural Resource Education for High School Students	\$30,000	\$115,500 (\$30,000 SFI + \$37,500 matching + \$48,000 in-kind = \$115,500 total project budget)	Trees For Tomorrow would reach out to high schools in the Great Lakes Region that currently do not use Trees For Tomorrow's programming. This project is intended to provide scholarships for those students to attend a field based, hands-on workshop on the wise use and management of natural resources.	This project supports Objective 17: Community Involvement in the Practice of Sustainable Forestry.

Project Partners

Appleton Coated: Jeff Lawniczak, EHS Manager. 920-687-3266. coachriz@new.racom. Appleton Coated produces high-end coated paper used in brochures, fine art books, and marketing campaigns. Appleton Coated's cooperation with Trees For Tomorrow's project is based on the need for education on sustainable and responsible forestry – so as to have resources for the future.

American Transmission Company: Todd Miller, ATC Environmental. PM. 906-779-7919. tmiller@atcllc.com. American Transmission Company owns and operates high voltage electric transmissions systems in portions of Wisconsin, Michigan, Minnesota, and Illinois. American Transmission Company partners with Trees For Tomorrow because of the need for energy education for students. Trees For Tomorrow provides and assists with classes on energy, renewable energy, and responsible consumerism.

NewPage Corporation: Tim Tollefson, Wood Supply Manager – Northwest WI. 866-336-7989 ext 24. tim.tollefson@newpagecorp.com. NewPage Corporation produces a wide variety of paper products. NewPage Corporation partners with Trees For Tomorrow because of the need for education on sustainable and responsible forestry. *NewPage Corporation also serves on the Wisconsin SFI Implementation Committee.*

Futurewood Corporation (Johnson Timber Corporation): DJ Aderman, Woodlands Manager. 715-634-1325. djaderman@johnsonstimber.com. Futurewood Corporation is a timber corporation that strives to provide sustainable forestry practices to its own land and its partners' lands. Futurewood Corporation grew from Johnson Timber Corporation. Futurewood Corporation (Johnson Timber Corporation) partners with Trees For Tomorrow because of the need for education on sustainable and responsible forestry. *Futurewood Corporation is an SFI Certified Organization.*

Midwest Forest Products: Erik Maki, President. 715-634-8955. aemaki.mfpc@cheqnet.net. Midwest Forest Products is a private corporation involved in pulpwood processing, procurement, chipping, trucking, timber harvesting, and timber management. Their main focus is to provide quality wood fiber to the paper industry. Midwest Forest Products partners with Trees For Tomorrow because of the need for education on sustainable and responsible forestry.

Plum Creek Timber Company: Bill O'Brion, Tomahawk Resource Supervisor. 715-453-6992 ext 24. bill.o'brion@plumcreek.com. Plum Creek Timber Company owns forestland, harvests timber, and manufactures lumber, plywood, and fiberboard. Plum Creek partners with Trees For Tomorrow because of the need for education on sustainable and responsible forestry. *Plum Creek Timber Company serves on the Wisconsin SFI Implementation Committee.*

Project Details

Thank you for SFI's previous and continued support to Trees For Tomorrow. Trees For Tomorrow is an accredited natural resources specialty school. Our mission is to deliver balanced, objective information on the management and use of trees, forests, and other natural resources. Our field-based programs, which place people in direct contact with natural resources that support human needs, teach knowledge and skills leading to responsible lifestyle choices. This experience inspires informed participation in policy-making and promotes stewardship and renewal of natural resources for use by future generations. Our main target group is middle through high school students from the Great Lakes Region. These students typically spend a 3-night/4-day workshop on natural resource topics. Students are boarded on the Trees For Tomorrow campus, receive three hot meals per day, instruction, and are transported to field sites.

In addition to working with students, Trees For Tomorrow also offers teacher workshops (i.e. Urban Forestry) and adult skill builder workshops (ie. Nature Photography). There are 12 total of these workshops planned for 2011. During summers Trees For Tomorrow provides naturalist programs open to the local community and general public. Each of the above programs is focused on aspects of the management and wise use of natural resources. A daycamp program was started in 2009 and is open to children locally during summers.

In mapping out high school attendance at Trees For Tomorrow, there exists a large gap area in northwest Wisconsin extending to the south-central portion of the state. In the Upper Peninsula of Michigan, only 2 high schools currently attend Trees For Tomorrow regularly. Elementary and middle schools attend from Northern Illinois, however no high schools currently attend Trees For Tomorrow workshops. Please see the attached maps of Wisconsin SFI sponsored high schools and Michigan high schools attending Trees For Tomorrow. Other organizations that sponsor high school groups have concentrated their efforts in the eastern portion of Wisconsin, leaving the "gap" areas un-served.

Trees For Tomorrow proposes a grant in the amount of \$30,000 over the next three years to create new partnerships in natural resource education for high school students in these "gap" areas of northwestern Wisconsin, northern Illinois, and the Upper Peninsula of Michigan. Trees For Tomorrow will recruit 250 new students over the next 3 years from these "gap" areas to attend a Trees For Tomorrow Workshop. Anticipated numbers of partnering high schools range from 10-18 schools over the 3 years. (Students from many different high schools generally attend a single high school workshop.) A typical workshop is a 3-night/4-day stay in dorms on the Trees For Tomorrow campus. Each day, students are transported to a variety of outdoor sites, many of which are on SFI certified forestland: Wisconsin Department of Natural Resources land and Vilas County Forest land. Many popular classes offered to students support SFI Standards and objectives:

Trees For Tomorrow Class Offered

Forest Measurements

Tree Planting/Tree Pruning

Critter Catching and Water Chemistry (Water quality classes)

Wildlife classes (Radiotelemetry, Wolves, Loons, Fisher, Pine Marten, etc.)

Invasive Species

Consumer Connections, all other classes place an emphasis

Sylvania Wilderness Area Class

SFI Objective Most Related to Class

Objective 1: Forest Management Planning

Objective 2: Forest Productivity and Objective 5: Management of Visual Quality and Recreational Benefits

Objective 3: Protection and Maintenance of Water Resources

Objective 4: Conservation of Biological Diversity including Forests with Exceptional Wildlife Value

Objective 4: Conservation of Biological Diversity including Forests with Exceptional Wildlife Value

Objective 7: Efficient Use of Forest Resources

Objectives 6 and 11: Protection of Special Sites and Promote Conservation of Biological Diversity, Biodiversity Hotspots and High-Biodiversity Wilderness Areas

Classes that are offered in these workshops will be taught by motivated, knowledgeable Trees For Tomorrow education staff, and occasionally a natural resource professional (private corporation, university, state, or federal agencies) will also instruct a class or meet students in the field. Students mimic the work performed by professional resource managers. These hands-on lessons in the field include activities such as measuring trees and deciding responsible/sustainable harvesting levels, tracking wildlife with radio telemetry equipment and drawing up habitat plans, or analyzing water samples and preparing erosion control methods. These lessons teach students decision-making skills as well as an appreciation for the difficult choices which responsible businesses and citizens must make in a resource-dependent society. Students are made aware that their decisions do matter in assuring quality of life for the future. By educating the youth with tangible lessons, we are assuring that future generations will consider the impacts that their decisions as adults will make on their communities, promoting educated involvement in policymaking, and encouraging environmental stewardship. The benefiting communities will be where these students live as adults.

To ensure that students are learning knowledge and skills on natural resources topics, instructors take a multi-level approach with evaluations. During each class the students take, a wrap-up portion is used to check the students' learning and to make extensions for its application. Students also do a "Day in Review" session nightly on topics that have been taught throughout the day. As part of Trees For Tomorrow's accreditation with North Central Association, a sample of attending schools undergo pre-, post, and 6 weeks post-testing to determine learning and retention. Instructors also use a general workshop evaluation to determine what can be improved with instruction, facilities, etc.

To promote the SFI goals, the Trees For Tomorrow Executive Director is willing to speak at the SFI Annual Conference and other identified venues. Trees For Tomorrow holds an Annual Golf Outing. All proceeds from the event will benefit the Trees For Tomorrow scholarship fund. This is an annual event that draws about 80 people from the paper and forest industry and utility organizations. SFI's support for Trees For Tomorrow's New Partnerships in Natural Resource Education for High School students would entitle SFI to the level of major sponsor at this event. SFI's name would appear on the event banner, brochures, and marketing items.

