



**SFI 2022 Forest Management Standard  
(Section 2)**

**November 14, 2020**

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## 1. General

### 1.1 Scope

#### What the Forest Management Standard Does

The *SFI 2022-15-2019 Forest Management Standard* promotes *sustainable forestry practices* based on *13XX Principles, 1516 Objectives, 37XX Performance Measures and 101XXX Indicators*. These requirements include measures to *protect* water quality, *biodiversity, wildlife habitat, species at risk and Forests with Exceptional Conservation Value*.

Commented [SFI 1]: Will update once all revisions are final.

#### What the Forest Management Standard Covers

The *SFI 2022-15-2019 Forest Management Standard* applies to any *certified organization* that owns or has management authority for forestlands.

#### Geographic Application of the Forest Management Standard

The *SFI 2022-15-2019 Forest Management Standard* applies to organizations in the United States and Canada.

### 1.2 Additional Requirements

*SFI Program Participants Certified Organizations* 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 2022-15-2019 Fiber Sourcing Standard*.

Use of the *SFI* on-product labels and claims shall follow Section *65* - 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 17021:2015~~1~~ - 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 *87* -SFI Policies
- iv. Section *109* – SFI 2015-2019 Audit Procedures and *Auditor* Qualifications and Accreditation
- v. Section *110* - Communications and Public Reporting
- vi. Section *143* - SFI Definitions
- vii. Interpretations for the Requirements for the SFI *2022-15-2019 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 143).

#### Informative References

- i. ISO 14001:2015~~04~~ Environmental Management Systems - Specification with guidance for use
- ii. PEFC ST 1003:2018~~0~~ Sustainable Forest Management Requirements, November 28~~6~~, 2018~~0~~
- iii. PEFC ST 1002:2018~~0~~ Group Forest Management Certification, November 28~~6~~, 2018~~0~~
- iv. Section 76 - Guidance to *SFI 2022~~15-2019~~* Standards
- v. Section 98 - SFI Standards Development and Interpretations Process
- vi. Section 121 - Public Inquiries and Official Complaints
- vii. Section 132 - Optional Modules

### 1.4 Forest Management Standard Principles

*SFI Program Participants Certified Organizations* 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* forest land bases. They support *sustainable forestry* on forestland they manage and promote it on other lands. They support efforts to safeguard ~~protect~~ private property rights, and to help all private landowners manage their forestland sustainably. In keeping with this responsibility, *SFI Program Participants Certified Organizations* 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 while promoting~~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 for the provision of ecosystem services such as the *conservation* of soil, air and water quality and quantity, climate change adaptation and mitigation~~carbon~~, *biological diversity, wildlife and aquatic habitats*, recreation and aesthetics.

#### 2. Forest Productivity and Health

To provide for regeneration after harvest, ~~and~~ maintain the health and productive capacity of the forest land base, and to *protect* and maintain *long-term* ~~forest and~~ soil health and productivity. In addition, to *protect* forests from economically or environmentally undesirable levels of wildfire, pests, diseases, *invasive exoticspecies-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 and maintain the* water quality and quantity of water bodies and *riparian areas*, and to conform with forestry *best management practices* to *protect* water quality, and quantity, to meet the needs of both human communities and ecological systems.

**Commented [SFI2]:** Task Group to review proposed edits to Principles

**Commented [SFI 3]:** Edit to expand beyond private forest land to reflect public forest tenures.

**Commented [SFI 4]:** Linkage to the new Objective 9 – Climate Change Adaptation and Mitigation

#### 4. Protection of Biological Diversity

To manage forests in ways that *protect* and promote *biological diversity*, including animal and plant species, *wildlife habitats*, *ecologically and culturally important species*, *threatened and endangered species* (i.e. *Forest with Exceptional Conservation Values*) and *native forest cover types at multiple scales* 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 is 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 *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*.

#### 13. Responsible Fiber Sourcing

To use and promote *sustainable forestry across a diversity of ownership and management types in the United States and Canada that is both scientifically credible and socially, environmentally, and economically responsible* and to avoid sourcing from *controversial sources both domestically and internationally*.

Commented [SF15]: Requirements now rolled into in P. 4.

Commented [SF16]: Edit to retain P6 with edit to align with inclusion of 'ecologically important' in P4.

Commented [SF17]: Now addressed in P. 12.

Commented [SF1 8]: Edit broadens the scope of what is being considered for research.

Commented [SF19]: New Principle to align with new Objective which applies in the U.S., Canada and internationally.

## 1.5 Forest Management Standard Objectives

A Summary of the *SFI 2022-2019 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 or afforestation of ecologically important areas.

**Why it Matters:** Ensures that we grow more trees than we harvest, guaranteeing that forests will last for future generations.

Commented [SFI10]: Conversion and Afforestation Subgroup edit.

### Objective 2. Forest Health and Productivity

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

**Why it Matters:** Ensures that forests remain healthy and resilient which means better forest productivity including providing a reliable and renewable source of sustainably managed fiber for consumer products.

Commented [SFI11]: Oct 15 TG edit.

### Objective 3. Protection and Maintenance of Water Resources

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

**Why it Matters:** Protects water quality and quantity helps provide safe and abundant drinking water for all.

Commented [SFI12]: Forest Conservation Subgroup edit.

### Objective 4. Conservation of Biological Diversity

To maintain or advance ~~manage the quality and distribution of wildlife habitats and contribute to the conservation of biological diversity at the~~ by developing and implementing stand- and landscape-level and across- ~~measures that promote a diversity of types of~~ forest and vegetation cover types/habitats and successional stages including, ~~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.~~

**Why it Matters:** Ensures that forests are managed to protect wildlife habitat and conserve biological diversity.

Commented [SFI13]: Forest Conservation Subgroup edit.

### Objective 5. Management of Visual Quality and Recreational Benefits

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

**Why it Matters:** Ensures that the public can continue to enjoy the aesthetic values and recreation opportunities of forests.

**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.

Why it Matters: Protects special sites that have important geological or cultural values.

**Objective 7. Efficient Use of Fiber Resources**

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

Why it Matters: Ensures the economic well-being of communities that live and work near forests.

