
Maryland DNR Forest Service

2020 SFI® Forest Management Summary Report

Introduction

The SFI Program of the Maryland DNR Forest Service of Annapolis, Maryland has achieved continuing conformance with the SFI® 2015-2019 Forest Management Standard, including the sustainable harvest level requirement (Performance Measure 1.1), according to the NSF SFI-FS Certification Audit Process.

The Maryland DNR Forest Service initially obtained SFI Certification from NSF on July 24, 2003 and the program was re-certified in July 2006. Initially only the Chesapeake Forest Lands were certified, with the Pocomoke State Forest added in 2009 as part of an expansion of scope that included other recently acquired lands. In 2011 the organization sought and was granted recertification to the current scope based on an audit of the six largest state forests against the SFI 2010-2014 Standard. The state forests included in the current scope were re-certified to the SFI 2015-2019 Standards in April of 2014 and again in April 2019. The most recent audit was a partial surveillance audit conducted July 2020.

The multi-site certificate covers 6 different State Forests (Chesapeake Forest, Pocomoke State Forest, Green Ridge State Forest, Garrett State Forest, Potomac State Forest, and Savage River State Forests) also including the central office located in Annapolis MD. The 2019 audit included office reviews in the following Chesapeake Forest, Pocomoke State Forest, Green Ridge State Forest, and the central office located in Annapolis, MD. Field visits were conducted in 2 out of a total of 6 State Forests. This sample size was determined using the guidelines set forth in IAF-MD1. The State Foresters were selected based on a date rotation of total 6 different Forests. Approximately half of the field sites visited were randomly sampled. Within the 2 selected forests, NSF's lead auditor selected field sites for inspection based upon the risk of environmental impact, likelihood of occurrence, special features, and other criteria outlined in NSF's protocols and procedures. 2 field offices, 1 central office and 12 field sites were visited, a smaller set of field sites was visited in 2020, in order to limit staff and auditor interactions, due to the on-going COVID-19 pandemic.

The 12 field sites consisting of the 1 active timber harvest (softwood 2nd thinning), 6 recently closed sale with wildlife considerations, 1 with herbicide application with invasive species, 3 High Conservation Forest, 3 planting sites, 1 Pre-commercial thinning site, 3 demonstration forests, and 1 research site (some sites met multiple considerations and are noted for each of those above). Both thinnings and final harvests were viewed for multiple sites. There were also several roads, several smaller road-trail/stream crossings with cross drains and BMPs being applied. Harvest levels are documented in Annual Work Plans and have been at or below levels identified in plans for MD DNR associated inventory and growth data as well as harvest-related planning documents are used to ensure that plans include long term harvest level and consistent with the growth and yield model generated by the PGSF and SRSF. Data from the 5-year stand-level inventory project was used to develop a volume-control target based allowable harvest levels for western forests.

Maryland DNR Forest Service has an extensive program for harvest planning and approval. A Sustainable Forest Management Plan has been developed for each forest, and these plans are regularly updated. Harvests levels have been modeled by forest type for sustainability by area control for a 50-year planning horizon. Based on the Sustainable Forest Management Plan an Annual Work Plan is developed for each forest including planned harvests and other management activities. The Annual Work Plan is reviewed by various agencies in the Maryland DNR, and a Citizen's Advisory Team. It is also posted on the Maryland DNR Forest Service website for public comment for a period of 30 days. Following review of comments, the finalized plan is approved and posted on the Maryland DNR Forest Service website.

This report describes the results of the 2020 Surveillance Audit which considered changes in operations, the management review system, and efforts at continuous improvement. A sample of the SFI requirements were selected for detailed review.

Maryland's State Forests

Maryland DNR Forest Service is responsible for the management of the 209,207 acres of Maryland State Forests through a variety of designations. The Forest Service is supported by other agencies within the Department of Natural Resources including Wildlife, Fisheries, Heritage, and the Natural Resources Police. Various management plans provide a useful summary of the importance of these forestlands and the broad policy goals:

Excerpted from the Savage River State Forest Management Plan:

'The resources and values provided from state forests reach people throughout the State and beyond. These resources and values range from economic too aesthetic and from scientific too inspirational. The Department of Natural Resources is mandated by law to consider a wide variety of issues and uses when pursuing a management strategy for these forests. The importance of considering these factors is acknowledged in the Annotated Code, which establishes the following policy pertaining to state forests and parks:

"Forests, streams, valleys, wetlands, parks, scenic, historic and recreation areas of the state are basic assets. Their proper use, development, and preservation are necessary to protect and promote the health, safety, economy and general welfare of the people of the state. It is the policy of the state to encourage the economic development and the use of its natural resources for the improvement of the local economy, preservation of natural beauty, and promotion of the recreational and leisure interest throughout the state." (Annotated Code of Maryland, Natural Resources Article §5-102)

The Department recognizes the many benefits provided by state forests and has established a corresponding management policy in regulation.