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Create new partnerships with high schools in the "gap" areas.	Trees For Tomorrow staff will contact high schools in these areas and coordinate workshops with those that are interested.	High school attendance at Trees For Tomorrow workshops will increase from the "gap" areas.	This goal will be met if the "gap" areas no longer appear to be gaps –schools that attend Trees For Tomorrow would be geographically representative of the area served.	\$3,000
Goal 2: Increase knowledge of natural resources, increase awareness of dependence on natural resources, and promote environmental stewardship.	50 students per school semester (total 250 over 3 years) will attend a 3-night/4-day workshop at Trees For Tomorrow and take field-based, hands-on classes on natural resource topics.	Students from the Great Lakes Region will increase knowledge and awareness of natural resources.	Success is measured by the Day in Review session occurring nightly with the students on points that should have been learned throughout the day. During each class, a wrap-up portion is included to check what has been learned and to make extensions for its application. For accreditation through North Central Association, Trees For Tomorrow conducts pre-, post-, and 6 weeks post tests on a sample of their students to determine learning and retention.	\$27,000

Project Timeline

This project will extend for 3 years.

- April – August 2011: Contact schools in "gap" areas to recruit and plan workshops for first schools coming in Fall 2011. This date coincides with the April launch date of the No Child Left Inside initiative through the Wisconsin Department of Public Instruction. This initiative will provide additional incentives for schools to implement an environmental education plan (J Haney, Wisconsin Center for Environmental Education, personal communication. Jan 19, 2011).
- September – December 2011: Trees For Tomorrow workshops are taken by about 50 students from the "gap" areas. Continue to recruit and plan school workshops for Spring and Fall 2012. Sample groups selected for accreditation testing.
- January – May 2012: Trees for Tomorrow workshops are taken by about 50 students from the "gap" areas. Continue to recruit and plan school workshops for Fall 2012 and Spring 2013. Sample groups selected for accreditation testing.
- June – August 2012: Contact schools and teachers in "gap" areas to continue to recruit and plan school workshops for Fall 2012 and Spring 2013.
- September – December 2012: Trees for Tomorrow workshops are taken by about 50 students from the "gap" areas. Continue to recruit and plan school workshops for Spring and Fall 2013. Sample groups selected for accreditation testing.

January – May 2013:

Trees For Tomorrow workshops are taken by about 50 students from the “gap” areas. Continue to recruit and plan school workshops for Fall 2013. Sample groups selected for accreditation testing. Develop need-based plan on future scholarship funding for schools from the “gap” areas.

June – August 2013:

Contact schools and teachers in “gap” areas to continue to recruit and plan school workshops for Fall 2013.

September – December 2013:

Trees For Tomorrow workshops are taken by about 50 students from the “gap” areas. Sample groups selected for accreditation testing. Implement need-based scholarship funding plan for future attendance for the schools from the “gap” areas.

Project Budget

Expenditure	Amount	Matching Funds*	In-Kind Contributions*	Totals
Staff Salary and Benefits	\$3,000 over 3 years (\$1,000/year)	<u>2011 Commitments*</u> \$3,000 – Appleton Coated *Similar commitments are expected in 2012 and 2013 \$3,000 x 3 years = \$9,000		\$12,000 (\$4,000/year)
Operating Costs				
Research Activities				
Meetings			\$48,000 – Trees For Tomorrow Board Members and Advisory Council volunteer hours (\$16,000 /year)	\$48,000 (\$16,000/year)
Travel				
Education & Outreach	\$27,000 over 3 years (\$9,000/year)	<u>2011 Commitments*</u> \$3,000 – Appleton Coated \$3,000 – American Transmission Company \$1,000 – Futurewood (Johnson Timber) Corporation \$1,000 – NewPage Corporation \$1,000 – Plum Creek Timber Company <u>\$ 500</u> – Midwest Forest Products \$9,500 *Similar commitments are expected in 2012 and 2013 \$9,500 x 3 years = \$28,500		\$55,500 (\$18,500/year)
Communications				
Total	\$30,000 (\$10,000/year)	\$37,500 (\$12,500/year)	\$48,000 (\$16,000/year)	\$115,500 (\$38,500/year)

TOTAL BUDGET: \$115,500 (including in-kind contributions)

Salary

Salary expenses will be for Trees For Tomorrow staff involved in recruiting and planning workshops for the schools in the "gap" area. See the table below for a breakdown of the project salary budget:

Staff	SFI	Project Partners	Totals
Assistant Director	\$1,800 (\$600/year) 6% of amount requested from SFI	\$5,400 (\$1,800/year)	\$7,200 (\$2,400/year) 6% of total project budget
Program Coordinator	\$1,200 (\$400/year) 4% of amount requested from SFI	\$3,600 (\$1,200/year)	\$4,800 (\$1,600/year) 4% of total project budget
Combined project salary	\$3,000 (\$1,000/year) 10% of amount requested from SFI	\$9,000 (\$3,000/year)	\$12,000 (\$4,000/year) 10% of total project budget

Education and Outreach

Education and outreach expenses account for 90% of amount requested from SFI. This is 48% of total project budget (If in-kind funds are not considered, education and outreach makes up 82% of the total project budget.)

Below is a breakdown of the education costs:

Price/person to attend a 3-night/4-day workshop = \$270. This includes room and board, instruction for morning, afternoon, and evening classes, and 3 hot meals per day. Trees For Tomorrow will cover transportation costs at \$8/person.

250 people over 3 years x \$270/person = \$67,500 total cost for 250 people to attend a Trees For Tomorrow workshop

\$67,500 total cost - \$27,000 SFI grant scholarship - \$28,500 matching funding scholarship = \$12,000 cost for 250 people

\$12,000 cost for 250 people / 250 people = \$48 cost per person

With school budget cuts and a down economy, Trees For Tomorrow finds it is essential to keep costs low for students and schools. Each group brings their own teachers and chaperones to help with the students. Today, teachers have to pay a substitute teacher to cover for them at school if needed. This makes an additional roadblock for teachers wishing to bring their classes Trees For Tomorrow, so it is vital to cover the cost of the teachers and chaperones as well. Future classes will also benefit from having the teacher attend a Trees For Tomorrow workshop, as he/she can use the information in the classroom for years to come.

Most schools we serve have many students whose families are unable to pay the full cost of a Trees For Tomorrow workshop. Trees For Tomorrow believes that natural resource education for everyone, regardless of income status, is essential for a sustainable future in natural resource management. Scholarship money is key to reaching these students and schools. Also, since the schools that will be attending for this project are coming for the first time, a discounted cost to the schools/students provides more incentive for the schools to experience a Trees For Tomorrow natural resources workshop. With the help of SFI, this three-year reduced workshop cost will help maintain the growing partnerships between high schools in the "gap" areas and Trees For Tomorrow.

SFI Inc. Conservation & Community Partnerships Grant Program

Guidance and Grant Application for Requests Over \$5,000.00

Grant Application

Organization Information

Lead Organization Name and Address	Department of Biological Sciences, CW 405 Biological Sciences Bldg., University of Alberta, Edmonton, Alberta, T6G 2E9 Tax exempt No.: 10810 2831 RR0001
Name, phone and email for Project Director	Meghan Anderson, 780-492-2539, meghan4@ualberta.ca
Lead Organizational Mission Statement (25 words or less)	Project mission statement: improve understanding of how forest harvesting affects the spatial overlap between moose and mountain caribou for the conservation of caribou.
Lead Organization Annual Operating Budget	n/a this is the first year this research project is running
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	1. Dr. Andrew Derocher, University of Alberta Wildlife Professor, derocher@ualberta.ca, phone 780-492-5570 2. Gregg Walker, Glacier and Mount Revelstoke National Parks Biologist, Gregg.walker@pc.gc.ca, phone 250-837-7556

Project Overview

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
1) Columbia Mountain Caribou Project 2) Ministry of Natural Resource Operations 3) Louisiana-Pacific Canada Ltd. 4) Revelstoke Community Forest Corporation 5) NSERC (Natural Sciences and Engineering Research Council) Senior Industrial Research Chair	Effect of high elevation forest harvest on the spatial overlap of mountain caribou and moose in summer	\$17,240.00	\$217,500.00	This study will investigate if forest harvesting at high elevations is causing a reduction in the spatial separation of moose and an endangered population of mountain caribou. This project has specific relevance to the conservation of caribou because the presence of moose in caribou habitat can make caribou more vulnerable to predation.	4. Protection of Biological Diversity 10. Research

Project Partners

1. Columbia Mountain Caribou Project

Contact: Robert Serrouya, Coordinator/Principle Investigator, rserrouya@telus.net

Qualifications: The Columbia Mountain Caribou Project (CMCP) is a non-governmental organisation that conducts research and monitoring on mountain caribou, an endangered ecotype of woodland caribou. Members of this project have published 14 papers on caribou ecology in international peer-reviewed journals, appendix A lists these publications. Currently the CMCP is supporting this project and another project that will study the multi predator prey system of caribou, moose, and wolf predation. The CMCP has a strong extension mandate and presents bi monthly updates to local forest planners, and annually at provincial and international conferences.