**Objective 8. Recognize and Respect Indigenous Peoples' Rights**

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

Why it Matters: Recognizing and respecting the Indigenous Peoples' rights supports relationship building and shared benefits from sustainably managed forests.

**Objective 9: Climate Smart Forestry**

To ensure forest management activities address climate change adaptation and mitigation measures.

Why it Matters: Ensures that SFI-certified forests make an important contribution to addressing the effects of climate change.

**Objective 109. Legal and Regulatory Compliance**

To comply with all applicable laws and regulations including, international, federal, provincial, statestate, and local. laws and regulations.

Why it Matters: Compliance with all laws ensures the protection of the environmental and social values of forests.

**Objective 110. 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.

Commented [SFI14]: Forest Conservation Subgroup edit

Commented [SFI15]: The new Climate Change Objective captures the intent of this requirement.

Why it Matters: Forest research means healthier, more productive forests.

**Objective 121. Training and Education**

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

Why it Matters: Training and educating foresters means forest management plans are more accurately implemented, ensuring the well-being of our forests.

**Objective 132. 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*.

**Why it Matters:** Outreach and education improves the public's understanding of how important sustainable forestry is to local and global issues.

**Objective 143. Public Land Management Responsibilities**

To participate and implement sustainable forest management on *public lands*.

**Why it Matters:** Protects the environmental, social, and economic values of public forests.

**Objective 154. Communications and Public Reporting**

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

**Why it Matters:** Reporting the results of third-party audits increases the public's understanding of forest certification.

**Objective 165. Management Review and Continual Improvement**

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

**Why it Matters:** Encourages continual improvement of sustainable forestry practices, a cornerstone of sustainable forestry.

**1.6 SFI 2022 ~~15-2019~~ Forest Land Management Requirements**

**Objective 1. Forest Management Planning**

To ensure forest management plans include *long-term* sustainable harvest levels and measures to avoid forest conversion or afforestation of ecologically important areas.

**Commented [SFI 16]:** Edit to reflect incorporating the topic of afforestation in Obj 1, moving it from Obj 2.

**Performance Measure 1.1.** ~~Program Participants~~ Certified Organizations shall ensure that forest management plans include *long-term* harvest levels that are sustainable and consistent with appropriate *growth-and-yield 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 ~~stand and~~ landscape scales;
  - e. soils inventory and maps, where available;
  - f. access to and use of *growth-and-yield modeling* capabilities;
  - g. up-to-date maps or a *geographic information system (GIS)*;

**Commented [SFI17]:** Edit to revert to original text. Retaining 'stand' implies an inventory is needed at the stand level which is not the intent of the requirement.

**Commented [SFI 18]:** Edit to recognize use of G&Y modeling.

- h. recommended sustainable harvest levels for areas available for harvest; and
- i. ~~consideration a review~~ of non-timber issues ~~such as (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).

~~i. consideration of *bioenergy feedstock* production;~~

~~k. consideration of pilot projects and economic incentive *programs* to promote water *protection*, carbon storage, or *biological diversity conservation*, or to address climate induced ecosystem change);~~

**Commented [SFI19]:** Edit to retain the existing requirement making the edit to replace 'review' with 'consideration' and e.g. with 'such as'.

**Commented [SFI20]:** Removing j. and k. in keeping with the edit above to revert to existing text for 1.1.1 i.

- 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 **is used to determine annual and/or periodic harvest levels.**
- 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 forest land ownership and tenure, or *forest health*.
- 5. Documentation of forest *management practices* (*such as: planting, fertilization* ~~fertilization,~~ and thinning) consistent with assumptions in harvest plans.

**Commented [SFI 21]:** Edit to link forest inventory to harvest level determination.

**6. Assessment of the local or regional social, environmental and economic effects impacts of forest management operations contained in the forest management plan; and consideration of how the results can be incorporated into the forest management plan.**

**Commented [SFI 22]:** Edit to clarify the intended scale of the assessment.

**Commented [SFI 23]:** Edit addressing how the results of an assessment could be incorporated in the management plan.

**Commented [SFI 24]:** This was an interpretation which is now incorporated into the Standard. (Interpretation #2, Part 1).

**Commented [SFI25]:** Guidance developed to assist with developing scope and scale of this assessment.

**Performance Measure 1.2.** ~~*Program Participants Certified Organizations*~~ shall not convert one *forest cover type* to another *forest cover type*, ~~unless type unless~~ **an assessment has been conducted to determine ecological impacts and provide appropriate justification.** ~~ied circumstances.~~

**Indicators:**

- 1. ~~*Program Participants Certified Organizations*~~ shall not convert one *forest cover type* to another *forest cover type*, unless the conversion:
  - a. ~~does not convert *native forest cover types* that are rare, *ecologically important*, or which put any *native forest cover types* at risk of becoming rare;~~ **Is in compliance with relevant national and regional *policy* and legislation related to land use and forest management; and**
  - b. ~~does not create significant *long-term* adverse impacts on *Forests with Exceptional Conservation Value*, *old growth forests*, forest critical to *threatened and endangered species*, or *special sites* or *ecologically important non-forest eco-systems*;~~ **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. ~~includes objectives for *long-term* outcomes that support maintaining *native forest cover types* and *ecological function*; and *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*.*~~

**Commented [SFI 26]:** Edit to remove "long term" as significant impacts could occur sooner than 1 economic rotation which is the definition of "long term".

Keeping "long term" could be interpreted to mean near term outcomes for maintaining native forts types and ecological function are not important.

**Commented [SFI 27]:** Edit to reference to ecologically important non-forest ecosystems.

d. is in compliance with relevant national and regional policy and legislation related to land use and forest management.

