American Forest Foundation (AFF) 2015-2020 Standards of Sustainability

Standards Prologue

The American Forest Foundation's (AFF) 2015-2020 Standards of Sustainability for Forest Certification (Standards) promote the health and **sustainability** of America's family forests. These Standards are designed as a tool to help woodland owners be effective stewards of the land as they adaptively manage renewable resources; promote environmental, economic and social benefits; and work to increase public understanding of sustainable forestry. The Standards are based on international **sustainability** metrics and North American guidelines for **sustainable forest management** and serve as the basis for the American Tree Farm System® (ATFS) certification program. The ATFS certification program is internationally endorsed by the Programme for the Endorsement of Forest Certification (PEFC™).

Landowners and **qualified natural resource professionals** who follow the Standards are encouraged to promote the American Tree Farm System® program by displaying appropriate signs and participating in relevant program activities. Landowners following these Standards are recognized as ambassadors for exemplary woodland stewardship.

How to Use the Standards

The Standards are designed to accommodate the range and diversity of family and small to mid-sized woodlands. As such, the AFF Standards should be utilized adaptively and as appropriate for the size, **scale** and intensity of the woodlands and operations.

Structure and Demonstrating Conformance

Each of the eight Standards of Sustainability addresses aspects of **sustainable forest management**. Moving from general to specific, each Standard incorporates **performance measures** and **indicators** to illustrate conformance. All components of each Standard apply to every property certified under the AFF Standards. Because the **indicator** is the most specific, it is the most explicit element for demonstrating or evaluating conformance.

A **standard** is an overarching principle of **sustainability**.
A **performance measure** refines the **Standard's** intent and describes considerations and pathways for conformance.
An **indicator** identifies specific actions or activities that demonstrate conformance.

Level of Requirement

Performance measures and **indicators** that include the word "shall" are considered core elements required for certification under the American Tree Farm System®.

Performance measures and **indicators** that include the word "should" draw on personal and professional judgment of **landowners, qualified natural resource professionals, qualified ATFS inspectors** and **third-party assessors**. These elements allow for latitude in implementation to the greatest practical extent in given circumstances and are justifiable in a third-party verification process.

Format of the Standards

Bold type throughout this document denotes words or phrases defined in the attached glossary.

Who Uses the Standards?

The Standards are used by a wide range of people. **Landowners** use the Standards to guide their management. **Qualified natural resource professionals** use the Standards to support and inform **landowners** in developing **mangement plans** and implementing **sustainable forest management** on the ground. **Qualified ATFS inspectors** and **group managers** use the Standards to conduct field inspections and **management plan** evaluations to determine conformance that qualifies a property for certification. Finally, **third-party assessors** review operations and **mangement plans** to verify conformance with the Standards, as prescribed by ATFS policies and procedures.

Guidance

Guidance statements appear throughout this document and are intended to inform the **landowner**, the **qualified ATFS inspector** and the **third-party assessor** about the intent of the Standard and how it may be applied on-the-ground. Guidance statements are not the Standards and are not considered normative language.

Qualified ATFS Inspectors and **third-party assessors** are cautioned to apply the Standards as written, avoid personal preferences and seek evidence of conformance. **Qualified ATFS Inspectors** and **third-party assessors** are urged to respect the **landowner's** opportunity for creative solutions and **adaptive management** embodied in the Standards.

Documentation

The **Standards** and respective guidance were designed to recognize and support on-the-ground stewardship. Throughout this document, **landowners** are encouraged to develop and retain documents related to their management activities. Documents should be retained for three years, as a general rule of thumb, although some **landowners** may retain documents much longer, while other may not retain documents at all. **Qualified ATFS inspectors** and **third-party assessors** are advised to view documentation as supplemental evidence supporting on-the-ground performance, rather than a proof point for conformance.