2. The Ministry of Natural Resource Operations (formerly The Ministry of Forests and Range)

Contact: Dr. Bruce McLellan, Senior Wildlife Ecologist, bruce.mclellan@gov.bc.ca

Qualifications: Bruce McLellan is a senior ecologist with the MNRO and a founder of the CMCP. He interacts weekly with forest licensees and managers because he is based in forest district offices. He received his B.Sc., MSc. and Ph.D. from the University of British Columbia. Bruce is an expert on large mammals and in particular bears and caribou. His research focus has been on linking wildlife habitat ecology to population dynamics and incorporating results into management actions. In particular Bruce has over two decades of research and conservation management experience on mountain caribou and wet-belt ecosystems. Furthermore, Bruce is the chair of the IUCN (International Union for the Conservation of Nature) Bear Specialist Group, has supervised many graduate students and publishes regularly in international journals on the ecology of grizzly bears and mountain caribou.

4. Louisiana Pacific Canada

Contact: Fernando Cocciolo, Area Forest Manager, Fernando.Cocciolo@lpcorp.com

Qualifications: Louisiana Pacific has been involved in land use planning in the southern BC area for at least the last decade. They have been strong supporters of the management and research focus of the CMCP, having provided over \$300,000 in support through stumpage fees over the last 12 years.

5. Revelstoke Community Forest Corporation (RCFC)

Contact: Michael Copperthwaite (RPF), General Manager, mike@rcfc.bc.ca

Qualifications: RCFC has similarly been involved in land use planning and supporting mountain caribou management, conservation, and research for two decades. They have implemented alternative forest harvesting trials for caribou and funded over \$50,000 for monitoring and research of mountain caribou.

6. NSERC Senior Industrial Research Chair

Contact: Dr. Stan Boutin, professor, University of Alberta, stan.boutin@ualberta.ca

Qualifications: Stan is the senior chair of the NSERC Industrial Research in Integrated Landscape Management at the University of Alberta. Stan's research interests include forestry-wildlife interactions, cumulative effect, integrated landscape management, population ecology of mammals, management of wildlife communities and predator-prey relationships. He has over 130 publications in peer reviewed journals. He is on the Alberta Caribou Research Sub-Committee, the Governance Board for the Alberta Caribou Committee, the Federal Woodland Caribou Critical Habitat Science Advisory Committee as well as a number of other committees. Stan received his Ph.D. from the University of British Columbia. Stan also previously worked for Alberta-Pacific Forest Industries as Director of Science and Technology (1998-1999), Research Program Leader (1997-1998), and Research Ecologist (1994-1995).

Project Details

Background

The southern population of mountain caribou is considered threatened at the national level within Canada (COSEWIC 2002) and endangered within British Columbia (B.C. Conservation Data Center 2010). The primary cause of mortality for mountain caribou is predation (Wittmer et al. 2005). Predation rates in many subpopulations are unsustainable and causing declines and extirpation (Wittmer et al. 2005). Most predation occurs during summer (Wittmer et al. 2005) when there is greatest spatial overlap between the few remaining caribou and the abundant moose population (Seip 1992). The high number of alternate prey species, such as moose, attracts an increased number of predators into areas used by caribou and this spatial overlap results in increased predation of mountain caribou (Bergerud and Elliot 1986; Seip 1992). It is hypothesized the reason for moose range expansion into high elevation areas is forest harvesting which leads to early-seral habitats (Seip and Cichowski 1994, Wittmer et al. 2005, 2007). Forest harvesting removes mature forests that are replaced over the short term by forbs and deciduous vegetation that may benefit non-caribou ungulates such as

moose (Bowman et al. 2010). Within the study area there are many cutblocks created within the last few decades which consist of early-seral vegetation.

Historically, caribou and moose had little spatial overlap; caribou tend to prefer landscapes of mature coniferous forests and subalpine, where as moose prefer landscapes with early-seral conditions (Bowman et al. 2010) that were rare in wet-belt ecosystems. Furthermore, in the summer mountain caribou migrate to high elevations to spatially separate themselves from other ungulates and predators (Bergerud and Page 1987, Seip 1992, McLoughlin et al. 2005). However, in a recent study in the northern Columbia Mountains, Stotyn et al. (2007) found that during the the range of caribou and moose partially overlapped during the summer but during winter moose and caribou remained spatially separated with moose restricted to valley bottoms by snow conditions. When moose move into caribou habitat, wolves likely follow because wolves are spatially correlated with moose (e.g. Cumming et al. 1994; Kuzyk 2002; Bowman et al. 2010). Thus, the spatial overlap of moose and caribou places caribou at greater risk of predation.

Despite widespread support for the hypothesis that that forest harvesting creates vegetation that favors ungulates such as moose, and thus reduces the spatial separation between moose and caribou this hypothesis is untested and it is unknown why moose are at high elevations. There is also some evidence for alternative views. Local land users suggest that moose have always been at higher elevations. Moose are frequently observed above 1500m within Mount Revelstoke and Glacier National Parks where there are no large human disturbances (G. Walker 2010 pers. comm.). Furthermore, there are rather limited studies on moose forage during the summer (Hjeljord et al. 2010) and moose habitat selection studies in mountain regions are limited. Thus it is not entirely clear if moose moving to high elevations in the summer due to human induced early-seral vegetation or if moose may have always been using higher elevation habitats.

This study will examine some of the main factors believed to contribute to moose habitat use and selection at higher elevations. This study will increase our understanding of the impacts of high elevation forest harvesting on the relationship between caribou, moose, and wolves. This is an important goal in mountain caribou conservation (B.C. Conservation Data Center 2010).

Project Location

The project will be located in south-eastern British Columbia, Canada in the northern Columbia Mountain ecoregion (51°N118°W; Demarchi 1996). The study site is located approximately 100 km north of the town Revelstoke. The size of the study area will be based on the summer range of 26 moose that have been collared, which is approximately 4500km². Within the summer home range this study will focus only on areas above 1500m, which relates to mountain caribou summer habitat (Apps et al. 2010).

1. How this study meets SFI standards

Protection of biological diversity: This project has specific relevance to the conservation of mountain caribou. This research project meets important research goals in mountain caribou conservation planning as stated by the B.C. Conservation Data Center (part of the Ministry of Environment) and is a research goal in the caribou recovery strategy (The Mountain Caribou Technical Advisory Committee 2002). This research can be used by forestry companies, land managers, and national parks to better manage moose and mountain caribou populations and habitat for the conservation of mountain caribou. The need for better management strategies is very urgent: in a recent analysis of 10 populations of mountain caribou one population was predicted to go extinct in 50 years and all others were predicted to go extinct in less than 200 years (Wittmer et al. 2010); two populations have already become extinct since 2004; and two other populations now have less than 10 animals (Hatter 2006, c.f. from Wittmer et al. 2005).

Research: This project is forestry research and will contribute to sustainable forestry by improving our knowledge of how forestry operations affect moose and mountain caribou populations. Most importantly results from this study can be used by forest companies to meet requirements to conserve biological diversity by managing the landscape for mountain caribou conservation.

2. Promotion of outcomes

This project plans to promote the outcomes of the research project in a number of ways. Project partners and SFI will be acknowledged in any published reports and public presentations. The following is planned:

a) The Columbia Mountain Caribou project will continue to run bi monthly meetings with forest planners, which occur at local government offices in Southern British Columbia. Updates of this research project will be given at these meetings.

a) A technical report which will summarize the issue, results, and possible management recommendations. The report will be submitted to SFI, the Ministry of Forestry, the Ministry of Environment, Mount Revelstoke and Glacier National Parks, and forest companies operating within the study site and other natural resource managers.

b) Public presentations of the results of the study and management recommendations at conferences, workshops, and to other interested organizations. For example, we plan to present the results for this study at the 14th North American Caribou Workshop. We also plan to make a presentation at The Columbia Mountains Institute of Applied Ecology (CMI) in Revelstoke, which is a non-profit organization that serves to connect people working in the field of applied ecology (i.e. managers, researchers, educators, academics and others). We are also happy to make a presentation at a SFI conference.

c) Publication of 1-2 papers from the project in peer reviewed journals. This will help share knowledge gained from the project with a wider scientific community and may aid in natural resource management across western Canada and will improve our understanding of moose ecology.