2. Any proposed conversion deemed appropriate per 1.2.1, and which has considered impacts relative to scale, may be implemented subject to ~~Where a Program Participant intends to convert another forest cover type,~~ an a landscape assessment that considers:
- a. a response to address forest health issues such as pests or pathogens, or proactive consideration of anticipated impacts of fire or climate change, reforestation challenges, or riparian protection needs, provided that such justification is supported by the best scientific information/credible science. ~~Productivity and stand quality conditions and impacts which may include social and economic values;~~
  - b. site productivity, economics, and/or stand quality. ~~Specific ecosystem issues related to the site such as invasive species, insect or disease issues, riparian protection needs and others as appropriate to 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; and
  - d. appropriate consultation with local communities, Indigenous People, and other stakeholders who could be affected by such activities.

**Commented [SFI 28]:** Edit clarifying that the assessment is at the landscape level.

**Commented [SFI 29]:** Edit to replace with the defined term.

**Performance Measure 1.3.** ~~Program Participants~~ Certified Organizations shall not have within the scope of their certification to this *SFI Standard*, forest lands that have been converted to non-forest land use.

Indicator:

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

**Performance Measure 1.4.** Certified Organizations shall not afforest in locations which negatively impact ecologically important natural communities, threatened and endangered species, or native natural communities which could be at risk of becoming rare.

Indicator:

1. Any afforestation activity must include an evaluation of the proposed site to determine the presence of:
- a. ecologically important natural communities, or
  - b. threatened and endangered species, or
  - c. native natural communities which could be at risk of becoming rare.
2. Afforestation shall not occur on that location if the evaluation determines a negative impact to the presence of:
- a. ecologically important natural communities, or
  - b. threatened and endangered species, or
  - c. native natural communities which could be at risk of becoming rare.

**Commented [SFI 30]:** Subgroup edit to clarify intent.

**Commented [SFI 31]:** New Performance Measure to address the topic of afforestation more thoroughly.

## **Objective 2. Forest Health and Productivity**

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

**Commented [SFI32]:** TG edit – Oct 15.

**Performance Measure 2.1.** ~~Program-Participants~~Certified Organizations 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 ~~not increase~~ minimize risk to *native* ecosystems.
4. *Protection* of desirable or planned advanced *natural regeneration* during harvest.

~~5. Any planned Afforestation activity should include an evaluation a plan programs that considers potential ecological impacts of the selection and planting of tree species in non-forested landscapes.~~

**Commented [SFI 33]:** Afforestation now has its own PM – PM 1.4.

**Performance Measure 2.2.** ~~Program-Participants~~Certified Organizations shall have a program to minimize chemical use required to achieve management *objectives* while protecting employees, neighbors, the public and the environment, including *wildlife* and *aquatic habitats*.

Indicators:

1. ~~Pest management shall be implemented through the use of integrated pest management shall be preferred.~~
2. Minimized chemical use required to achieve management *objectives*.
3. Use of *least-toxic and narrowest-spectrum pesticides* necessary to achieve management *objectives*.
4. Use of pesticides registered for the intended use and applied in accordance with label requirements.
5. The World Health Organization (WHO) type 1A and 1B pesticides shall be prohibited, except where no other viable alternative is available.
6. Use of pesticides banned under the Stockholm Convention on Persistent Organic Pollutants (2001) shall be prohibited.
7. Supervision of forest chemical applications by state- or provincial-trained or certified applicators.
8. Use of management practices appropriate to the situation, ~~for examplesuch as:~~

**Commented [SFI 34]:** Definition of 'integrated pest management' was edited to align with PEFC's definition which is adopted from FAO. Section 13 reflects this edit.

**Commented [SFI35]:** Edit to improve auditability of the requirement – 'shall be preferred' is subjective and hard to audit.

- 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 limit 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. use of spill response plans and chemical spill kits;
- ji. filing of required state or provincial reports; and/or
- kj. use of methods to ensure protection of threatened and endangered species.

**Commented [SFI 36]:** New sub indicator to reference spill prevention.

**Performance Measure 2.3.** *Program-Participants* Certified Organizations shall implement forest management practices which to protect and maintain forest and soil productivity and soil health.

**Commented [SFI 37]:** Task Group determined that a new term 'soil health' should be adopted to highlight values in the soil other than the soils ability to grow trees.

**soil health:** the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. (USDA)

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 impacts to site productivity.
3. Post-harvest conditions conducive to maintaining site productivity (such as: e.g., limited rutting, retained down woody debris and minimized skid trails).
4. Retention of vigorous trees during partial harvesting, consistent with scientific silvicultural standards for the area.
5. Criteria-Practices that address harvesting and site preparation to protect soil productivity and soil health.
6. Road construction, and skidding layout, and harvest plans designed to minimize impacts to soil productivity, and soil health.

**Commented [SFI38]:** Guidance to be developed regarding soil health - how it measured, and then maintained or enhanced.

7. Protection of residual trees from material damage resulting from harvesting, stand tending, road or trail construction or construction of in woods log processing areas.

**Commented [SFI39]:** Subgroup determined that existing requirements in Obj 2, 3 & 4 meet the intent.

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

**Commented [SFI 40]:** Edit to add clarity – some amount disturbance can be beneficial from a biodiversity perspective.

Indicators:

1. *Program* to protect forests from damaging agents.
2. Management to promote healthy and productive forest conditions to minimize reduce susceptibility to damaging agents.

3. Participation in, and support of, fire and pest prevention and control *programs*.

**Performance Measure 2.5.** *Program-Participants*Certified Organizations 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 and water quantity of rivers, streams, lakes, *wetlands* and other water bodies, ~~through meeting or exceeding best management practices.~~

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

Indicators:

1. ~~1.~~ *Program* to implement federal, state, or provincial water quality *best management practices* during all phases of management activities.

~~2. Program to implement federal, state or provincial water quantity regulatory requirements and 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*Certified Organizations shall implement water, wetland, and *riparian protection programs* ~~measures~~ based on climate, 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 water quality and quantity 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. Program to protect water quantity during all phases of management. 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.

**Commented [SFI41]:** Subgroup edit – water quantity now addressed in PM 3.2.

**Commented [SFI 42]:** Edit to remove “Canadian” in the PM text. Existing text “meeting or exceeding provincial water quality laws” adequately addresses the CDN context. Best management practices does not have the same water quality context as in the US.