How the Standards Were Developed

These Standards were developed at the direction of the AFF Board of Trustees by the 2015-2020 AFF Independent Standards Review Panel (ISRP) under the process described by the AFF Standards Setting Procedures. The panel comprised a representative cross-section of forestry community leaders with a stake in the ATFS Certification Program or a sincere interest in forest **sustainability** in the United States.

The guidance was developed for these Standards at the direction of the AFF Board of Trustees by the AFF National Standards Interpretation Committee (NSIC). This body, which is independent from the ISRP, comprised individuals with expertise in the arena of forest certification, forest management, marketing and global **sustainability**.

Standard 1: Commitment to Practicing Sustainable Forestry

Landowner demonstrates commitment to **forest health** and **sustainability** by developing a forest **management plan** and implementing sustainable practices.

Performance Measure 1.1

Landowner shall have and implement a written forest **management plan** consistent with the size of the forest and the **scale** and intensity of the forest activities.

GUIDANCE
The **management plan** may include several separate documents that, taken together, constitute the **management plan**. **Management plans** vary widely and may encompass a wide range of formats, language styles and document types, including emerging digital technologies and other tools that illustrate evidence of planning.

Umbrella **management plans** may be utilized in the management of multiple parcels and ownerships. **Landowners** or **their designated representatives** and **qualified natural resource professionals** are advised to select language that best reflects **landowner's** objectives and property circumstances. Consideration of specific conditions (size, **scale** and intensity of property and operations), **landowner** capacities, access to resource professional support and nonliteral interpretations are advised.

Indicator 1.1.1
Management plan shall be active, adaptive and embody the **landowner's** current objectives, remain appropriate for the land certified and reflect the current state of knowledge about natural resources and **sustainable forest management.**

GUIDANCE
The **management plan's** detail should reflect the forest and habitat complexity of the property as well as the management intensity planned for the property. The Standards do not require a prescribed **management plan** information structure or hierarchy. The plan preparer has considerable latitude in developing the **management plan**, or its composition of parts, at a level of complexity that reflects the **landowner's objectives** and provides for an accurate method of prescribing any planned treatments or activities on the property. A more formal or structured system is appropriate for larger collections of properties, whether under one ownership or part of an **independently managed group (IMG)** structure. A **group manager** should have a system in place to allow timely retrieval and editing of management plans under his/her authority and responsibility. Handwritten notes to the plan are acceptable as indications of updates to the plan for individual properties.

The nature of **adaptive management** requires that the **landowner** or his/her **designated representative** not be bound to follow the **management plan** prescriptions when circumstances influencing the property and its management have changed or when the **landowner's objectives** change. Examples of such changes include changes in family circumstances, the sale or acquisition of lands included in the certificate and disturbance from storms, fires, pests or disease outbreaks. Forestry involves dealing with dynamic natural systems and some accommodations may be necessary for natural events such as fires, flooding or wind damage, as well as the **landowners**' personal circumstances. To respond to such events, **management plans** must be active and adaptive in nature, as indicated in **Indicator** 1.1.1.

While the **management plan** is not expected to address all possible facets of state-of-the-art forestry or habitat management, the plan is expected to avoid forestry or wildlife management practices that do not support **sustainable forest management**. For example, a plan that prescribes practices to maximize short-term income should not compromise long-term **forest health** or resilience.

Indicator 1.1.2

Management plans shall describe current forest conditions, **landowner's objectives,** management activities aimed at achieving **landowner's objectives**, document a feasible strategy for activity implementation and include a map accurately depicting significant forest-related resources.

The forest **management plan** shall demonstrate consideration of the following resource elements: **forest health**, soil, water, wood and fiber production, **threatened or endangered** species, **special sites**, **invasive species** and **forests of recognized importance.** Where present and relevant to the property, the plan shall describe management activities related to these resource elements.

Where present, relevant to the property and consistent with **landowner's objectives,** the plan preparer should consider, describe and evaluate the following resource elements: fire, wetlands, **desired species**, recreation, forest aesthetics, biomass and carbon.