"The state forests are managed to promote the coordinated uses of their varied resources and values for the benefit of all people, for all time. Water, wildlife, wood, natural beauty and opportunities for natural environmental recreation, wildlands experience, research demonstration areas, and outdoor education are major forest benefits." (Code of Maryland Regulations 08.07.01.01)

The 2020 Surveillance Audit was performed by NSF on July 21-23, 2020 by an audit team headed by Michelle Matteo Sr. Lead Auditor. Beth Jacqmain was the Sr. FSC Lead Auditor and supported the NSF lead auditor for SFI. Audit team members fulfill the qualification criteria for conducting audits contained in SFI 2015-2019 Standards and Rules, Section 9 - Procedures and Auditor Qualifications and Accreditation.

The objective of the audit was to assess conformance of the firm's SFI Program to the requirements of the SFI 2015-2019 Standard and Rules, Section 2 – Forest Management.

The scope of the audit included forest management operations. Forest practices that were the focus of field inspections included those that have been under active management over the planning period of the past 2 years. In addition, practices conducted earlier were also reviewed as appropriate (regeneration and BMP issues, for example); SFI obligations to promote sustainable forestry practices, to seek legal compliance, and to incorporate continual improvement systems were also within the scope of the audit.

The SFI Standard was used without modifying any requirements. SFI requirements that are outside of the scope of Maryland's SFI program were excluded from the scope of the SFI Certification Audit as follows:

- Indicator 10.1.2. 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. Maryland DNR Forest Service does not participate in research on genetically engineered trees.

Audit Process

NSF initiated the SFI audit process with a series of planning phone calls and emails to reconfirm the scope of the audit, review the SFI Indicators and evidence to be used to assess conformance, verify that Maryland DNR Forest Service was prepared to proceed to the SFI Audit, and to prepare a detailed audit plan.

The audit was governed by a detailed audit plan designed to enable the audit team to efficiently determine conformance with the applicable requirements. The plan provided for the assembly and review of audit evidence consisting of documents, interviews, and on-site inspections of ongoing or completed forest practices.

During the audit NSF reviewed a sample of the written documentation assembled to provide objective evidence of conformance. NSF also selected field sites for inspection based upon the risk of environmental impact, likelihood of occurrence, special features, and other criteria outlined in the NSF protocols. NSF selected and interviewed stakeholders such as contract loggers, landowners and other interested parties, and interviewed employees within the organization to confirm that the SFI Standard was understood and actively implemented. The activities of the central office were reviewed against the multi-site requirements as well.

The possible findings of the audit included conformance, major non-conformance, minor non-conformance, opportunities for improvement, and practices that exceeded the requirements of the standard.

A report was prepared, and final approval was done by an independent Certification Board Member assigned by NSF. Follow-up or Surveillance Audits are required by the Sustainable Forestry Initiative Standard[®]. The next Surveillance Audit is scheduled for the first week of April 2021.

Overview of Audit Findings

Maryland's SFI Program demonstrated conformance against the SFI 2015-2019 Standard. There was one non-conformance in 2020, and one "Opportunities for Improvement". As such, the program has earned continuing certification with the minor non-conformance.

Six OFIs identified in the 2019 audit have been resolved, one remains open:

