





SFI 2015-2019 FOREST MANAGEMENT STANDARD

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1. GENERAL

1.1 Scope

What the Forest Management Standard Does

The SFI 2015-2019 Forest Management Standard promotes sustainable forestry practices based on 13 Principles, 15 Objectives, 37 Performance Measures and 101 Indicators. These requirements include measures to protect water quality, biodiversity, wildlife habitat, species at risk and Forests with Exceptional Conservation Value.

What the Forest Management Standard Covers

The SFI 2015-2019 Forest Management Standard applies to any organization that owns or has management authority for forestlands.

Geographic Application of the Forest Management Standard

The SFI 2015-2019 Forest Management Standard applies to organizations in the United States and Canada.

1.2 Additional Requirements

SFI Program Participants with fiber sourcing programs (acquisition of roundwood and field-manufactured or primary-mill residual chips, pulp and veneer to support a forest products facility) must also conform to the SFI 2015-2019 Fiber Sourcing Standard.

Use of the SFI on-product labels and claims shall follow Section 5 - Rules for Use of SFI On-Product Labels and Off-Product Marks as well as ISO 14020:2000.

1.3 References

This standard incorporates, by dated or undated reference, provisions from other publications. These normative and informative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated and undated references, the latest edition of the publication applies.

Normative References

- i. ISO/IEC 17021:2011 Conformity Assessment Requirements for bodies providing audit and certification of management systems
- ii. ISO/IEC Guide 2:2004 Standardization and related activities -General vocabulary
- iii. Section 7 SFI Policies
- iv. Section 9 SFI 2015-2019 Audit Procedures and Auditor Qualifications and Accreditation
- v. Section 10 Communications and Public Reporting
- vi. Section 13 SFI Definitions
- vii. Interpretations for the Requirements for the SFI 2015-2019 Program

For the purposes of this standard, the relevant definitions given in ISO/IEC Guide 2:2004 apply, together with the definitions in the SFI Definitions (Section 13).

Informative References

- i. ISO 14001:2004 Environmental Management Systems -Specification with guidance for use
- ii. PEFC ST 1003:2010 Sustainable Forest Management Requirements, November 26, 2010
- iii. PEFC ST 1002:2010 Group Forest Management Certification, November 26, 2010
- iv. Section 6 Guidance to SFI 2015-2019 Standards and Rules
- v. Section 8 SFI Standards Development and Interpretations Process
- vi. Section 11 Public Inquiries and Official Complaints

1.4 SFI 2015-2019 Forest Management Standard Principles

SFI Program Participants believe forest landowners have an important stewardship responsibility and a commitment to society, and they recognize the importance of maintaining viable commercial, family forest and conservation forestland bases. They support sustainable forestry practices on forestland they manage, and promote them on other lands. They support efforts to protect private property rights, and to help all private landowners manage their forestland sustainably. In keeping with this responsibility, SFI Program Participants shall have a written policy (or policies) to implement and achieve the following principles:

1. Sustainable Forestry

To practice sustainable forestry to meet the needs of the present without compromising the ability of future generations to meet their own needs by practicing a land stewardship ethic that integrates reforestation and the managing, growing, nurturing and harvesting of trees for useful products and ecosystem services such as the conservation of soil, air and water quality, carbon, biological diversity, wildlife and aquatic habitats, recreation and aesthetics.

2. Forest Productivity and Health

To provide for regeneration after harvest and maintain the productive capacity of the forestland base, and to protect and maintain longterm forest and soil productivity. In addition, to protect forests from economically or environmentally undesirable levels of wildfire, pests, diseases, invasive exotic plants and animals, and other damaging agents and thus maintain and improve long-term forest health and productivity.

3. Protection of Water Resources

To protect water bodies and riparian areas, and to conform with forestry best management practices to protect water quality.

4. Protection of Biological Diversity

To manage forests in ways that protect and promote biological diversity, including animal and plant species, wildlife habitats, and ecological or natural community types.

5. Aesthetics and Recreation

To manage the visual impacts of forest operations, and to provide recreational opportunities for the public.

6. Protection of Special Sites

To manage lands that are ecologically, geologically or culturally important in a manner that takes into account their unique qualities.

7. Responsible Fiber Sourcing Practices in North America

To use and promote among other forest landowners sustainable forestry practices that are both scientifically credible and economically, environmentally and socially responsible.