**Commented [SFI43]:** TG edit Oct 15.

**Commented [SFI44]:** Sept 23 call – decided to move to PM 3.2 where other water protections will be address in one PM.

**Commented [SFI 45]:** Edit to add ‘climate’ to list of factors.

**Commented [SFI46]:** Sept 23 call – new Water Quantity indicator.

3. ~~Documentation and implementation programs of plans to manage and protect rivers, streams, lakes, wetlands, other water bodies and riparian areas.~~

**Commented [SF147]:** Sept 23 call – decided that this indicator is duplicative to Ind. 3.2.1 and could be deleted.

34. ~~Programs~~ Plans that address wet-weather events in order to maintain water quality (such as: e.g., forest inventory systems, identification of wet-weather tracts and definitions of acceptable operating conditions).

5. ~~Programs to address the impacts of any planned salvage operations to water quality and water quantity at the stand and landscape level when conducting forest management activities to address tree mortality due to factors such as, wildfire, forest pests, disease, wind and/or ice damage or flooding, to include measures to limit any negative impacts.~~

**Commented [SF148]:** Sept 23 call - Group decided that existing requirements in Objective 2.3 and 4 already address operations in the context of salvage. Proposed indicator not accepted.

#### Objective 4. Conservation of Biological Diversity

To ~~maintain or advance~~ manage the quality and distribution of ~~wildlife habitats~~ and contribute to the conservation of biological diversity at the ~~by developing and implementing stand- and landscape-level and across~~ measures that promote a diversity of types of forest and vegetation cover types ~~habitats~~ and successional stages including, 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~~ Certified Organizations shall conserve biological diversity.

Indicators:

1. Program to incorporate the conservation of ~~native~~ biological diversity, including ~~native~~ species, ~~wildlife habitats~~ and ecological community types at stand and landscape levels, through the use of ~~best scientific information~~ including the incorporation of research results.

**Commented [SF149]:** The use of “native” has been moved this sentence because it does not apply to the term or concept of “biodiversity”. Biodiversity is the variety and variability of life on Earth, typically measured as the variation at the genetic, species, and ecosystem level. As such it does not have a locality. The term “native” is better applied to species, or biota, or flora and fauna, e.g. the black spruce is a native species of the boreal forest.

2. Development of criteria and implementation of practices, as guided 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. ~~Program to individually and/or~~ through cooperative efforts such as ~~SFI Implementation Committees~~, support diversity of ~~native forest cover types~~ and age or size classes that enhance ~~native biological diversity~~, by incorporating the results of analysis of documented diversity at landscape and ownership/tenure levels, to ensure the contribution of the managed area to the diversity of conditions that promote ~~biodiversity~~.

**Commented [SF150]:** Use of ‘native’ incorrectly included here.

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.

**Commented [SF151]:** Guidance developed to clarify and offer examples of conditions that can affect biodiversity by virtue of condition, age and/or size classes.

4. ~~Program-Participants~~ Certified Organizations shall ~~individually and/or through cooperative efforts such as SFI Implementation Committees~~, participate in or incorporate the results of ~~credible, relevant~~ state, provincial, or regional conservation planning and priority-setting efforts to conserve biological diversity and ~~incorporate the results of~~ consider these efforts

**Commented [SF152]:** Edit to call out option for cooperatively addressing this requirement.

**Commented [SF153]:** Edit for more specificity.

**Commented [SF154]:** Guidance developed relative to incorporating results into forest management planning.

in forest management planning. ~~Examples of~~ credible priority-setting efforts include state and provincial wildlife action plans, state forest action plans, relevant habitat conservation plans, ~~or~~ provincial wildlife recovery plans, Indigenous planning processes or ecoregional plans.

**Commented [SFI 55]:** Edit to recognize Indigenous planning processes as one of the “credible priority setting efforts”.

5. Program to address conservation of known sites with viable occurrences of significant species of concern, ecologically important species and natural communities, including those that are locally rare.

**Commented [SFI 56]:** Guidance developed to clarify the relationship between the new term “ecologically important” and the concept of “viable occurrences of significant species of concern”, essentially an effort to make language more clear and consistent. Guidance includes attention to species that are vulnerable and/or locally rare.

6. Identification and protection of non-forested wetlands, including bogs, peatlands, fens and marshes, and vernal pools that are ecologically important of ecological significance.

**Commented [SFI 57]:** Locally rare was intended to be addressed through guidance as a suggested way to determine species that are “ecologically important” in the guidance.

7. Participation in programs and demonstration of activities as appropriate to limit the introduction, spread and impact of invasive species exotic plants and animals that directly threaten or are likely to threaten native plant and animal communities.

**Commented [SFI 58]:** Edit to include peatlands.

8. Consider the role of natural disturbances, including opening size, structural retention, the use of prescribed or natural fire where appropriate, and forest health threats in relation to biological diversity when developing forest management plans. Utilize planning tools such as opening size, harvest layout, and structural retention designed in proportions and configurations that are consistent with the characteristic natural disturbance regimes in at the landscape level.

**Commented [SFI 59]:** Guidance was developed to clarify the relationship between these wetland areas the concept of “natural communities”.

**Commented [SFI 60]:** Edit to use the new terminology.

**Commented [SFI 61]:** Edit to give more specificity to the Indicator. The idea that historic natural disturbance be used as more of a guide in management planning.

**Performance Measure 4.2.** ~~Program Participants~~ Certified Organizations shall protect threatened and endangered species, critically imperiled and imperiled species, and natural communities (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 flora and fauna associated with viable occurrences of critically imperiled and imperiled species and ecological communities, defined also known as Forests with Exceptional Conservation Value. Programs ~~Plans~~ for protection may be developed independently and/or collaboratively through cooperative efforts involving such as SFI Implementation Committees, and may include Program-Certified Organization 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.

**Commented [SFI 62]:** Deletion of plans made because programs is understood to be more action oriented and typically requires a plan to implement so is redundant.

**Commented [SFI 63]:** Is there anything additional that could be done to address conserving “old-growth like” conditions?

Certified Organizations should both find the opportunities to promote old growth within their managed area and determine what other contributory conditions they can offer toward landscape outcomes.