3. Goals

The overall objective of this study is to examine how high elevation forest harvesting may be affecting moose habitat use and selection in mountainous ecosystems and thus how moose overlap spatially with mountain caribou. Our main question is does forest harvesting at high elevations reduce the spatial separation between moose and caribou during summer, when caribou are at greatest risk of predation. We would like to examine what habitat types and vegetation moose select, what vegetation they consume and how vegetation compares between sites that moose use. There are other factors that could cause moose to be at high elevations such as temperature and predator avoidance. We believe that it is unlikely that moose are migrating to higher elevations to thermo-regulate considering the moderate climate of the Cascade Mountains and that moose are not at their southern distribution in this ecosystem. Predator avoidance could be a mechanism, however, this project will focus on the influence of vegetation and habitat types.

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1. Determine what resources (e.g. seral vegetation, forest age, riparian habitat, ect.) moose use and select for at high elevations. Specifically we will examine if moose select for cutblocks more than natural habitat types. We will also determine the average elevation of moose in the summer.	Use previously collected moose location data (global positioning system (GPS) and VHF radio collar data) and geographical information system (GIS) maps to compare the habitat variables that moose use against what is available to moose. We will focus on moose resource use at high elevations. We will also determine if there is a significant difference between the elevation of moose that are exposed to high elevation cutblocks and moose that are not exposed to high elevation cutblocks.	We will be able to examine if high elevation logging causes a difference in the elevation of moose, and thus whether they might spatially overlap with mountain caribou. In general, we will determine what characterizes moose habitat in the Columbia mountains of British Columbia. This will provide information on whether moose use logged habitat more than natural forests or natural seral habitats at high elevations. We are not aware of any other study that has focused on moose resource use at high elevations in particular.	This goal will be successful if we are able to incorporate our results into regional and provincial recovery frameworks. We are well integrated with all land management agencies in British Columbia, therefore this has a high chance of success. Furthermore, we will have been successful if we are able to present our results at conferences and publish our results in a peer reviewed journal to inform other ecologists and the public of our outcomes.	~80% (\$174,000.00)
Goal 2: Determine what plant species moose are foraging on during the summer.	We will perform a diet analysis by microhistological analysis of moose pellets.	This will indicate what plant species moose forage on during the summer, which is important for two reasons. First, we plan to use this as a basis in our study to indicate to what proportion moose are consuming particular plant species. We may be able to use this to indicate if the majority of moose forage originates from early-seral areas (e.g. cutblocks). Second, there are very limited diet analyses of moose in summer months and there are very few diet studies of moose in mountainous ecosystems. In our study areas it is relatively unknown what moose forage on in the summer months.	This goal will be successful if we are able to incorporate our results into regional and provincial recovery frameworks. We are well integrated with all land management agencies in British Columbia, therefore this has a high chance of success. Furthermore, we will have been successful if we are able to present our results at conferences and publish our results in a peer reviewed journal to inform other ecologists and the public of our outcomes.	~10% (\$21,750.00)
Goal 3: Identify what vegetation moose are selecting and compare the vegetation in different habitat types.	We will conduct vegetation surveys at locations moose have used (GPS locations) and random points. Moose location data was previously collected.	This will examine if forest harvesting creates vegetation that is different from natural early-seral vegetation that may attract moose differently at high elevations. We will compare the	This goal will be successful if we are able to incorporate our results into regional and provincial recovery frameworks. We are well integrated with all	~10% (\$21,750.00)

		vegetation in natural seral areas (e.g. burns, avalanche chutes) to cutblocks. This data will also be used to examine moose habitat selection at a fine scale. For example, this will examine if moose select for small wetland complexes within a forest.	land management agencies in British Columbia, therefore this has a high chance of success. Furthermore, we will have been successful if we are able to present our results at conferences and publish our results in a peer reviewed journal to inform other ecologists and the public of our outcomes.	
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Project Timeline

Vegetation surveys will be conducted in summer 2011, once it is snow free above 1500 meters. Concurrently, moose pellets will be collected and dried. At the end of the season the pellet samples and forage species samples will be sent to the Washington State University Wildlife Habitat Laboratory for analysis. During the winter and spring month, data will be analyzed and results published soon after.

Project Budget

Item	Description	Amount requested from SFI	Matching Funds	In Kind Support	Total \$
<i>Salary and staff</i>					
Field assistant	One field assistant to help with vegetation surveys and moose pellet collection		10,100.00 from the NSERC Industrial Research Chair		10,100.00
Project leader living expenses	Scholarship to cover tuition and living expenses		17,500.00 from NSERC scholarship		17,500.00
<i>Operating costs</i>					
Laboratory diet analysis	Moose diet analysis to be conducted at the Wildlife Habitat and Nutrition Lab in Washington	3,630.00			3,630.00
Accommodation	Accommodation during field season in Revelstoke for the field crew (2 people)	3,200.00			3,200.00
GPS	To locate vegetation	370.00			370.00

	plots				
Two way radio	Radio to communicate location on logging roads where there is still active logging	240.00			240.00
Safety beacon	SPOT personal locator device for emergency rescue			160.00 from the CMCP	160.00
Safety beacon service plan	Monthly service charges	100.00			100.00
4x4 truck	To access vegetation plots	6,800.00			6,800.00
Moose location data	Data used in project to analyze moose location in relation to habitat variables.			170,000.00 from the CMCP	170,000.00
GIS software	Software used to examine landscape level attributes in moose habitat			2,500.00 from the University of Alberta	2,500.00
<i>Travel</i>					
Fuel	Fuel for the truck to get to and from the field site	2,200.00			2,200.00
<i>Education, outreach and communication</i>					
Travel, presentation, and conferences	Costs of going to conferences and making presentations				700.00
Total Costs \$	217,500.00				
Funding requested from SFI	17,240.00				

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Appendix A

List of publications from the group of researchers with the Columbia Mountain Caribou Project

1. Apps, C. D. and B. N. McLellan. 2006. Factors influencing the dispersion and fragmentation of endangered mountain caribou populations. *Biological Conservation* 130:84–97.
2. Apps, C. D., B. N. McLellan, T. A. Kinley, and J. P. Flaa. 2001. Scale-dependent habitat selection by mountain caribou, Columbia Mountains, British Columbia. *Journal of Wildlife Management* 65:65–77.
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13. Wittmer, H. U., A. R. E. Sinclair, and B. N. McLellan. 2005b. The role of predation in the decline and extirpation of woodland caribou. *Oecologia* 144:257–267.
14. Wittmer, H.U., R.N.M. Ahrens, and B.N. McLellan. 2010. Viability of mountain caribou in British Columbia, Canada: effects of habitat change and population density. *Biological Conservation* DOI:10.1016/j.biocon.2009.09.007



**SFI Inc. Conservation and Community Grant Program
Agreement to Public Communications**

I, Meghan Anderson, as a representative of The University of Alberta and a Partner in "Effect of high elevation forest harvest on the spatial overlap of mountain caribou and moose in summer", hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by University of Alberta to sign this agreement.

Signed:

Meghan Anderson
Name

Project Leader
Title

University of Alberta
Organization

13/02/2011
Date

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:



Agreement to Public Communications.doc

Rob serrouya, Ecologist

I, _____ (Name, Title), as a representative of CMCP (Organization Name) and a Partner in research project on "Effect of high elevation forest harvest on the spatial overlap of mountain caribou and moose in summer", hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by CMCP (Organization Name) to sign this agreement.

Signed:

[Signature]
Name

Principle Investigator
Title

Columbia Mountains Caribou Project
Organization

14 Feb 2011
Date



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.SM

SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, Fernando Cociolo (Name, Title), as a representative of Louisiana-Pacific Canada, Ltd. (Organisation Name) and a Partner in "Effect of high elevation forest harvest on the spatial overlap of mountain caribou and moose in summer" (Name of Project), hereby give the Sustainable Forestry Initiative[®] (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI[®] Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Louisiana-Pacific Canada, Ltd. (Organization Name) to sign this agreement.