8. Legal Compliance

To comply with applicable federal, provincial, state and local *forestry* and related environmental laws, statutes and regulations.

9. Research

To support advances in sustainable forest management through forestry research, science and technology.

10. Training and Education

To improve the practice of sustainable forestry through training and education programs.

11. Community Involvement and Social Responsibility

To broaden the practice of sustainable forestry on all lands through community involvement, socially responsible practices, and through recognition and respect of Indigenous Peoples' rights and traditional forest-related knowledge.

12. Transparency

To broaden the understanding of forest certification to the SFI 2015-2019 Forest Management Standard by documenting certification audits and making the findings publicly available.

13. Continual Improvement

To continually improve the practice of forest management, and to monitor, measure and report performance in achieving the commitment to sustainable forestry.

1.5 SFI 2015-2019 Forest Management Standard Objectives

A Summary of the SFI 2015-2019 Forest Management Standard Objectives follows:

Objective 1. Forest Management Planning

To ensure forest management plans include long-term sustainable harvest levels and measures to avoid forest conversion.

Objective 2. Forest Health and Productivity

To ensure long-term forest productivity, carbon storage and conservation of forest resources through prompt reforestation, afforestation, minimized chemical use, soil conservation, and protecting forests from damaging agents.

Objective 3. Protection and Maintenance of Water Resources

To protect the water quality of rivers, streams, lakes, wetlands and other water bodies through meeting or exceeding best management practices.

Objective 4. Conservation of Biological Diversity

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 a diversity of types of habitat and successional stages, and the conservation of forest plants and animals, including aquatic species, as well as threatened and endangered species, Forests with Exceptional Conservation Value, old-growth forests and ecologically important sites.

Objective 5. Management of Visual Quality and Recreational Benefits

To manage the visual impact of forest operations and provide recreational opportunities for the public.

Objective 6. Protection of Special Sites

To manage lands that are geologically or culturally important in a manner that takes into account their unique qualities.

Objective 7. Efficient Use of Fiber Resources

To minimize waste and ensure the efficient use of fiber resources.

Objective 8. Recognize and Respect Indigenous Peoples' Rights

To recognize and respect Indigenous Peoples' rights and traditional knowledge.

Objective 9. Legal and Regulatory Compliance

To comply with applicable federal, provincial, state, and local laws and regulations.

Objective 10. Forestry Research, Science and Technology

To invest in *forestry* research, science and technology, upon which sustainable forest management decisions are based and broaden the awareness of climate change impacts on forests, wildlife and biological diversity.

Objective 11. Training and Education

To improve the implementation of sustainable forestry practices through appropriate training and education programs.

Objective 12. Community Involvement and Landowner Outreach

To broaden the practice of sustainable forestry through public outreach, education, and involvement, and to support the efforts of SFI Implementation Committees.

Objective 13. Public Land Management Responsibilities

To participate and implement sustainable forest management on public lands.

Objective 14. Communications and Public Reporting

To increase transparency and to annually report progress on conformance with the SFI Forest Management Standard.

Objective 15. Management Review and Continual Improvement To promote continual improvement in the practice of sustainable forestry by conducting a management review and monitoring performance.

1.6 SFI 2015-2019 Forest Management Standard Requirements Objective 1. Forest Management Planning

To ensure forest management plans include long-term sustainable harvest levels and measures to avoid forest conversion.

Performance Measure 1.1. Program Participants shall ensure that forest management plans include long-term harvest levels that are sustainable and consistent with appropriate growth-andvield models.

Indicators:

- 1. Forest management planning at a level appropriate to the size and scale of the operation, including:
 - a. a long-term resources analysis;
 - b. a periodic or ongoing forest inventory;
 - c. a land classification system;
 - d. biodiversity at landscape scales;
 - e. soils inventory and maps, where available;
 - f. access to growth-and-yield modeling capabilities;
 - g. up-to-date maps or a geographic information system (GIS);
 - h. recommended sustainable harvest levels for areas available for harvest: and
 - i. a review of non-timber issues (e.g., recreation, tourism, pilot projects and economic incentive programs to promote water protection, carbon storage, bioenergy feedstock production, or biological diversity conservation, or to address climate-induced ecosystem change).
- 2. Documented current harvest trends fall within long-term sustainable levels identified in the forest management plan.
- 3. A forest inventory system and a method to calculate growth and yield.
- 4. Periodic updates of forest inventory and recalculation of planned harvests to account for changes in growth due to productivity increases or decreases, including but not limited to improved data, long-term drought, fertilization, climate change, changes in forestland ownership and tenure, or forest health.
- 5. Documentation of forest practices (e.g., planting, fertilization and thinning) consistent with assumptions in harvest plans.