1. **SFI 2.1.1:** 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.
OFI: Regeneration criteria are forest-type specific. Confirmed that Western SFs use Oak-SILVAH for criteria and for protocols for regeneration surveys. No regeneration delays were observed in the field. Although planting is rarely done, there is an opportunity for improvement in the regeneration criteria in order to achieve acceptable species and stocking levels for naturally regenerating stands in the Eastern Region.
Closed: The guidance for forest regeneration criteria for the Chesapeake Forest Lands and Pocomoke State Forest can be found in the Policy and Procedures Handbook for the Chesapeake Forest Lands & Pocomoke State Forest. Also, in that same document, Appendix K displays the Decision Tree For Regenerating Mixed Hardwood-Pine Stands.
2. **SFI 2.2.5:** Use of Pesticides banned under the Stockholm convention and Persistent Organic pollutants.
OFI: Although Pesticides are currently checked against the FSC checklist, there is an opportunity to improve the chemical review process, both internally and with external contractors, to ensure that current and future uses of pesticides does not include pesticides banned under the Stockholm convention and Persistent Organic pollutants are not being used.
Closed: To address the issue of all pesticides used within our certification scope we the State Forest managers communicated with the utility companies working across our management units. They learned that some utilities have used pesticides on their Right-of-Way management that may be on the banned pesticide list. Pesticide use reporting on has been cryptic at best and in some incidences considered proprietary. We came to the conclusion it is best to remove these areas from our scope. Those acres excised from our forest certification scope. Staff members now routinely cross check the chemicals used against the Stockholm convention and Persistent Organic pollutants list.
3. **SFI 3.1.3:** Monitoring of overall best management practices implementation.
OFI: The organization currently conducts BMP monitoring with written checklists. Different checklists are used in the Eastern Shore and the Western SFs. There is an opportunity to improve the difference in criteria used in the West vs the Eastern Shore (example with the criteria for 1-5 verses Yes NO and NA noted) in efforts to help improve consistency for evaluation of BMP effectiveness.
Closed: A revised FOREST HARVEST OPERATIONS – HARVEST SITE REVIEW ON STATE LANDS was created and has been in use.
4. **SFI 8.2.1** *Program Participants* with forest *management responsibilities on public lands* shall confer with affected *Indigenous Peoples* with respect to sustainable forest management practices. Indicator:
8.2.1 *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.**OFI:** Although the Chesapeake/Pocomoke Forest Citizens Advisory Committee member has been recently established, there is an opportunity to continue efforts and seek input from indigenous people, including all MD State Forest regions, as the last formal outreach efforts were completed 5-6 years ago and per interview, there is not a regularly scheduled interval to re-evaluate the MD DNR SF outreach efforts.
Closed: During the 2019 audit an email communication from the Chesapeake Forest Lands office (dated April 3, 2019) was shared with the audit team that indicated that we did reach out to the Maryland Commission on Indian Affairs (MCIA) with a notice regarding an opportunity to have a native American member on the Citizens Advisory Committee (CAC). Since the 2019 audit (Feb 2020), we sent a personal invitation to MCIA to review our state forests for annual work plans and to follow up regarding CAC representation. A member has been appointed to the CAC.

5. **SFI 11.1.2** Assignment and understanding of roles and responsibilities for achieving *SFI 2015-2019 Forest Management Standard objectives*.

OFI: There is an opportunity to improve the assignment and understanding of roles and responsibilities as it relates to contract requirements, per review of the Stone Mountain Road contract #0217. Internal contractual documents were incomplete on one page of the contract; per interview with multiple DNR staff, there were differing thoughts as to who was responsible for noting the official date and signature on the contract, i.e.: State Forest Staff vs. Central Office staff in Annapolis.

Closed: This issue specifically, who enters the contract beginning date at the top of the timber sale contract has been an issue but has been resolved by the Department of Natural Resources Procurement office. Procurement has stated to us regarding the contract beginning date is to be signed after the contract has been approved and before it is returned to the logging contractor. The date is to be entered by the Forest Resource Planning program manager who administers timber sales for the Department of Natural Resources.

6. **SFI 11.1.3** Staff education and training sufficient to their roles and responsibilities.

OFI: While the seed mix used on landings and roads has been previously approved by State Wildlife staff for food plots and for the Erosion and Sediment Control plan, there is an opportunity to improve staff education and training as it relates to the seed mixture (species and ratios) currently being applied on landings and roads, as only non-native, naturalized species are being used.

Open: The primary purpose for these seed mix is to provide a quick, reliable covering for disturbed soils and it provides that. It has been used for many years without an incident of being invasive. This seed mix was suggested by our Wildlife & Heritage Service as a good mix for wildlife benefits. It is preferred by our State Forest managers since it is readily available for purchase by logging contractors from local sources and based on its quality, price and productivity. It has been our experience that this planting falls out (diminishes) after about 5-years and must be disked and replanted to maintain these open areas that also serve as wildlife food plots. One of these re-establishment sites was visited during the 2019 audit at Green Ridge State Forest.

2020 audit note: Communications with other DNR staff display that native seed mixes are available as an option and are worth discussing with Forestry – this OFI remains open.

7. **SFI 15.1.2:** System for collecting, reviewing, and reporting information to management regarding progress in achieving *SFI 2015-2019 Forest Management Standard objectives and performance measures*.

OFI: Currently the document "Internal Review-ISA-FIELD-CHECKLIST-ALL-SF- is used. There is an opportunity to consider using other foresters from different regions to help strength and improve current auditing processes.