Signed:

Fernando Cociolo
Name

Area Forest Manager
Title

Louisiana-Pacific Canada, Ltd.
Organization

Feb. 14, 2011
Date



**SFI Inc. Conservation and Community Grant Program
Agreement to Public Communications**

I, Michael Copperthwaite, General Manager (Name, Title), as a representative of Revelstoke Community Forest Corporation (Organization Name) and a Partner in "Effect of high elevation forest harvest on the spatial overlap of mountain caribou and moose in summer", (Name of Project), hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Revelstoke Community Forest Corporation (Organization Name) to sign this agreement.

Signed:

Michael Copperthwaite
Name

General Manager
Title

Revelstoke Community Forest Corporation
Organization

February 14, 2011
Date



SUSTAINABLE FORESTRY INITIATIVE

Good for you. Good for our forests.SM

SFI Inc. Conservation and Community Grant Program Agreement to Public Communications

I, Dr. Stan Boutin, as a representative of NSERC Industrial Research Chair and a Partner in Effect of high elevation forest harvest on the spatial overlap of mountain caribou and moose in summer, hereby give the Sustainable Forestry Initiative[®] (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI[®] Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by NSERC Industrial Research Chair to sign this agreement.

Signed:

Stan Boutin

Name

NSERC Industrial Research Chair

Title

NSERC Industrial Research, University of Alberta

Organization

13/02/2011

Date

Dr. Bruce McLellan, Senior Wildlife Ecologist with The Ministry of Natural Resource Operations, is a willing partner to this project, however, he is currently unable to sign the Agreement to Public Communication at this time.

**SFI Inc. Conservation & Community Partnerships Grant Program
Guidance and Grant Application for Requests over \$5,000.00**

Grant Application

Application Requirements

- *Proposals must follow this application format.*
- *Applications cannot be longer than 10 pages (Project Partner signed agreements and Lead Organization proof of non-profit status do not count towards the 10 page maximum).*
- *You may delete all text that precedes this section and any text in italics throughout the application.*

All applications must address the following items:

Organization Information

The Lead Organization in the Project must be a registered, 501c(3), non-profit (or Canadian equivalent) organization. Colleges and universities qualify as tax-exempt organizations. Applicants must submit proof of tax-exempt status with this application.

Lead Organization Name and Address	University of Wisconsin – Stevens Point Forestry Outreach Programs College of Natural Resources University of Wisconsin- Stevens Point Stevens Point, WI 54481-3897
Name, phone and email for Project Director	John DuPlissis 715.346.4128 John.duplissis@uwsp.edu
Lead Organizational Mission Statement (25 words or less)	Provide outreach and education to Wisconsin's woodland owners on sustainable forest management and to play an important role as leaders in the management of our state's natural resources.
Lead Organization Annual Operating Budget	\$0.00
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	Gordy Mouw, NewPage Corporation <i>Gordy currently serves as Chairman of the Wisconsin SFI State Implementation Committee.</i> Gordon.Mouw@newpagecorp.com (715) Gerry Mich, Wisconsin Family Forests, Inc gerry@wisconsinfamilyforests.org (715) 213-1618

Project Overview

The Project must relate to or support one or more elements of the SFI 2010-2014 Program. You can download a copy of the Standard and supporting documents on our [website](#).

Confirmed Project Partners (list organization name only)*	Project Title	Amount Requested	Total Project Budget	Brief Project Summary (50 words or less)	What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s))
Wisconsin Department of Natural Resources, Wisconsin Woodland Owners Association, Wisconsin Tree Farm Committee, University of Minnesota Extension, Minnesota Forestry Association	Woodland Leadership Institute	\$36,000	\$72,091	The purpose of the Woodland Leadership Institute is to equip forest landowners and woodland enthusiasts to provide grassroots leadership on the issues important to the growth and development of sustainable forest management in upper Midwest.	1. Sustainable Forestry 2. Forest Productivity and Health 7. Responsible Fiber Sourcing Practices in North America 11. Training and Education 12. Public Involvement

*For each partner organization, please list below the contact name, title, email, phone number and include a summary of the individual and organizations qualifications and experience as it relates to your project. Also you must include a copy of the Agreement to Public Communications, which can be found at the end of this document, for each Project Partner.

Wisconsin Department of Natural Resources

Carol Nielsen, Private Forestry Specialist, carol.nielsen@wisconsin.gov, 608.267.7508

Carol is the Private Forestry Specialist with the Wisconsin Department of Natural Resources. She serves on the Woodland Leadership Institute’s Steering Committee which guides the implementation of the Institute and supervised the funding agreement between UWSP Forestry Outreach Programs and the WDNR from 2007 through 2010 when funding was cut due to serious budget constraints. **Wisconsin DNR is a participant in the Sustainable Forestry Initiative® program #NSF-SFIS-1Y941-S1**

Wisconsin Woodland Owners Association

Nancy Bozek, Executive Director, nbozek@uwsp.edu, 715.346.4798

Nancy is the Executive Director of the Wisconsin Woodland Owners Association. She was part of the team that developed the Woodland Leadership Institute, she serves on the Institute’s Steering Committee which guides its implementation, and helps to identify and recruit candidates for the Institute.

Wisconsin Tree Farm Committee

Shirley Bargander, Chair, shirley.bargander@wisconsin.gov, 715.359.3819

Shirley is a Team leader with the Wisconsin Department of Natural Resources’ Division of Forestry. She is a graduate of Wisconsin’s Rural Leadership Program and currently serves as the Chair of the Wisconsin Tree Farm Committee. Shirley serves on the Institute’s Steering Committee which guides its implementation, and helps to identify and recruit candidates for the Institute. **The American Tree Farm System is a partner of the Sustainable Forestry Initiative® program with a mutual recognition agreement that allow wood produced on and procured from Wisconsin Tree Farmers to be accounted by SFI participants in the "certified woodbasket."**

University of Minnesota Extension

Mike Reichenbach, Extension Educator, Reich027@umn.edu, 218.726.6470

Mike is an Extension Forestry Specialist with the University of Minnesota. Mike assists in the development of the curriculum, seminar agendas, and identifying topic specialists and speakers. Mike serves on the Institute's Steering Committee which guides its implementation and helps to identify and recruit candidates for the Institute.

Minnesota Forestry Association

John O'Reilly, President, President@MinnesotaForestry.org, 320.655.3901

John is a graduate of the Woodland Leadership Institute and currently serves as the President of the Minnesota Forestry Association. John serves on the Institute's Steering Committee which guides its implementation and helps to identify and recruit candidates for the Institute.

Project Details

Please provide your answers to the following questions to describe your project. You may provide an introductory narrative to your project, but the following questions must be addressed in the requested format.

Overview

The University of Wisconsin Stevens Point in cooperation with University of Wisconsin Extension, University of Minnesota Extension, the Wisconsin Department of Natural Resources, and Minnesota and Wisconsin woodland owner organizations provide funding and support for the Wisconsin Woodland Leadership Institute.

The Woodland Leadership Institute was created in 2001 with the goal of building leadership capacity and leadership skills of woodland owners and woodland enthusiasts and to help strengthen Wisconsin's woodland owner organizations.

Graduates of the Woodland Leadership Institute are expected to:

- Play an active role in leadership positions of woodland landowner organizations.
- Enhance forest management by non-industrial private forest landowners through peer-to-peer contact and planned activities in their local community.

The Institute is designed to educate, train, and equip non-industrial private forest landowners to become leaders in their local communities on issues important to the growth and development of forestry, sustainable forest management, and public policy in Minnesota and Wisconsin; and to help them become active in local, regional, and statewide woodland landowner organizations.

Forest Certification and the role of certification in promoting sustainable forest management are part of the curriculum of the Woodland Leadership Institute. The Wisconsin Sustainable Forestry Initiative's State Implementation Committee is a valuable resource to the Institute and Executive Committee members participate as speakers in the initial Seminar to discuss the importance and role of forest certification in forest management.

147 woodland owners and enthusiasts have completed the Woodland Leadership Institute curriculum since its inception in 2001. If you view the leadership roster of Minnesota and Wisconsin's woodland owner and wildlife habitat organizations you will see that a large number of those in leadership roles are graduates of the Institute.

1. *For conservation projects, please explain how your project will improve the implementation of the SFI Standard or will benefit forest management through certification. For community projects, please explain how this Project will strengthen and involve communities in forest management.*

Woodland Leadership Institute graduates are required to develop personal goals outlining how they will use what they have learned to address real issues in their community. Each person develops their goals based on their personal interests, organizations that they are involved with and the needs of their community.

Graduates of the Woodland Leadership Institute have provided over 2,000 hours of volunteer service hosting workshops or gatherings on their land; writing articles for a newspaper, newsletter or magazine; talking with woodland owners and woodland owner organizations about sustainable forest management; and participating in local government hearings or board meetings.