Performance Measure 1.2. Program Participants shall not convert one forest cover type to another forest cover type, unless in justified circumstances.

Indicators:

- 1. Program Participants shall not convert one forest cover type to another forest cover type, unless the conversion:
 - a. Is in compliance with relevant national and regional policy and legislation related to land use and forest management; and
 - b. Would not convert native forest types that are rare and ecologically significant at the landscape level or put any native forest types at risk of becoming rare; and
 - c. Does not create significant long-term adverse impacts on Forests with Exceptional Conservation Value, old-growth forests, forests critical to threatened and endangered species, and special sites.
- 2. Where a Program Participant intends to convert to another forest cover type, an assessment considers:
 - a. Productivity and stand quality conditions and impacts which may include social and economic values;
 - b. Specific ecosystem issues related to the site such as invasive species, insect or disease issues, riparian protection needs and others as appropriate to the site including regeneration challenges; and
 - c. Ecological impacts of the conversion including a review at the site and landscape scale as well as consideration for any appropriate mitigation measures.

Performance Measure 1.3. Program Participants shall not have within the scope of their certification to this SFI 2015-2019 Forest Management Standard, forestlands that have been converted to nonforestland use

Indicator:

1. Forestlands converted to other land uses shall not be certified to this SFI 2015-2019 Forest Management Standard. This does not apply to forestlands used for forest and wildlife management such as wildlife food plots or infrastructure such as forest roads, log processing areas, trails etc.

Objective 2. Forest Health and Productivity

To ensure long-term forest productivity, carbon storage and conservation of forest resources through prompt reforestation, afforestation, minimized chemical use, soil conservation, and protecting forests from damaging agents.

Performance Measure 2.1. Program Participants shall promptly reforest after final harvest.

Indicators:

1. Documented reforestation plans, including designation of all harvest areas for either natural, planted or direct seeded regeneration and prompt reforestation, unless delayed for site-specific environmental or forest health considerations or legal requirements, through planting within two years or two planting seasons, or by planned natural regeneration methods within five years.

- 2. Clear criteria to judge adequate regeneration and appropriate actions to correct understocked areas and achieve acceptable species composition and stocking rates for planting, direct seeding and natural regeneration.
- 3. Plantings of exotic tree species should minimize risk to native ecosystems.
- 4. Protection of desirable or planned advanced natural regeneration during harvest.
- 5. Afforestation programs that consider potential ecological impacts of the selection and planting of tree species in nonforested landscapes.

Performance Measure 2.2. Program Participants shall minimize chemical use required to achieve management objectives while protecting employees, neighbors, the public and the environment, including wildlife and aquatic habitats.

Indicators:

- 1. Minimized chemical use required to achieve management
- 2. Use of least-toxic and narrowest-spectrum pesticides necessary to achieve management objectives.
- 3. Use of pesticides registered for the intended use and applied in accordance with label requirements.
- 4. The World Health Organization (WHO) type 1A and 1B pesticides shall be prohibited, except where no other viable alternative is
- 5. Use of pesticides banned under the Stockholm Convention on Persistent Organic Pollutants (2001) shall be prohibited.
- 6. Use of integrated pest management where feasible.
- 7. Supervision of forest chemical applications by state- or provincialtrained or certified applicators.
- 8. Use of management practices appropriate to the situation, for example:
 - a. notification of adjoining landowners or nearby residents concerning applications and chemicals used;
 - b. appropriate multilingual signs or oral warnings;
 - c. control of public road access during and immediately after applications;
 - d. designation of streamside and other needed buffer strips;
 - e. use of positive shutoff and minimal-drift spray valves;
 - f. aerial application of forest chemicals parallel to buffer zones to minimize drift;
 - g. monitoring of water quality or safeguards to ensure proper equipment use and protection of streams, lakes and other water bodies;
 - h. appropriate transportation and storage of chemicals;
 - i. filing of required state or provincial reports; and/or
 - j. use of methods to ensure protection of threatened and endangered species.