GUIDANCE

Current conditions may be described in general terms, including age, species and composition, or identified in accompanying maps and inventories. The depth of narrative and level of detail in current condition descriptions may vary widely with access to technical support, property attributes and the **scale** and intensity of management. Third-party assessors are encouraged to recognize a range of approaches in assessing current condition descriptions.

The plan must clearly describe **landowner's objectives**. **Landowner objectives** are concise, high-level statements of what the **landowner** hopes to accomplish through his or her management. **Landowner objectives** may range widely in language styles and approaches, from specific and technical to general and nontechnical. For example, some plans may describe specific forest conditions (fast-growing conifer plantations, mixed hardwood bottomland forests, older forests of longleaf pine, etc.) or general goals for the property (good habitat for animals, a healthy forest, etc.) the **landowner** is attempting to achieve.

Strategies for achieving the **landowner's objectives** should be reflected in the body of the plan. For example, if the **landowner's** objective is to increase the occurrence of wildlife on the property, the **management plan** is expected to prescribe management activities that will enhance, or at least maintain, suitable habitat.

The plan must specifically mention the required topics (**forest health**, soil, water, wood and fiber production, **threatened or endangered species**, **special sites**, **invasive species** and **forests of recognized importance**). If there is no occurrence of an attribute on the required topic list (**threatened or endangered** species, for example), the plan should state that the attribute is not

present on the subject property and describe the consultation or means by which the determination was made. For example, a plan may state that, "Based on field review of the property and review of the state natural heritage database on XX date, no **threatened or endangered** species are known to be present on the property." For requirements and guidance on required elements and consultation options regarding **forest health**, **threatened or endangered** species, **forests of recognized importance** and **special sites**, please refer to Standards 5 and 7, respectively.

If attributes such as fire, wetlands, **desired species**, recreation, aesthetic quality, biomass or carbon are present on the property and aligned with the **landowner's objectives**, the **landowner** or **designated representative** may consider inclusion of these elements in his or her **management plan.**

There is no requirement for level of detail around optional elements. Addressing the attribute may be as simple as saying that, "The attribute will be protected during all forest operations in compliance with applicable regulations." Alternately, the plan preparer may provide a detailed description of the management actions or protections specific to the attribute.

A property recently covered by a written **management plan** will not necessarily have evidence of plan performance.

Management plans can present a suite of options to **landowners** for their consideration. ATFS does not view **management plans** as a strict blueprint for **landowner** action, rather **that management plans** are adaptive and responsive to a number of factors. **Qualified ATFS inspectors** and **third-party assessors** should contemplate the following question when assessing the conformance of a **management plan** to the AFF Standards: *does the failure to perform the plan-action constitute a breach of **sustainability** for this property?* If the answer is no, then, the **landowner** is not out of conformance. If the answer is yes, this is an issue that needs to be addressed.

Indicator 1.1.3

The Landowner should monitor for changes that could interfere with the management objectives as stated in **management plan**. When problems are found, reasonable actions are taken.

GUIDANCE

Monitoring for individual **landowners** or **designated representatives** can be achieved by visiting the property on a regular basis, riding through it or walking the trails. This can be done annually or more or less frequently depending on the individual circumstances (region, soils, risk of **invasive species**, risk of pest outbreaks, etc.).

Landowners and **designated representatives** are encouraged to keep a written record of monitoring observations to reflect and document changing conditions-- including the presence of **invasive species**, pest or disease or storm damage-- along with management activities. In addition, these records may also be used to defend against adverse possession claims, substantiate any casualty losses and enable timely response to trespass, illegal dumping, timber theft and insect or disease outbreaks. Records of monitoring may be informal, such as handwritten notes, and could include photos, digital technologies, online tools such as www.mylandplan.org and other emerging media. **Landowners** are encouraged to update **management plans** based on monitoring. Records of

management activities should, over time, demonstrate response to information inputs from monitoring.