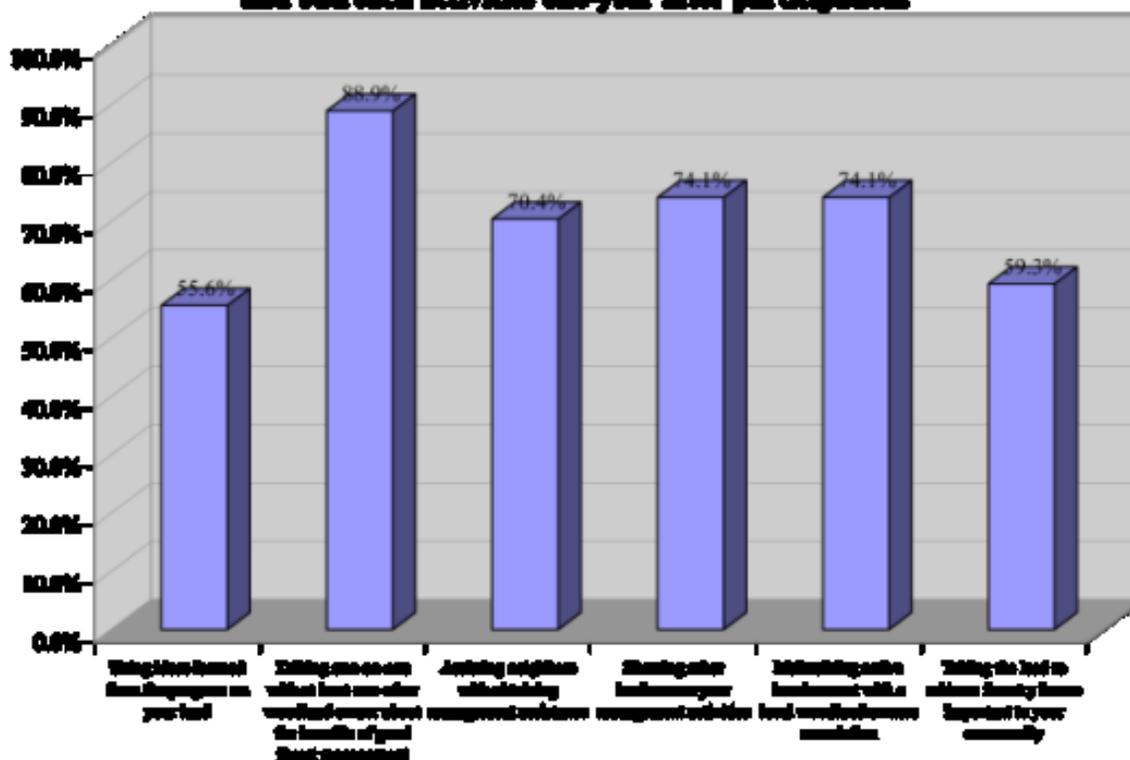
Institute graduates have worked directly with almost 600 woodland owners of which over 260 have initiated contacts with forest management professionals or woodland owner organizations and 100 have taken the first steps toward practicing sustainable forest management on over 5,000 acres of forest land.

These folks have also been active participants and speakers talking to over 1,100 woodland owners at conferences and workshops and hosting nearly 20 workshops on their lands.

They have also been actively engaged in legislative issues and participating in over 140 legislative or local government hearings and board meetings.

The graph below shows how they have used what they have learned as participants in the Institute.

Percent of Program participants engaged in the following land management and outreach activities one-year after participation.



2. *What activities will you and your Project partners perform to promote the outcomes of your Project and SFI Involvement in the Project?*

The Institute has been an important program for each of Minnesota’s and Wisconsin’s various woodland owner organizations. Institute graduates have played important roles in the growth and maintenance of these organizations. I have heard time and again from the paid staff and leadership of different organizations about the value of Institute graduates to their organization in service, ideas, and energy. There is no doubt of the value these organizations place on Institute graduates and the valuable role that they play within these organizations.

Wisconsin Woodland Owners Association

The Wisconsin Woodland Owners Association (WWOA) has been a strong supporter of the Woodland Leadership Institute recommending the Institute to members interested in serving in Leadership positions. This, in turn, has contributed to a number of graduates taking active leadership within WWOA.

Twelve graduates have served on WWOA’s Board of Directors with seven serving on the Executive and three serving as President. Seven others have served on various standing and ad-hoc committees of the Board.

Graduates have also been very active at the chapter level. Sixteen graduates have served as chapter chairs, five have served on their local Chapter Board, and six have served on various chapter committees. Graduates have also been active members of the Wisconsin Woodland Owners Association's Foundation with two graduates serving on the Foundation's Board of Directors.

Minnesota Forestry Association

Five graduates are currently serving on the MFA Board of Directors, include the Board President. Another seven are currently serving as chapter or committee Chairs.

Wisconsin Family Forests

Woodland Leadership Institute graduates have been instrumental in the start up and leadership of four of Wisconsin Family Forests' (WFF) Alliances. Five graduates have served as Alliance Presidents and three graduates have served on the WFF Board and Executive Committee. Gerry Mich, Class of 2002, currently serves as the WFF Executive Director.

Woodland Advocate Program

Woodland Leadership Institute graduates have been instrumental in the creation of this new and exciting program designed to help woodland owners learn how to keep their forest healthy. Advocates provide one-on-one attention to their neighbor's needs and concerns, and introduce their neighbors to the people, programs, and products that can help them manage their woodland sustainably.

American Tree Farm System

Woodland Leadership Institute graduates have also been an integral part of the American Tree Farm System both nationally and in Wisconsin. Eleven graduates of the program have been named Wisconsin's Outstanding Tree Farmer of the Year, four have been named Regional Outstanding Tree Farmer of the Year, and two have been named National Outstanding Tree Farmer of the Year. Three graduates currently serve on the American Tree Farm System's National Operating Committee and eight graduates serve on the Wisconsin Tree Farm Executive including one graduate who serves as the southern region chair and another who served on the Executive committee.

Wisconsin Forestry Cooperatives

Woodland Leadership Institute graduates have also been active in Wisconsin's Forestry Cooperatives. Graduates of the program have served on the Board as well as the Board Chair of the Sustainable Woods Cooperative. Two graduates have also served on the Living Forest Cooperative's Board. Additionally, staff from both the Living forest Cooperative and the Prairie Ridge Forest Stewardship Cooperative have also graduated from the Institute.

Advisory Councils and Boards

A number of graduates have served or are serving on various state, federal and University mandated boards and advisory councils that require forest landowner participation. More than a dozen have served or are currently serving in some capacity on these Boards, Committees, or Councils.

- In the table below, please list the goals for your project. For each goal, please describe the actions you will take to achieve your goal, the corresponding tangible outcomes (e.g. implementation guidance on a component of the SFI Standard, outreach and education to landowners, acres positively affected by the Project) for each goal, how you will measure your success in achieving each goal, and the portion of the requested grant funds that would be used to achieve the goal. Add rows as-needed to address all project goals.*

The Woodland Leadership Institute uses the Logic Model to evaluate program implementation, goals achieved, and the extent to which outcomes are achieved. Outcomes of particular interest are the number of graduates who go on to become leaders in woodland owner organizations, projects that educate family forest owners in sustainable forest management, and outreach and education activities that encourage family forest owners to implement sustainable forest management practices.

Project Goals	Activities	Tangible Outcomes	Measure Success
Goal 1: Graduates will play an active role in leadership positions of woodland landowner organizations	As a part of their participation in this program participants are asked to develop personal goals outlining how they will use what they have learned through the Institute to address real issues in their community. The institute is designed to help them develop these goals through the seminars, readings, observations and interviews of community leaders, and the sharing of ideas and feedback from their classmates.	Woodland Leadership Institute graduates are required to develop personal goals outlining how they will use what they have learned to address real issues in their community. Each person develops their goals based on their personal interests, organizations that they are involved with and the needs of their community.	Graduates are asked to fill out a one-year after report that asks them a series of question about their activities to promote sustainable forest management as well as specific questions related to progress towards completing their graduation project
Goal 2: Graduates will enhance forest management by non-industrial private forest landowners through peer-to-peer contact and planned activities in their local community.	Same as above	Same as above	Same as above

Project Timeline

Please provide a timeline for completion of the project. Projects may be multi-year in length, and should be for 9 months at a minimum. The timeline should reflect when you will deliver upon the goals and outcomes as outlined above.