Performance Measure 2.3. Program Participants shall implement forest management practices to protect and maintain forest and soil productivity.

Indicators:

- 1. Process to identify soils vulnerable to compaction, and use of appropriate methods, including the use of soil maps where available, to avoid excessive soil disturbance.
- 2. Use of erosion control measures to minimize the loss of soil and site productivity.
- 3. Post-harvest conditions conducive to maintaining site productivity (e.g., limited rutting, retained down woody debris, minimized skid trails).
- 4. Retention of vigorous trees during partial harvesting, consistent with scientific silvicultural standards for the area.
- 5. Criteria that address harvesting and site preparation to protect soil productivity.
- 6. Road construction and skidding layout to minimize impacts to soil productivity.

Performance Measure 2.4. Program Participants shall manage so as to protect forests from damaging agents, such as environmentally or economically undesirable wildfire, pests, diseases, and invasive exotic plants and animals, to maintain and improve long-term forest health, productivity and economic viability.

Indicators:

- 1. Program to protect forests from damaging agents.
- 2. Management to promote healthy and productive forest conditions to minimize susceptibility to damaging agents.
- 3. Participation in, and support of, fire and pest prevention and control programs.

Performance Measure 2.5. Program Participants that deploy improved planting stock, including varietal seedlings, shall use best scientific methods.

Indicator:

1. Program for appropriate research, testing, evaluation and deployment of improved planting stock, including varietal seedlings.

Objective 3. Protection and Maintenance of Water Resources To protect the water quality of rivers, streams, lakes, wetlands and other water bodies through meeting or exceeding best management practices.

Performance Measure 3.1. Program Participants shall meet or exceed all applicable federal, provincial, state and local water quality laws, and meet or exceed best management practices developed under Canadian or U.S. Environmental Protection Agency-approved water quality programs.

Indicators:

- 1. Program to implement federal, state or provincial water quality best management practices during all phases of management activities.
- 2. Contract provisions that specify conformance to best management practices.
- 3. Monitoring of overall best management practices implementation.

Performance Measure 3.2. Program Participants shall implement water, wetland and riparian protection measures based on soil type, terrain, vegetation, ecological function, harvesting system, state best management practices (BMPs), provincial guidelines and other applicable factors.

Indicators:

- 1. Program addressing management and protection of rivers, streams, lakes, wetlands, other water bodies and riparian areas during all phases of management, including the layout and construction of roads and skid trails to maintain water reach, flow and quality.
- 2. Mapping of rivers, streams, lakes, wetlands and other water bodies as specified in state or provincial best management practices and, where appropriate, identification on the ground.
- 3. Documentation and implementation of plans to manage and protect rivers, streams, lakes, wetlands, other water bodies and riparian areas.
- 4. Plans that address wet-weather events in order to maintain water quality (e.g., forest inventory systems, wet-weather tracts, definitions of acceptable operating conditions).

Objective 4. Conservation of Biological Diversity

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 a diversity of types of habitat and successional stages, and the conservation of forest plants and animals, including aquatic species, as well as threatened and endangered species, Forests with Exceptional Conservation Value, old-growth forests and ecologically important sites.

Performance Measure 4.1. Program Participants shall conserve biological diversity.

Indicators:

- 1. Program to incorporate the conservation of native biological diversity, including species, wildlife habitats and ecological community types at stand and landscape levels.
- 2. Development of criteria and implementation of practices, as quided by regionally based best scientific information, to retain stand-level wildlife habitat elements such as snags, stumps, mast trees, down woody debris, den trees and nest trees.
- 3. Document diversity of forest cover types and age or size classes at the individual ownership or forest tenure level, and where credible data are available, at the landscape scale. Working individually

- or collaboratively to support diversity of native forest cover types and age or size classes that enhance biological diversity at the landscape scale.
- 4. Program Participants shall participate in or incorporate the results of state, provincial, or regional conservation planning and priority-setting efforts to conserve biological diversity and consider these efforts in forest management planning. Examples of credible priority-setting efforts include state wildlife action plans, state forest action plans, relevant habitat conservation plans or provincial wildlife recovery plans.
- 5. Program to address conservation of known sites with viable occurrences of significant species of concern.
- 6. Identification and protection of non-forested wetlands, including bogs, fens and marshes, and vernal pools of ecological significance.
- 7. Participation in programs and demonstration of activities as appropriate to limit the introduction, spread and impact of invasive exotic plants and animals that directly threaten or are likely to threaten native plant and animal communities.
- 8. Consider the role of natural disturbances, including the use of prescribed or natural fire where appropriate, and forest health threats in relation to biological diversity when developing forest management plans.