**Commented [SFI 64R63]:** Group determined that conserving “old growth like” conditions is addressed in the edits made in PM 4.1.

**Commented [SFI 65]:** ‘to protect’ added here in the PM to strengthen the requirement for protection of ecologically important sites.

**Performance Measure 4.3.** ~~Program Participants~~ Certified Organizations shall manage to protect ecologically important sites in a manner that takes into account their unique qualities.

Indicators:

1. Use of information such as existing NatureServe or 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-ParticipantsCertified Organizations* shall apply knowledge gained through research, science, technology, ~~and~~ field experience ~~and the results of monitoring of the effectiveness of conservation-related programs~~ 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-reputable systems organizations~~. Such participation may include providing non-proprietary scientific information, ~~timetime~~, and assistance by staff, or in-kind or direct financial support.
2. A ~~program methodology to program to~~ incorporate ~~data collected~~, research results and field applications of *biodiversity* and ecosystem research into forest management decisions.
3. ~~Individually or collaboratively participate in or support research that demonstrates clarifies~~ ~~the conservation outcomes resulting from management strategies~~.

**Commented [SFI 66]:** Edit to incorporate the results of monitoring of conservation related programs.

**Commented [SFI 67]:** Edited language is more consistent with the examples... (organizations vs. systems).

**Commented [SFI 68]:** Edit to use the defined term "program".

**Commented [SFI69]:** Subgroup edit – *demonstrate* is more action oriented.

## **Objective 5. Management of Visual Quality and Recreational Benefits.**

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

**Performance Measure 5.1.** *Program-ParticipantsCertified Organizations* 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-ParticipantsCertified Organizations* 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 to 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-ParticipantsCertified Organizations* shall adopt a *green-up 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 *Certified Organization Program-Participant*.

**Performance Measure 5.4.** *Program-Participants Certified Organizations* 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 Certified Organizations* shall *have a program* to identify *special sites* and manage *and protect* 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, and/or consultation, or consultation with Indigenous Peoples* 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 Certified Organizations* shall employ appropriate forest harvesting technology and in-woods manufacturing processes *and practices* to *minimize* waste and ensure efficient utilization of *forest resources harvested trees*, where consistent with other *SFI Standard objectives*.

Indicator:

1. *Program* or monitoring system to ensure efficient utilization, *which may include using* provisions *such as to ensure*:
  - a. management of harvest residue (*such as: e.g.,* slash, limbs, tops) considers economic, social and environmental factors (*such as e.g.,* organic and nutrient value

**Commented [SFI 70]:** Edit to call out protection of special sites.

**Commented [SFI 71]:** Clarifying edit.

**Commented [SFI 72]:** Guidance for Objective 8 (regarding appropriate consultation with Indigenous Peoples) expanded to cover consultation re. protection of special places.

**Commented [SFI 73]:** Clarifying edit to expand the focus of efficient utilization beyond just "harvested trees".

- to future forests and the potential of increased fuels build-up) and other utilization needs;
- b. training or incentives to encourage loggers to enhance utilization;
- c. exploration of markets for underutilized species and low-grade wood and alternative markets (such as e-g-r; 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~~*Certified Organizations* shall recognize and respect *Indigenous Peoples’* rights.

Indicators:

1. ~~Program-Participants~~*Certified Organizations* will shall develop and implement -provide a written *policy* acknowledging a commitment to recognize and respect the rights of *Indigenous Peoples*. This *policy* shall provide reference to a *program* that includes:
  - a. use of available resources and information to identify the *Indigenous Peoples* whose rights may be affected by the *Certified Organization’s* forest management activities.
  - b. recognition of the established framework of legal, customary, and traditional rights such as outlined in:
    - i. the UN Declaration on the Rights of Indigenous Peoples; and/or
    - ii. federal, provincial, and state laws and regulations; and/or
    - iii. treaties, agreements or other constructive arrangements among governments and *Indigenous Peoples*.
  - c. appropriate training of personnel and contractors so that the *Certified Organization* is competent to fulfill their responsibilities under Objective 8 of the Forest Management Standard.
2. The written *policy* shall be publicly available.

**Performance Measure 8.2.** ~~Program-Participants~~*Certified Organizations* with forest management responsibilities on public lands shall confer with affected *Indigenous Peoples* whose rights may be affected by with respect to sustainable the *Certified Organization’s* forest management practices.

Indicator:

1. *Program* that includes communicating with affected *Indigenous Peoples* to enable ~~Program-Participants~~*Certified Organizations* 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*~~;
  - d. *communicate through processes that respect their representative institutions, using appropriate protocols*;
  - e. *provide opportunities to review forest management plans and forest management practices*; and
  - f. respond to ~~*Indigenous Peoples’*~~ inquiries and concerns received.

**Commented [SF174]:** Proposed edit to clarify intent.

**Commented [SF175]:** Proposed edit to clarify intent.

**Commented [SF176]:** Training materials are under development.

**Commented [SF1 77]:** This was an interpretation which is now incorporated into the Standard. (Interpretation #1, Part 1).

**Commented [SF178]:** Guidance expanded to address communications with Indigenous Peoples.

**Commented [SF1 79]:** Edit accepted.

**Commented [SF1 80]:** Guidance updated to reflect the need to share management plans in a non-technical format.

**Commented [SF181]:** Guidance developed regarding opportunities for Indigenous Peoples to participate in information sharing events such as third party audits.

**Performance Measure 8.3.** ~~Program Participants~~*Certified Organizations* are encouraged to communicate with and shall respond to ~~local~~ *Indigenous Peoples* whose rights may be affected by with respect to sustainable forest management practices on ~~the Certified Organization's~~ *their* private lands.

**Commented [SFI 82]:** Edit for clarity.

Indicators:

1. ~~Program Participants~~*Certified Organizations* 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. Climate Smart Forestry.**

To ensure forest management activities address climate change adaptation and mitigation measures.