We are seeking \$36,000.00 to underwrite the cost of this program which would allow us to offer this program at a greatly reduced rate to woodland owners and make it affordable for them to participate. The average per person cost is approximately \$1,200 for this yearlong program. Grant monies, along with participant registration fees, would be used to support the implementation of the Woodland Leadership Institute in 2012 and 2013. Our goal would be to enroll 18 participants from Michigan, Minnesota, and Wisconsin in each class.

January 2012 – Begin recruitment for class of 2012

*April 2012 - Convene steering committee to select participants
Notify candidates of selection status*

*May 2012 - Seminar 1 - Sustainability and Stewardship of Wisconsin's Forest Resources
Send out Pre-work material for Second Seminar*

*July 2012 - Seminar 2 - Forest Management in Wisconsin
Send out Pre-work material for Third Seminar*

August 2012- Seminar 3 - Examples of Citizen Led Conservation and the role of leadership in Landowner Organizations

January 2013 – Begin recruitment for class of 2013

April 2013 - Convene steering committee to select participants
Notify candidates of selection status

May 2013 - Seminar 1 - Sustainability and Stewardship of Wisconsin's Forest Resources
Send out Pre-work material for Second Seminar

July 2013 - Seminar 2 - Forest Management in Wisconsin
Send out Pre-work material for Third Seminar

August 2013- Seminar 3 - Examples of Citizen Led Conservation and the role of leadership in Landowner Organizations

September 2013 - Send out one-year after questionnaires to 2012 graduates.

Project Budget

Please fill out the table below to illustrate the entire Project budget. SFI Inc. will not award any funds for organization overhead costs, which include but are not limited to, office rent or maintenance, utilities, temporary hires, etc. While some portion of the grant may be used to offset staff salary and benefits, this should be no more than 10% of the requested amount.

You may modify this table to fit your needs, however please ensure your budget addresses the following components:

1. Percent of budget allocated to each staff person working on the Project
2. Total Operating costs divided up by relevant topics such as travel, meetings, communications, education & outreach etc.
3. Identify any in-kind support
4. Identify any matching funds allocated to this Project

Expenditure	Amount	Matching Funds*	In-Kind Contributions*
Staff Salary and Benefits			
	\$0.00	\$25,491	
Operating Costs			
Research Activities			
Meetings			
Travel			
Education & Outreach	\$36,000	\$9,600	
Communications	\$0.00	\$1,000	
Total			

*list sources and amounts of any matching funds or in-kind contributions

We are seeking \$36,000.00 to underwrite the cost of this program which would allow us to offer this program at a greatly reduced rate to woodland owners and make it affordable for them to participate. The average per person cost is approximately \$1,200 for this yearlong program. Grant monies, along with participant registration fees, are used to support the implementation of the Woodland Leadership Institute in 2012 and 2013. Our goal would be to enroll 18 participants in each class.

The requested funding would be used for the following activities

- Program support for Participants – \$36,000
 - Meeting room / conference center costs.
 - Food costs
 - Lodging costs.
 - Field trip costs
 - Teaching materials (binders, publications, and other media)
 - Speaker honorariums

Match funds

- Participant Registration Fees - \$7,200
- Lead trainer program costs - \$2,400
- Staff Salary and Benefits - \$25,491
- Recruitment and communication - \$1,000
-

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be required to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:

I, _____ (Name, Title), as a representative of _____ (Organization Name) and a Partner in _____ (Name of Project), hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by _____ (Organization Name) to sign this agreement.

Signed:

Name

Title

Organization

Date

**SFI Inc. Conservation Community Partnerships Grant Program
for Requests Over \$5,000.00**

Grant Application

Lead Organization Name and Address	Wisconsin Woodland Owners Association
Name, phone and email for Project Director	William J. Horvath 350 McDill Avenue Stevens Point, WI 54481
Lead Organizational Mission Statement (25 words or less)	To serve the interests of woodland owners, develop public appreciation for the value of woodlands in the economy and overall welfare of Wisconsin."
Lead Organization Annual Operating Budget	\$149,175
Two references (Name, Organization, email and phone) who can speak to the potential of the Project (these should not be the same as your Project partners):	Greg Rebman, State Forester, NRCS, Greg.Rebman@WI.usda.gov 608-662-4422, Ext. 231 John DuPlissis, Forestry Outreach Specialist, University Extension, John.DuPlissis@uwsp.edu , 715-346-4128

Project Overview

Of the nine million acres of forestland held by an estimated 362,000 owners in Wisconsin, the vast majority of forest owners do not have a forest management plan. 44,000 are in Wisconsin's Managed Forest Law (MFL) program with plans covering slightly over three million acres. Like many other states parcelization and fragmentation is rapidly occurring because of the demand for recreation – mostly hunting.

Wisconsin has a highly integrated wood industry anchored by the paper industry. That wood industry employs over sixty five thousand and produces a 20 billion economy without counting Wisconsin's outdoor recreation enterprises.

The acceleration of woodland ownership has created a strain on technical assistance from state and private industry leading to a forest management plan and implementation.

In 2006 efforts were undertaken by Family Forests to reduce the workload for professional foresters by creating the Woodland Advocate Program.

Original efforts in 2006 supported by the forest industry, the DNR Division of Forestry were successful resulting in 130 management plans covering 4,500 acres. The program has since expanded in nine counties with state SFI financial support.

The Family Forest Woodland Advocate Program offers forestry information and resources to landowners through someone they can trust: other landowners. It promotes sustainable forestry management through trained, volunteer woodland owners working with fellow landowners in their own neighborhoods. These volunteers visit properties, listen to concerns, and help the landowner clarify their goals for their woods. At the neighbor's invitation, the Woodland Advocate arranges for a professional forester to walk the land and develop a management plan. The Advocate also puts the landowner in touch with other forestry resources.

The project has demonstrated that landowners want help from someone they can trust in caring for their woods, and other landowners can provide the link to those trusted individuals.

Family Forests has asked WWOA to take the leadership for the project and expand it to reach additional forest landowners.

<p>Confirmed Project Partners (list organization name only)*Wisconsin Woodland Owners Association WI SFI WI DNR Division of Forestry Wisconsin Tree Farm Committee</p>	<p>Project Title Woodland Advocate Program</p>	<p>Amount Requested \$15,000</p>	<p>Total Project Budget \$41,000</p>	<p>Brief Project Summary (50 words or less) The project will expand the Woodland Advocate program beyond the pilot stage. It will train woodland advocates and develop a statewide network of fully trained advocates and integrate the system with available technical assistance from DNR foresters, consulting foresters, including industry foresters and others thus increasing the acreage of sustainably managed forestland.</p>	<p>What element(s) of the SFI 2010-2014 Program does/do your Project address (Please cite the Standard Component(s)) The project supports SFI Standard Principles 1, Sustainable Forestry, 11, Training and Education, 14, Continual Improvement and objectives 1, Forest Management Planning, 8, Landowner Outreach, 9, Use of Qualified Resource and Logging Professionals and 17, Community Involvement in Sustainable Forestry.</p>

*For each partner organization, please list below the contact name, title, email, phone number and include a summary of the individual and organizations qualifications and experience as it relates to your project. Also you must include a copy of the Agreement to Public Communications, which can be found at the end of this document, for each Project Partner.

Kathryn Nelson, Forest Tax Policy Chief, WI DNR Division of Forestry, 608-266-3545, Kathryn.elson@wisconsin.gov
Kathryn is a professional forester administers Wisconsin Forest Tax Land in the Forestry Division, WI Dept. of Natural Resources

Gordon Nouw, New Page Corp., Chair State SFI Committee, 715-422-3295, Gordon.Mouw@newpagecorp.com
Forester of New Page Corp.

Wisconsin Tree Farm Committee, Al Barden, Representative. bardenalb@nnex.net; 715-479-8449

William . Horvath, Wisconsin Woodland Owners Association, MFL Division Coordinator, 715-341-4021, bill.horvath@sbcglobal.net

Project Details

The project will improve the implementation of the SFI Standard in two ways. First it will bring additional landowners and forestland under a forest management plan. These plans are stewardship plans that meet standards for SFI but are not certified. Secondly, the project will result in some of these forest landowners signing agreements with DNR to implement a forest management plan in exchange for lowered taxes. These lands are then certified under SFI and SFC.

SFI and WWOA already have a close working relationship with SFI serving on WWOA's MFL Division Advisory Committee and in activities to increase acreage of forestland under certification.