Performance Measure 4.2. Program Participants shall protect threatened and endangered species, Forests with Exceptional Conservation Values (FECV) and old-growth forests.

Indicators.

- 1. Program to protect threatened and endangered species.
- 2. Program to locate and protect known sites of flora and fauna associated with viable occurrences of critically imperiled and imperiled species and communities also known as Forests with Exceptional Conservation Value. Plans for protection may be developed independently or collaboratively, and may include Program Participant management, cooperation with other stakeholders, or use of easements, conservation land sales, exchanges, or other conservation strategies.
- 3. Support of and participation in plans or programs for the conservation of old-growth forests in the region of ownership or forest tenure.

Performance Measure 4.3. Program Participants shall manage ecologically important sites in a manner that takes into account their unique qualities.

- 1. Use of information such as existing natural heritage data or expert advice in identifying or selecting ecologically important sites for protection.
- 2. Appropriate mapping, cataloging and management of identified ecologically important sites.

Performance Measure 4.4. Program Participants shall apply knowledge gained through research, science, technology and field experience to manage wildlife habitat and contribute to the conservation of biological diversity.

Indicators:

- 1. Collection of information on Forests with Exceptional Conservation Value and other biodiversity-related data through forest inventory processes, mapping or participation in external programs, such as NatureServe, state or provincial heritage programs, or other credible systems. Such participation may include providing nonproprietary scientific information, time and assistance by staff, or in-kind or direct financial support.
- 2. A methodology to incorporate research results and field applications of biodiversity and ecosystem research into forest management decisions.

Objective 5. Management of Visual Quality and Recreational

To manage the visual impact of forest operations and provide recreational opportunities for the public.

Performance Measure 5.1. Program Participants shall manage the impact of harvesting on visual quality.

Indicators:

- 1. Program to address visual quality management.
- 2. Incorporation of aesthetic considerations in harvesting, road, landing design and management, and other management activities where visual impacts are a concern.

Performance Measure 5.2. Program Participants shall manage the size, shape and placement of clearcut harvests.

Indicators:

- 1. Average size of clearcut harvest areas does not exceed 120 acres (50 hectares), except when necessary to meet regulatory requirements, achieve ecological objectives, or respond to forest health emergencies or other natural catastrophes.
- 2. Documentation through internal records of clearcut size and the process for calculating average size.

Performance Measure 5.3. Program Participants shall adopt a greenup requirement or alternative methods that provide for visual quality.

Indicators:

- 1. Program implementing the green-up requirement or alternative methods.
- 2. Harvest area tracking system to demonstrate conformance with the green-up requirement or alternative methods.

3. Trees in clearcut harvest areas are at least 3 years old or 5 feet (1.5 meters) high at the desired level of stocking before adjacent areas are clearcut, or as appropriate to address operational and economic considerations, alternative methods to reach the performance measure are utilized by the Program Participant.

Performance Measure 5.4. Program Participants shall support and promote recreational opportunities for the public.

Indicator:

1. Provide recreational opportunities for the public, where consistent with forest management objectives.

Objective 6. Protection of Special Sites

To manage lands that are geologically or culturally important in a manner that takes into account their unique qualities.

Performance Measure 6.1. Program Participants shall identify special sites and manage them in a manner appropriate for their unique features.

Indicators:

- 1. Use of information such as existing natural heritage data, expert advice or stakeholder consultation in identifying or selecting special sites for protection.
- 2. Appropriate mapping, cataloging and management of identified special sites.

Objective 7. Efficient Use of Fiber Resources

To minimize waste and ensure the efficient use of fiber resources.

Performance Measure 7.1. Program Participants shall employ appropriate forest harvesting technology and in-woods manufacturing processes and practices to minimize waste and ensure efficient utilization of harvested trees, where consistent with other SFI 2015-2019 Forest Management Standard Objectives.