Closed: When we first established our Internal Silvicultural Audit program, we considered many options. The first teams included members of the Interdisciplinary Teams (IDT). Later, we tested an option that included staff from other state forests units. Ultimately, we decided a review including the just the State Forest staff, the regional forester (State Forest manager supervisor) and the forest certification coordinator was the optimal review team. This provided direct review by the regional forester and continuity of the reviews from the forest certification coordinator.

Our Internal Silvicultural Audit field document has been revised to better reflect issues to be addressed for silviculture review.

One Minor CAR identified in the 2019 audit has been resolved:

1. Contract logger is a MD Master Logger, however there were issues with the equipment on-site. Dozer was persistently leaking on site onto the soil below the equipment, some oil was observed on the soil below the Skidder. Logger was not on site. No apparent safety equipment (no fire extinguishers & spill kits observed on all 3 machines on an active site), however, later interview stated that the fire extinguishers were behind the seats of the skidder and harvester out of view. Recent BMP inspection conducted by forester noted no issues. This process is not fully effective for SFI 2015-2019 Standards and Rules®, Section 2 – Forest Management, Indicator 11.1.4 Contractor education and training sufficient to their roles and responsibilities.
Closed: To better ensure fluid leaks are prevented, contained and cleaned up appropriately we have taken the following steps:
 - Drafted the Standard Operating Procedures For Woodland Spill Management - Attachment F which will be part of all timber sale contracts.
 - This guidance document was based on a review of relevant Maryland regulations and conversations with the Maryland Department of the Environment (MDE), the department enforcing fuel spill regulations. MDE contacts included:
 - Geoffrey Donahue, Chief of Emergency Response Division — (410) 537-4460
 - Thomas Walter, Chief of Compliance for Oil Control Program — (410) 537-3473
 - Review of the Maryland Master Logger Program (MLP), required training for all logging contractors harvesting on Maryland state forests. The MLP has a component on handling logging fuel spills which is based on prevention, containment, and clean up.

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- Revised the Internal Silvicultural Audit inspection form to include for reviews of active logging jobs for personal protection equipment, spill kits, fire extinguishers, and first aid kits.
 - Revised Best Management Practices (BMP) Checklist includes a review of fuel or oil leaks and safety equipment.

There was one new Non-Conformance in the 2020 audit:

1. **SFI 14.1.1:** 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*. The April 2019 Recertification Audit is not present on the SFI website, no confirmation was provided that it has been submitted. Progress in implementing this corrective action plan will be reviewed in subsequent surveillance audits.

There was 1 OFI that was not closed and remains open in 2020:

1. **SFI 11.1.3** Staff education and training sufficient to their roles and responsibilities.
OFI: While the seed mix used on landings and roads has been previously approved by State Wildlife staff for food plots and for the Erosion and Sediment Control plan, there is an opportunity to improve staff education and training as it relates to the seed mixture (species and ratios) currently being applied on landings and roads, as only non-native, naturalized species are being used.
Open: The primary purpose for these seed mix is to provide a quick, reliable covering for disturbed soils and it provides that. It has been used for many years without an incident of being invasive. This seed mix was suggested by our Wildlife & Heritage Service as a good mix for wildlife benefits. It is preferred by our State Forest managers since it is readily available for purchase by logging contractors from local sources and based on its quality, price and productivity. It has been our experience that this planting falls out (diminishes) after about 5-years and must be disked and replanted to maintain these open areas that also serve as wildlife food plots. One of these re-establishment sites was visited during the 2019 audit at Green Ridge State Forest.
2020 audit note: Communications with other DNR staff display that native seed mixes are available as an option and are worth discussing with Forestry – this OFI remains open.
This finding does not indicate a current deficiency, but served to alert Maryland DNR Forest Service to areas that could be strengthened or which could merit future attention.

NSF also identified the following areas where forestry practices and operations of Maryland DNR Forest Service exceed the basic requirements of the standard:

There was one area where the forestry program of Maryland DNR's Forest Service "Exceeds the Requirements":

1. **SFI 11.1.2** Assignment and understanding of roles and responsibilities for achieving *SFI 2015-2019 Forest Management Standard objectives*.
Excellent communication exists between the MD-DNR Forest Service and Parker Forestry Service. This relationship allows a seamless working relationship between the two entities.