**Performance Measure 9.1** *Certified Organizations* shall *individually and/or through cooperative efforts involving SFI Implementation Committees or other partners* ~~develop a program to~~ identify and address the climate change risks to forests and forest operations and develop appropriate adaptation objectives and strategies. *Strategies are based on best scientific information, based on analysis of available regional climate models, research, and scenario analysis.*

**Commented [SFI83]:** Edit to highlight a potential role for SICs as an example of cooperative efforts.

**Commented [SFI84]:** Recommended edit to remove "develop a program" as PM requires more than just developing a program.

**Commented [SFI 85]:** Subgroup edit for clarity.

Indicators:

1. *Based on best scientific information, Certified Organizations* shall identify climate change risks and prioritize them based on the likelihood, nature, *severity and longevity* of their expected impact to their forest lands or forest tenures.
2. *Certified Organizations* shall develop an adaptation plan to address priority climate change risks, via effective implementation of the *SFI 2022 Forest Management Standard* requirements for which considers approaches for potential adaptive management including:
  - a. *periodic updates of forest inventory and recalculation of planned harvests as appropriate to account for changes in growth due to productivity increases or decreases, including improved data, long-term drought, fertilization, climate change, or forest health; shifting southern latitude seed zones incrementally northward and upward in elevation, as appropriate, to account for predicted warming;*
  - b. *access to growth and yield modeling capabilities silvicultural activities to limit the impacts from wildfire, disease or forest pests; and*
  - c. *documented harvest trends within long-term sustainable levels identified in the forest management plan, and*
  - d. *appropriate research, testing, evaluation, and deployment of improved planting stock, including varietal seedlings.*
3. *Certified Organizations* shall document how their adaptation plan objectives and strategies fit within broader regional climate adaptation strategies and plans, where they exist.

**Commented [SFI86]:** Edit to include severity of impacts in list of factors.

**Commented [SFI87]:** Edit to link the need for an inventory update with changes in G&Y where the data is adequately calibrated.

**Commented [SFI88]:** Edit to call out existing elements in the FM Standard that help contribute to an adaptation plan.

4. *Certified Organizations* shall report annually to SFI Inc. their progress towards achieving climate change adaptation strategies and plans.

**Performance Measure 9.2** *Certified Organizations* shall ~~have a program to~~ individually and/or through cooperative efforts involving *SFI Implementation Committees* or other partners identify and address opportunities to mitigate for the effects of climate change mitigation associated with its forest operations.

**Indicators:**

1. Based on *best scientific information*, *Certified Organizations* shall identify and address opportunities to enhance carbon sequestration on the forests they own or manage via effective implementation of the *SFI 2022 Forest Management Standard* requirements ~~considering factors such as including:~~

- a. improved growth rates toward the enhancement of forest carbon pools (e.g., through improved seed selection, plantation survival, stocking levels, choice of species, thinning, competition reduction, fertilization), and;
- b. ~~protection of forests from the impacts from more frequent of wildfire, disease, or forest pest outbreaks as per Performance Measure 2.4.~~ Silvicultural activities to limit the impacts from wildfire, disease or forest pests, and
- c. adjustments to forest management ~~practices~~, as appropriate.

2. Based on *best scientific information*, *Certified Organizations* shall identify and address opportunities to enhance ecosystem resilience for the forests they own or manage via effective implementation of the *SFI 2022 Forest Management Standard* requirements including:

- a. prompt *reforestation* or ~~within two planting seasons or by planned~~ *natural reforestation* within five years as per Indicator 2.2.1;
- b. adequate regeneration and appropriate actions to correct understocked areas, and
- c. evaluation for *afforestation* of areas that are not *ecologically important*, and
- d. ~~e.~~ protection of desirable or planned advanced regeneration during harvest and the retention of vigorous trees during partial harvest.

3. Based on *best scientific information*, *Certified Organizations* shall ~~develop a program to identify and address~~ greenhouse gas emissions both within their operational control and outside of their operational control, and ~~develop a program to address greenhouse gas emissions, within their operational control.~~

4. *Certified Organizations* shall report annually to SFI Inc. their measures to mitigate climate change associated with forest operations.

**Objective 109. Legal and Regulatory Compliance.**

To comply with all applicable laws and regulations including, international, federal, provincial, state, and ~~local~~ laws and regulations

**Performance Measure 109.1.** ~~Program Participants~~ *Certified Organizations* shall comply with applicable federal, provincial, state, and local forestry ~~and related social~~ and environmental laws and regulations.

**Commented [SFI89]:** New Indicator for reporting progress to SFI Inc.

**Commented [SFI90]:** Edit to remove “develop a program” as PM requires more than just developing a program.

**Commented [SFI91]:** Edit to highlight a potential role for SICs as an example of cooperative efforts.

**Commented [SFI92]:** Edit to add specificity to the desired outcome for PM 9.2.

**Commented [SFI 93]:** Subgroup edit.

**Commented [SFI94]:** Revisit the language and check vs. PM 2.4.

**Commented [SFI95]:** Oct 15 edit.

**Commented [SFI96]:** Edit to call out existing elements in the FM Standard that help contribute to carbon sequestration.

**Commented [SFI97]:** Oct 15 edit.

**Commented [SFI 98]:** Subgroup edit to recognized role of afforestation and new afforestation PM in Objective 1.

**Commented [SFI99]:** Edit to call out existing elements in the FM Standard that help address mitigation through ecosystem resilience.

**Commented [SFI100]:** Edit following Board review Oct 21 of the new Objective 9.

**Commented [SFI101]:** Edit to clarify the scope of the requirement.

**Commented [SFI102]:** New Indicator for reporting progress to SFI Inc.

**Commented [SFI103]:** *Local*: a level of elected government below state or province such as county, district, city, township, municipality, town or parish.

**Commented [SFI 104]:** Edit deleting “social” as it is addressed in more detail in PM 10.2.

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.*

**Commented [SFI 105]:** Edit to remove as it is redundant.

**Performance Measure 109.2.** ~~Program Participants~~*Certified Organizations* 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 ~~Certified Organization~~ *Program Participant* operates.

**Commented [SFI 106]:** Edit to align with language used in PM 10.1.

Indicators:

1. Written *policy* demonstrating commitment to comply with social laws, such as those covering civil rights, equal employment opportunities, ~~gender equality, diversity inclusion,~~ 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.