- 1. Program or monitoring system to ensure efficient utilization, which may include provisions to ensure:
 - a. management of harvest residue (e.g., slash, limbs, tops) considers economic, social and environmental factors (e.g., organic and nutrient value to future forests and the potential of increased fuels build-up) and other utilization needs;
 - b. training or incentives to encourage qualified logging professionals to enhance utilization;
 - c. exploration of markets for underutilized species and low-grade wood and alternative markets (e.g., bioenergy markets); or
 - d. periodic inspections and reports noting utilization and product separation.

Objective 8. Recognize and Respect Indigenous Peoples' Rights

To recognize and respect Indigenous Peoples' rights and traditional knowledge.

Performance Measure 8.1. Program Participants shall recognize and respect Indigenous Peoples' rights.

Indicator:

1. Program Participants will provide a written policy acknowledging a commitment to recognize and respect the rights of Indigenous Peoples.

Performance Measure 8.2. Program Participants with forest management responsibilities on public lands shall confer with affected Indigenous Peoples with respect to sustainable forest management practices.

Indicator.

- 1. Program that includes communicating with affected Indigenous Peoples to enable Program Participants to:
 - a. understand and respect traditional forest-related knowledge;
 - b. identify and protect spiritually, historically, or culturally important sites;
 - c. address the use of non-timber forest products of value to Indigenous Peoples in areas where Program Participants have management responsibilities on public lands; and
 - d. respond to Indigenous Peoples' inquiries and concerns received.

Performance Measure 8.3. Program Participants are encouraged to communicate with and shall respond to local Indigenous Peoples with respect to sustainable forest management practices on their private lands.

Indicators:

- 1. Program Participants are aware of traditional forest-related knowledge, such as known cultural heritage sites, the use of wood in traditional buildings and crafts, and flora that may be used in cultural practices for food, ceremonies or medicine.
- 2. Respond to Indigenous Peoples' inquiries and concerns received.

Objective 9. Legal and Regulatory Compliance

To comply with applicable federal, provincial, state, and local laws and regulations.

Performance Measure 9.1. Program Participants shall comply with applicable federal, provincial, state and local forestry and related social and environmental laws and regulations.

Indicators:

- 1. Access to relevant laws and regulations in appropriate locations.
- 2. System to achieve compliance with applicable federal, provincial, state, or local laws and regulations.
- 3. Demonstration of commitment to legal compliance through available regulatory action information.

Performance Measure 9.2. Program Participants shall take appropriate steps to comply with all applicable social laws at the federal, provincial, state and local levels in the country in which the Program Participant operates.

Indicators:

- 1. Written policy demonstrating commitment to comply with social laws, such as those covering civil rights, equal employment opportunities, anti-discrimination and anti-harassment measures, workers' compensation, Indigenous Peoples' rights, workers' and communities' right to know, prevailing wages, workers' right to organize, and occupational health and safety.
- 2. Forestry enterprises will respect the rights of workers and labor representatives in a manner that encompasses the intent of the International Labor Organization (ILO) core conventions.

Objective 10. Forestry Research, Science and Technology

To invest in *forestry* research, science and technology, upon which sustainable forest management decisions are based and broaden the awareness of climate change impacts on forests, wildlife and biological diversity.

Performance Measure 10.1. Program Participants shall individually and/or through cooperative efforts involving SFI Implementation Committees, associations or other partners provide in-kind support or funding for forest research to improve forest health, productivity and sustainable management of forest resources, and the environmental benefits and performance of forest products.

- 1. Financial or in-kind support of research to address questions of relevance in the region of operations. Examples could include, but are not limited to, areas of forest productivity, water quality, biodiversity, community issues-or similar areas that build broader understanding of the benefits and impacts of forest management.
- 2. Research on genetically engineered trees via forest tree biotechnology shall adhere to all applicable federal, state, and provincial regulations and international protocols ratified by the United States and/or Canada depending on jurisdiction of management.

Performance Measure 10.2. Program Participants shall individually and/or through cooperative efforts involving SFI Implementation Committees, associations or other partners develop or use state, provincial or regional analyses in support of their sustainable forestry programs.

Indicator:

- 1. Participation individually and/or through cooperative efforts involving SFI Implementation Committees and/or associations at the national, state, provincial or regional level, in the development or use of some of the following:
 - a. regeneration assessments;
 - b. growth and drain assessments;
 - c. best management practices implementation and conformance;
 - d. biodiversity conservation information for family forest owners: and
 - e. social, cultural or economic benefit assessments.