General Description of Evidence of Conformity

NSF's audit team used a variety of evidence to determine conformance. The 2020 audit included State Forest reviews in the following by the NSF audit team, Chesapeake Forest, Pocomoke State Forest, and the central office located in Annapolis, MD. Field visits were conducted in 2 out of a total of 6 State Forests. 2 field offices, 1 central office and 12 field sites were visited. The 12 field sites consisted of the 1 active timber harvest (softwood 2nd thinning), 6 recently closed sale with wildlife considerations, 1 with herbicide application with invasive species, 3 High Conservation Forest, 3 planting sites, 1 Pre-commercial thinning site, 3 demonstration forests, and 1 research site (some sites met multiple considerations and are noted for each of those above). Both thinnings and final harvests were viewed for multiple sites. There were also several roads, several smaller road-trail/stream crossings with cross drains and BMPs being applied. A further description of the audit evidence is provided below, organized by SFI Objective. NSF's audit team used a variety of evidence to determine conformance.

Objective 1 Forest Management Planning

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

Summary of Evidence: *The forest management plans for both the Chesapeake and Pocomoke State Forests and supporting documentation and the associated inventory data and growth analyses were the key evidence of conformance for eastern forests.*

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.

Summary of Evidence: *Field observations and associated records including annual work plans and “State Forest Database” reports were used to confirm practices. Maryland DNR Forest Service has programs for reforestation, for protection against insects, diseases, and wildfire, and for careful management of activities which could potentially impact soil and long-term productivity.*

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.

Summary of Evidence: *While this Objective was not audited in 2020, in the past evidence included field observations of a range of sites. Auditors visited the portions of field sites that were close to water various types of water resources, (primary waterways, secondary streams and drains) generally riparian buffers, and confirmed that these buffers were flagged during planning, painted prior to harvests and noted for input into GIS.*

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.

Summary of Evidence: *While this Objective was not audited in 2020, in the past evidence included field observations, written plans and policies for the protection of old growth, High Conservation Value Forests 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.

Summary of Evidence: *While this Objective was not audited in 2020, in the past evidence included field observations of active and completed harvesting operations and policies/procedures for visual quality. Visits to recreation sites and contacting various stakeholder seeking input and obtaining feedback on how the DNR balances public interests while providing various recreational opportunities.*

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.

Summary of Evidence: *While this Objective was not audited in 2020, in the past evidence included field observations of completed operations, assessments of GIS maps and other records of special sites, training records, and written protection plans. Partners within the DNR and outside stakeholders participate in identification of special sites and participate during audits.*

Objective 7 Efficient Use of Fiber Resources

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

Summary of Evidence: *While this Objective was not audited in 2020, in the past evidence included field observations of recently completed operations, contract clauses, and discussions with supervising field foresters and interviews with loggers.*

Objective 8 Recognize and Respect Indigenous Peoples’ Rights

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

Summary of Evidence: *All of the management plans include the policy statement developed to recognize and respect Indigenous Peoples’ rights.*

Objective 9 Legal and Regulatory Compliance

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

Summary of Evidence: *Field and office reviews of ongoing and completed operations were the most critical evidence. Foresters are licensed and have access to legal and regulatory listing electronic and hard copy.*

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.

Summary of Evidence: While this Objective was not audited in 2020, in the past evidence included discussions with stakeholders and support for research on state forest lands. Forests are used for several ongoing research projects such as research projects involving, pollinators and prescribed burning, which are visited.

Objective 11 Training and Education

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

Summary of Evidence: Review of training records, and the records of support for the Maryland Master Logger Program. Further all harvests are conducted by logging crews with one or more Maryland Master Loggers. Training was check for licensed foresters and also for applicators applying chemicals on the forests.

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.

Summary of Evidence: Records provided by the audited organization and interviews were used to confirm the requirements.

Objective 13 Public Land Management Responsibilities

To participate and implement sustainable forest management on public lands.

Summary of Evidence: The Citizen Advisory Committee confirms the involvement with the public inputs does occur.

Objective 14 Communications and Public Reporting

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

Summary of Evidence: Reports filed with SFI Inc. and the SFI Inc. website provided the key evidence. The state forests web site includes the complete certification reports from the past years.

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.

Summary of Evidence: The state forests web site includes the organization's Sustainable Forestry Initiative Management Reviews for the past 10 years. The most recent of these program reviews, agendas and notes from field reviews, and interviews with personnel from all involved levels in the organization were assessed.

Relevance of Forestry Certification

Third-party certification provides assurance that forests are being managed under the principles of sustainable forestry, which are described in the Sustainable Forestry Initiative Standard as:

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 forest land base, and to protect and maintain long-term 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 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.

14. Avoidance of Controversial Sources including Illegal Logging in Offshore Fiber Sourcing

(Applies only to the SFI 2015-2019 Fiber Sourcing Standard)

To avoid wood fiber from illegally logged forests when procuring fiber outside of North America, and to avoid sourcing fiber from countries without effective social laws.

Source: Sustainable Forestry Initiative® (SFI) Standard, 2015–2019 Edition

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