**Commented [SFI 107]:** Alignment with PEFC requirements.

### **Objective 110. 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.~~

**Commented [SFI 108]:** Edit to align with language used in PM 11.1.

**Commented [SFI 109]:** Edit to remove "forestry" here is limiting the scope of the research and redundant with the inclusion of "sustainable forest management".

**Commented [SFI 110]:** The new Climate Change Objective captures the intent of this requirement.

**Performance Measure 110.1.** ~~Program Participants~~*Certified Organizations* 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.

**Commented [SFI 111]:** Edit to align with revised Indicator 11.1.1.

Indicators:

1. Financial or in-kind support of research, ~~collaboratives, or knowledge transfer~~ to address ~~questions~~ *key themes* of relevance in the region of operations ~~as identified by~~ *Certified Organizations, local stakeholders, communities and/or Indigenous Peoples.* Examples could include, but are not limited to, ~~areas of the following topics:~~
  - a. ~~forest productivity~~ *climate change adaptation and mitigation;*
  - b. ~~water quality and quantity;~~
  - c. biodiversity, *Forests with Exceptional Conservation Value, and species maintenance and recovery;*
  - d. *landscape ecology;*
  - e. *Indigenous traditional forest related knowledge;*
  - f. *ecosystem services or non-timber forest products;*
  - g. ~~community issues~~ *engagement;*

**Commented [SFI112]:** Edit to include that Certified Organization can identify themes – good to clarify.

- h. forest health and productivity;
- i. support for Forest Inventory Analysis (FIA);
- j. SFI sponsored Conservation Grant Program research;
- k. the role of forests in the bioeconomy, and
- l. or similar areas themes which build broader understanding of the benefits and effects impacts of sustainable forest management and forest sustainability or sustainable supply chains.

**Commented [SFI 113]:** Edit to better illustrate the range of potential topics for research.

**Commented [SFI114]:** Subgroup edit to include sustainable supply chains.

~~2. Research on genetically modified 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.~~

**Commented [SFI 115]:** Edit to delete this clause and place reliance of the SFI Forest Tree Technology Policy. Policy to be updated for Board review.

~~23. Ensure that knowledge gained through research is shared, to the extent possible, to positively influence sustainable forest management. Consider the sharing of knowledge gained through research in appropriate formats to influence sustainable forest management.~~

**Commented [SFI 116]:** Edit to strengthen the requirement.

**Performance Measure 110.2.** ~~Program Participants Certified Organizations~~ shall individually and/or through cooperative efforts involving *SFI Implementation Committees*, associations or other partners develop, contribute to, or use national, state, provincial or regional analyses in support of their *sustainable forestry programs*.

**Commented [SFI 117]:** Edit to bring more specificity to the Performance Measure.

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 of some of the following information such as:
  - 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; ~~and~~
  - f. landscape-scale biodiversity assessments which clarify the contributory role of sustainable forest management.

**Commented [SFI 118]:** Edit to expand the list of assessments that could be considered.

~~**Performance Measure 10.3.** Program Participants Certified Organizations 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 Certified Organizations~~ are knowledgeable about *climate change impacts on wildlife, wildlife habitats and conservation of biological diversity* through international, national, regional or local *programs*.

**Commented [SFI 119]:** This Performance Measure is no longer needed due to the new Climate Change Objective.

**Objective 121. Training and Education.**

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

**Commented [SFI 120]:** Edits to the requirements to Objective 12 will mirror those decided in the Fiber Sourcing Subgroups discussion for FS Objective 6.

**Performance Measure 12.1.1.** ~~Program Participants~~*Certified Organizations* shall require appropriate training of personnel and contractors so that they are competent to fulfill their responsibilities under the *SFI 2022-2019 Forest Management Standard*.

Indicators:

1. Written statement of commitment to the *SFI 2022-2019 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 2022-2019 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**Certified Organizations* shall have written agreements for the use of *qualified logging professionals*, ~~certified logging professionals (where available), and/or wood producers~~ that have completed training programs and are recognized as *qualified logging professionals and/or certified logging companies*.

~~6. Certified Organizations can choose to use the services of certified logging companies to foster improvement in wood producers. Certified Organizations shall encourage the use of certified logging companies where they are available and after consideration of other factors involved in developing contractual relationships.~~

**Commented [SFI121]:** Edit from Logger Training Subgroup. Edit aligns with same text in Fiber Sourcing PM 3.2.2.

**Commented [SFI122]:** Edit to align with decision in the Logger Training Subgroup discussion.

**Performance Measure 12.1.2.** ~~Program Participants~~*Certified Organizations* shall work individually and/or ~~through cooperative efforts involving 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 specific to qualified logging professionals*.

Indicators:

1. Participation in or support of *SFI Implementation Committees* to establish criteria and identify delivery mechanisms for *wood producer core* training courses ~~that allow individuals to attain qualified logging professional status. These criteria shall address at least the following 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, *Forests with Exceptional Conservation Value (critically imperiled and imperiled species and ecological communities)*, and other measures to *protect biodiversity and wildlife habitat (e.g., Forests with Exceptional Conservation Value)*;
  - d. logging safety;

**Commented [SFI 123]:** Logger Training Subgroup edit to call out requirements need to attain trained status.

**Commented [SFI 124]:** Moved to PM 12.2, Indicator 2 under continuing education requirements.

eg. 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, and

f. ~~other topics identified by Certified Organizations and/or SFI Implementation Committees that improve their responsibilities in meeting the SFI 2022 Standards.~~

h. ~~transportation issues;~~

i. ~~business management;~~

j. ~~public policy and outreach; and~~

k. ~~awareness of emerging technologies.~~

**Commented [SFI 125]:** Edit to call out option to recognize other topics for as Core training.

**Commented [SFI 126]:** Moved to continuing education – Indicator 12.2.2

2. Participation in or support of *SFI Implementation Committees* to establish criteria and identify delivery mechanisms for *wood producer* continuing education training courses that shall be taken by *qualified logging professionals* at least once every two years to maintain their status. The continuing education training course(s) shall ~~at least once every two years that address~~ ~~shall address~~ one or more of the following topics:

**Commented [SFI 127]:** Logger Training Subgroup edit to call out requirements to retain “trained” status.

**Commented [SFI 128]:** New Indicator to call out Continuing Education for Qualified Logging Professionals.

The SIC 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:

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 species management, exotic plants and animals, forest resource conservation, aesthetics and special sites;~~

d. ~~b. awareness of rare forested natural communities as identified by provincial or state agencies, or by credible organizations such as NatureServe and The Nature Conservancy;~~

ee. ~~transportation issues;~~

fd. ~~business management;~~

ge. ~~public policy and outreach;~~

hf. ~~awareness of emerging technologies;~~

ig. ~~logging safety; or and~~

jh. ~~other topics identified by Certified Organization and/or SFI Implementation Committees that improve their responsibilities in meeting the SFI 2022 Standards;~~

~~and~~

k. ~~trends related to the effectiveness of the SFI Implementation Committee approved wood producer training programs.~~

**Commented [SFI 129]:** Aligns with comment above – repetition of core topics in CE for reinforcement.

**Commented [SFI 130]:** Edit to call out options to recognize other topics for as Core training.

**Commented [SFI 131]:** Logger Training Subgroup edit. Replaced by (j).

**Performance Measure 121.3.** ~~Certified Organizations 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 specific to certified logging companies where they exist.~~

**Commented [SFI 132]:** New Performance Measure to emphasize Certified Logging Companies.

13. ~~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 logger training programs and meeting continuing education requirements of the training program of key personnel;~~
- 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 including Forest with Exceptional Conservation Value (critically imperiled and imperiled species and ecological communities);~~
- d. ~~use of best management practices to protect water quality;~~
- e. ~~adherence to a logging safety program;~~
- 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;~~
- i. ~~independent verification that each crew includes an individual who:~~
  - i. ~~has completed the *SFI Implementation Committee* approved wood producer training program;~~
  - ii. ~~is an owner of, employee of, or contracted by the wood producer; and~~
  - iii. ~~has direct responsibility and is on site regularly to consistently carry out the roles and responsibilities of the wood producer.~~

**Commented [SFI133]:** Certified Logging Companies referenced in PM 12.1 and the definition of CLC be updated. PM 12.3 removed.

### **Objective 132. 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 132.1.** *Program Participants* *Certified Organizations* 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 Committees*.
2. Support, individually ~~and/or collaboratively~~ through cooperative efforts involving *SFI Implementation Committees*, education and outreach to forest landowners describing the importance 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) considers economic, social, environmental factors (e.g., ~~organic~~ and nutrient value to future forests) and other utilization needs;

- f. control of *invasive species* ~~exotic plants and animals~~;
- g. characteristics of *special sites*; and
- h. reduction of wildfire risk; ~~:-~~
- i. use of qualified logging professionals, and qualified resource professionals and/or certified logging companies;
- j. awareness of SFI, and
- k. reporting of inconsistent practices.

**Commented [SFI134]:** Inclusion of Certified Logging Companies

**Commented [SFI 135]:** Edit – additional topics for CE.

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*, *conservation easements* federal, state, or provincial cost share programs, or the *SFI Conservation Grant Program*.

**Performance Measure 132.2.** ~~Program Participants~~ *Certified Organizations* shall individually and/or through cooperative efforts involving membership in a SFI Implementation Committee(s) 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 for the public promoting *sustainable forestry*, such as
  - a. field tours, seminars, websites, webinars or workshops;
  - b. educational trips;
  - c. self-guided forest management trails;
  - d. publication of articles, educational ~~pamphlets~~ pamphlets, or newsletters; or
  - e. support for national, state, provincial, and local *forestry* organizations and soil and water *conservation* districts.
  - f. engagement and support of teachers and/or students through programs such as Project Learning Tree.

**Performance Measure 132.3.** ~~Program Participants~~ *Certified Organizations* shall, individually and/or through cooperative efforts including membership in a SFI Implementation Committee(s), establish, at the state, provincial, or other appropriate levels, procedures to address concerns raised by loggers, consulting foresters, employees, unions, stakeholders, the public or other ~~Program Participants~~ *Certified Organizations* regarding management practices that appears inconsistent with the *SFI Standard principles* and *objectives*.

**Commented [SFI 136]:** Edit to include "stakeholders".

Indicators:

1. Support for *SFI Implementation Committees* (e.g., toll-free numbers and other efforts) to address concerns about apparent nonconformance ~~ing~~ 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 143: Public Land Management Responsibilities.**

To participate and implement sustainable forest management on *public lands*.

**Performance Measure 143.1.** ~~Program-Participants~~ Certified Organizations with forest management responsibilities on public lands shall participate in the development of public land planning and management processes.

Indicators:

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~~ federal, or independent collaboration.

**Objective 154. Communications and Public Reporting.**

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

**Performance Measure 154.1.** A Certified Organization ~~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 ~~2022-15-2019~~ Forest Management Standard.

Indicator:

1. The summary audit report submitted by the Certified Organization ~~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 Certified Organization ~~Program-Participant~~ that was audited, including its SFI representative;
  - d. a general description of the ~~Program-Participant's~~ Certified organization'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 Certified Organization ~~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 management 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 154.2.** ~~Program-Participants~~ Certified Organizations shall report annually to SFI Inc. on their conformance with the SFI ~~2022-15-2019~~ 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 2022-2019 Forest Management Standard*.

**Objective 165. 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 165.1.** *Program-Participants Certified Organizations* shall establish a management review system to examine findings and progress in implementing the *SFI 2022-2019 Forest Management Standard*, to make appropriate improvements in *programs*, and to inform their employees of changes.

Indicators:

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 2022-2019 Forest Management Standard objectives and performance measures*, including measures to reduce the negative impacts from forest management operations.
3. Annual review of progress by management and determination of changes and improvements necessary to continually improve conformance to the *SFI 2022-2019 Forest Management Standard*.

**Commented [SFI 137]:** This was an interpretation which is now incorporated into the Standard. (Interpretation #2, Part 1).