Performance Measure 10.3. Program Participants shall —individually and/or through cooperative efforts involving SFI Implementation Committees, associations or other partners—broaden the awareness of climate change impacts on forests, wildlife and biological diversity.

Indicators:

- 1. Where available, monitor information generated from regional climate models on long-term forest health, productivity and economic viability.
- 2. Program Participants are knowledgeable about climate change impacts on wildlife, wildlife habitats and conservation of biological diversity through international, national, regional or local programs.

Objective 11. Training and Education

To improve the implementation of sustainable forestry practices through appropriate training and education programs.

Performance Measure 11.1. Program Participants shall require appropriate training of personnel and contractors so that they are competent to fulfill their responsibilities under the SFI 2015-2019 Forest Management Standard.

Indicators:

- 1. Written statement of commitment to the SFI 2015-2019 Forest Management Standard communicated throughout the organization, particularly to facility and woodland managers, and field foresters.
- 2. Assignment and understanding of roles and responsibilities for achieving SFI 2015-2019 Forest Management Standard objectives.
- 3. Staff education and training sufficient to their roles and responsibilities.
- 4. Contractor education and training sufficient to their roles and responsibilities.

5. Program Participants shall have written agreements for the use of qualified logging professionals and/or certified logging professionals (where available) and/or wood producers that have completed training programs and are recognized as qualified logging professionals.

Performance Measure 11.2. Program Participants shall work individually and/or with SFI Implementation Committees, logging or forestry associations, or appropriate agencies or others in the forestry community — to foster improvement in the professionalism of wood producers.

- 1. Participation in or support of SFI Implementation Committees to establish criteria and identify delivery mechanisms for wood producer training courses and periodic continuing education that address:
 - a. awareness of sustainable forestry principles and the SFI program;
 - b. best management practices, including streamside management and road construction, maintenance and retirement:
 - c. reforestation, invasive exotic plants and animals, forest resource conservation, aesthetics and special sites;
 - 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);
 - e. awareness of rare forested natural communities as identified by provincial or state agencies, or by credible organizations such as NatureServe and The Nature Conservancy;
 - f. logging safety;
 - g. U.S. Occupational Safety and Health Administration (OSHA) and Canadian Centre for Occupational Health and Safety (CCOHS) regulations, wage and hour rules, and other provincial, state and local employment laws;
 - h. transportation issues;
 - i. business management;
 - j. public policy and outreach; and
 - k. awareness of emerging technologies.
- 2. The SFI Implementation Committee-approved wood producer training *programs* shall have a continuing education component with coursework that supports the current training programs, safety and the principles of sustainable forestry.
- 3. Participation in or support of SFI Implementation Committees to establish criteria for recognition of logger certification programs, where they exist, that include:
 - a. completion of SFI Implementation Committee recognized wood producer training programs and meeting continuing education requirements of the training program;
 - b. independent in-the-forest verification of conformance with the logger certification program standards;

- c. compliance with all applicable laws and regulations including responsibilities under the U.S. Endangered Species Act, the Canadian Species at Risk Act and other measures to protect wildlife habitat;
- d. use of best management practices to protect water quality;
- e. logging safety;
- f. compliance with acceptable silviculture and utilization standards;
- g. aesthetic management techniques employed where applicable; and
- h. adherence to a management or harvest plan that is site specific and agreed to by the forest landowner.

Objective 12. Community Involvement and Landowner Outreach

To broaden the practice of sustainable forestry through public outreach, education, and involvement, and to support the efforts of SFI Implementation Committees.

Performance Measure 12.1. Program Participants shall support and promote efforts by consulting foresters, state, provincial and federal agencies, state or local groups, professional societies, conservation organizations, Indigenous Peoples and governments, community groups, sporting organizations, labor, universities, extension agencies, the American Tree Farm System® and/or other landowner cooperative programs to apply principles of sustainable forest management.

Indicators:

- 1. Support, including financial, for efforts of SFI Implementation
- 2. Support, individually or collaboratively, education and outreach to forest landowners describing the importance of and providing implementation guidance on:
 - a. best management practices;
 - b. reforestation and afforestation;
 - c. visual quality management;
 - d. conservation objectives, such as critical wildlife habitat elements, biodiversity, threatened and endangered species, and Forests with Exceptional Conservation Value;
 - e. management of harvest residue (e.g., slash, limbs, tops) that considers economic, social and environmental factors (e.g., organic and nutrient value to future forests) and other utilization needs:
 - f. control of invasive exotic plants and animals;
 - g. characteristics of special sites; and
 - h. reduction of wildfire risk.
- 3. Participation in efforts to support or promote conservation of managed forests through voluntary market-based incentive programs such as current-use taxation programs, Forest Legacy Program or conservation easements.