Project Goals	Activities	Tangible Outcomes	Measure Success	Grant Funds
Goal 1: Train additional forestland advocates.	Train forestland advocates under a refined advocate training program as developed by University Forestry Extension for identifying skill sets and assign them mentoring projects with forest landowners.	A cadre of fully trained advocates to serve as first responders which will lead to provision of technical assistance for a forest management plan.	Measurement will be by the number of landowner contacts leading to a forest management plan and the acreage in each plan.	\$5,000
Goal 2: Provide travel and material for forest advocate work with woodland owners.	Purchase or reprint available material which can be used by advocates when working with landowners and payment for mileage by advocates incurred when traveling to forestland owners property. Advocates receive no other remuneration.	A forest landowner with a better understanding of the options including a plan for managing forestland.	The number of forest management plans referrals to professional foresters.	\$5,000
Goal 3: Strengthen agency and organizational relationships to achieve goal 1 and 2 including strengthening WWOA's 13 chapters to fully participate in the project.	An open woods event held in 71 counties sponsored by chapters to help identify potential landowners needing visits by advocates. The open woods concept is a one day event on WWOA members property to learn more about forest management. WWOA held a state wide open woods event in 2004. Training will be given to chapter chairs on organizing open woods events in each of the 71 counties.	Identification of forest landowners attending the open wood event who signify they want additional assistance.	Measurement will be on the number of open wood events; number of forest landowners attending and number of those seeking additional assistance from forest advocates.	\$5,000

Project Timeline

Goal one will occur in both year one and two where additional advocates are secured for training. Goal two will occur over both years of the project period. Goal three will be accomplished in year two of the project period with activities occurring in some counties in year one for open wood events.

Project Budget

Expenditure	Amount	Matching Funds*	In-Kind Contributions*
Staff Salary and Benefits	0	0	0
Operating Costs	0	0	0
Research Activities	0	0	0
Meetings	5,000	5,000 (1)	5,000 (2)
Travel	2,500	5,000 (1)	5,000 (3)
Education & Outreach	5,000	5,000 (1)	1,000(3)
Communications	2,500	0	
Total	15,000	15,000	11,000

*list sources and amounts of any matching funds or in-kind contributions

1. Family Forest Funds transferred to WWOA.
2. Three WWOA chapter meetings and expenses.
3. Travel by WWOA officers, project coordinator and chapter officers.

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be expected to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:



Agreement to Public Communications.doc

I, William Horvath, MFL Division Coordinator (Name, Title), as a representative of Wisconsin Woodland Owners Association, Inc. (Organization Name) and a Partner in Forest Certification and Wildlife Management (Name of Project), hereby give the Sustainable Forestry Initiative (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Wisconsin Woodland Owners Association, Inc. (Organization Name) to sign this agreement.

Signed:

MFL Division Coordinator

Title

Wisconsin Woodland Owners Association Inc.
Organization

2-9-11

Date

Consin Wood

**SFI Inc. Conservation and Community Grant Program
Agreement to Public Communications**

I, Gordy Mouw, Chair (Name, Title), as a representative of Wisconsin SIC (Organization Name) and a Partner in (Name of Project), hereby give the Sustainable Forestry Initiative (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by (Organization Name) to sign this agreement.

Signed:



Gordy Mouw
Name

Chair

Title

Wisconsin SIC
Organization

2/7/11
Date

Agreement to Public Communications

As part of the Grant Application, the Lead Organization must complete and sign this page. All identified organizations and partners involved in the Project must also agree to authorize SFI Inc. to publicize the Project and to use their names, images, logos and information about the Project in such publicity. All Organizations listed in the application will be required to sign an agreement to this effect and submit it with the application. If additional Organizations join the Project after an application is accepted by SFI Inc., they will also be expected to sign the agreement. You can access an additional copy of this agreement for your Project Partners here:



Agreement to Public Communications.doc

Cory Catlin State Chapter President

I, WI-NWTF (Name, Title), as a representative of WI-NWTF (Organization Name) and a Partner in Indomestic Recognition Proj (Name of Project), hereby give the Sustainable Forestry Initiative® (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI® Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by WI-NWTF (Organization Name) to sign this agreement.

Signed:

Cory Catlin

Name

WI-NWTF President

Title

WI NWTF

Organization

2/9/11

Date

Consin Wood

**SFI Inc. Conservation and Community Grant Program
Agreement to Public Communications**

I, Alvin L. Barden, member of Wisconsin Tree Farm Committee and a Partner in Forest Certification and Wildlife Management, hereby give the Sustainable Forestry Initiative (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of Tree Farm images or the logo is not granted. If they are to be used, permission must be obtained from the Washington office of the American Tree Farm System.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by Wisconsin Tree Farm Committee to sign this agreement.

Signed:

s/ Alvin L Barden
Name

Member
Title

Wisconsin Tree Farm Committee
Organization

February 8, 2011
Date

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
FAX 608-267-3579
TTY Access via relay - 711



February 14, 2011

William J. Horvath
350 McDill Avenue
Stevens Point WI 54481

Subject: Woodland Advocate Program Grant Application

Dear Mr. ~~Horvath~~: *Bill*

On behalf of the Wisconsin Department of Natural Resources I am writing a letter of support for the Wisconsin Woodland Owner Association (WVOA) to obtain a grant to implement the Woodland Advocate Program. The Woodland Advocate Program will help Wisconsin woodland owners become aware of the forestry programs and services offered by state and private foresters. This partnership can encourage more landowners to sustainably manage their woodlands and provide benefits to Wisconsin citizens.

I, Kathryn J. Nelson, Forest Tax Program and Policy Chief, as a representative of Wisconsin Department of Natural Resources (DNR) and a Partner in the Woodland Advocate Program, hereby give the Sustainable Forestry Initiative[®] (SFI), Inc. permission to use my name, the organization name as written above, and any other information about the Project in public communications regarding the Project.

I understand that public communications include, but are not limited to:

- Press releases and announcements regarding the SFI[®] Inc. Conservation and Community Partnerships Grant Program.
- Public presentations, fact sheets, briefing notes and other communication materials that highlight successful Projects and the SFI Inc. Conservation and Community Partnerships Grant Program.
- Use of the Organization logo on the SFI Inc. website, on news releases or other materials.
- Other materials as appropriate.

SFI Inc. will not attribute quotes or opinions to my organization without permission.

With my signature below, I attest that, to the best of my knowledge, the information provided in this application is true and accurate, and I am authorized by DNR to sign this agreement.

Sincerely,

A handwritten signature in cursive script that reads 'Kathryn J. Nelson'.

Kathryn J. Nelson
Forest Tax Program and Policy Chief
Wisconsin Department of Natural Resources

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date:

DEC 18 2000

WISCONSIN WOODLAND OWNERS ASSOC
INCORPORATED
PO BOX 285
STEVENS POINT, WI 54481-0285

Employer Identification Number:

39-1344158

DLN:

300348011

Contact Person:

DAVID V SCIAN

ID# 31369

Contact Telephone Number:

(877) 829-5500

Our Letter Dated:

March 1980

Addendum Applies:

No

Dear Applicant:

This modifies our letter of the above date in which we stated that you would be treated as an organization that is not a private foundation until the expiration of your advance ruling period.

Your exempt status under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3) is still in effect. Based on the information you submitted, we have determined that you are not a private foundation within the meaning of section 509(a) of the Code because you are an organization of the type described in section 509(a)(1) and 170(b)(1)(A)(vi).

Grantors and contributors may rely on this determination unless the Internal Revenue Service publishes notice to the contrary. However, if you lose your section 509(a)(1) status, a grantor or contributor may not rely on this determination if he or she was in part responsible for, or was aware of, the act or failure to act, or the substantial or material change on the part of the organization that resulted in your loss of such status, or if he or she acquired knowledge that the Internal Revenue Service had given notice that you would no longer be classified as a section 509(a)(1) organization.

You are required to make your annual information return, Form 990 or Form 990-EZ, available for public inspection for three years after the later of the due date of the return or the date the return is filed. You are also required to make available for public inspection your exemption application, any supporting documents, and your exemption letter. Copies of these documents are also required to be provided to any individual upon written or in person request without charge other than reasonable fees for copying and postage. You may fulfill this requirement by placing these documents on the Internet. Penalties may be imposed for failure to comply with these requirements. Additional information is available in Publication 557, Tax-Exempt Status for Your Organization, or you may call our toll free number shown above.

If we have indicated in the heading of this letter that an addendum applies, the addendum enclosed is an integral part of this letter.

Letter 1050 (DO/CG)