Performance Measure 12.2. Program Participants shall support and promote, at the state, provincial or other appropriate levels, mechanisms for public outreach, education and involvement related to sustainable forest management.

Indicator.

- 1. Periodic educational opportunities promoting sustainable forestry,
 - a. field tours, seminars, websites, webinars or workshops;
 - b. educational trips:
 - c. self-guided forest management trails;
 - d. publication of articles, educational pamphlets or newsletters; or
 - e. support for state, provincial, and local forestry organizations and soil and water conservation districts.

Performance Measure 12.3. Program Participants shall establish, at the state, provincial-or other appropriate levels, procedures to address concerns raised by loggers, consulting foresters, employees, unions, the public or other Program Participants regarding practices that appear inconsistent with the SFI 2015-2019 Forest Management Standard principles and objectives.

Indicators:

- 1. Support for SFI Implementation Committees (e.g., toll-free numbers and other efforts) to address concerns about apparent nonconforming practices.
- 2. Process to receive and respond to public inquiries. SFI Implementation Committees shall submit data annually to SFI Inc. regarding concerns received and responses.

Objective 13. Public Land Management Responsibilities To participate and implement sustainable forest management on public lands.

Performance Measure 13.1. Program Participants with forest management responsibilities on public lands shall participate in the development of public land planning and management processes.

- 1. Involvement in public land planning and management activities with appropriate governmental entities and the public.
- 2. Appropriate contact with local stakeholders over forest management issues through state, provincial, federal or independent collaboration.

Objective 14. Communications and Public Reporting

To increase transparency and to annually report progress on conformance with the SFI 2015-2019 Forest Management Standard.

Performance Measure 14.1. A *Program Participant* shall provide a summary audit report, prepared by the *certification body*, to *SFI Inc.* after the successful completion of a certification, recertification or surveillance audit to the *SFI 2015-2019 Forest Management Standard*.

Indicator.

- 1. The summary audit report submitted by the *Program Participant* (one copy must be in English), shall include, at a minimum,
 - a. a description of the audit process, objectives and scope;
 - b. a description of substitute *indicators*, if any, used in the audit and a rationale for each;
 - c. the name of the *Program Participant* that was audited, including its *SFI* representative;
 - d. a general description of the *Program Participant's* forestland included in the audit;
 - e. the name of the certification body and lead auditor (names
 of the audit team members, including technical experts,
 may be included at the discretion of the audit team and
 Program Participant);
 - f. the dates the audit was conducted and completed;
 - g. a summary of the findings, including general descriptions of evidence of conformity and any nonconformities and corrective action plans to address them, opportunities for improvement, and exceptional practices; and
 - h. the certification decision.

The summary audit report will be posted on the *SFI Inc.* website (www.sfiprogram.org) for public review.

Performance Measure 14.2. *Program Participants* shall report annually to *SFI Inc.* on their conformance with the *SFI 2015-2019 Forest Management Standard.*

Indicators:

- 1. Prompt response to the SFI annual progress report survey.
- 2. Record keeping for all the categories of information needed for *SFI* annual progress report surveys.
- 3. Maintenance of copies of past survey reports to document progress and improvements to demonstrate conformance to the *SFI 2015-2019 Forest Management Standard*.

Objective 15. Management Review and Continual Improvement

To promote continual improvement in the practice of *sustainable forestry* by conducting a management review and monitoring performance.

Performance Measure 15.1. *Program Participants* shall establish a management review system to examine findings and progress in implementing the *SFI 2015-2019 Forest Management Standard*, to make appropriate improvements in *programs*, and to inform their employees of changes.

- 1. System to review commitments, *programs* and procedures to evaluate effectiveness.
- 2. System for collecting, reviewing, and reporting information to management regarding progress in achieving *SFI 2015-2019 Forest Management Standard objectives* and *performance measures*.
- 3. Annual review of progress by management and determination of changes and improvements necessary to continually improve conformance to the SFI 2015-2019 Forest Management Standard.