A **management plan** is considered current if it remains consistent with the **landowner's objectives** and the conditions on the ground, regardless of when the plan was written.

Standard 2: Compliance with Laws

Forest management activities comply with all relevant federal, state and local laws, regulations and ordinances.

Performance Measure 2.1

Landowner shall comply with all relevant federal, state, county and municipal laws, regulations and ordinances governing forest management activities.

GUIDANCE
The **Standard** only applies to laws, regulations and ordinances related to forest management activities taking place on the property.

Landowners or **designated representatives** should employ the maxim, "When in doubt, ask." Common forest management activities that are regulated in many states include conservation of state and federally protected species and their habitat, prescribed burning, **pesticide** application, harvesting, road building, pond construction and stream crossings.

Excellent professional resources are available at local natural resource agency offices. Please consult the resource pages on the ATFS website and at www.mylandplan.org for additional help on relevant federal and state laws and regulations.

Indicator 2.1.1
Landowner shall comply with all relevant laws, regulations and ordinances and will correct conditions that led to **adverse regulatory actions**, if any.

GUIDANCE
Full legal compliance with relevant laws, regulations and ordinances is the intent of the **Standard**. Mistakes may occur in carrying out forest management activities. **Landowners** must be committed to correcting inadvertent violations. A pattern of willful violation of relevant laws, regulations or ordinances is not acceptable.

If there is evidence of past nonconformance, then the **landowner** must show proof of a good-faith effort to remedy the nonconformance. If the matter is tied up in court, then the **landowner** is only disqualified when a final adverse judgment is rendered and the **landowner** refuses to comply with the ruling.
Compliance with all relevant (applicable) laws can be verified by a three-tiered process:

Step 1 – Observation of conditions on the subject property
Step 2 – The **landowner's** verbal or written claim of legal compliance
Step 3 – Research with the state Department of Natural Resources, local Natural Resource Conservation Service office or State Forestry Commission offices

If Step 1 and Step 2 do not raise any issues, then the **qualified ATFS inspector** or **third-party assessor** is not required to employ Step 3.

Indicator 2.1.2

Landowner should obtain advice from appropriate **qualified natural resource professionals** or **qualified contractors** who are trained in, and familiar with, relevant laws, regulations and ordinances.

GUIDANCE

Landowners are advised to engage **qualified natural resource professionals** and **qualified contractors,** licensed **pesticide** applicators and other trained professionals to support regulatory compliance.

Standard 3: Reforestation and Afforestation

Landowner completes timely restocking of **desired species** of trees on harvested sites and nonstocked areas where tree growing is consistent with land use practices and the **landowner's objectives**.

Performance Measure 3.1

Reforestation or afforestation shall be achieved by a suitable process that ensures adequate stocking levels.

Indicator 3.1.1
Harvested forest land shall achieve adequate stocking of **desired species** reflecting the **landowner's objectives**, within five years after harvest, or within a time interval as specified by applicable regulation.

GUIDANCE
The **landowner** or **designated representative** should ask his or her **qualified natural resource professional** or check with the state agency responsible for forestry assistance to find out if there is a reforestation law in place, and if so, to ensure compliance with it.

Federal and state reforestation programs may provide guidance regarding adequate stocking levels that **landowners** may utilize as a reference to support management. However, certain wildlife habitat management regimes may favor lower stocking rates than the cost-share program or silvicultural guidelines do. Therefore, it is important to make sure the chosen guidelines fit the forest conditions and are consistent with **landowner objectives**.

Natural regeneration stocking assessments should account for both softwood and hardwood regeneration and should take place within the normally accepted time frame for local conditions.

For reforestation and afforestation, use of native species and local provenances that are well-adapted to site conditions is preferred, where appropriate. If nonnative species are selected, **landowner** should consult or seek guidance from **qualified natural resource professionals**, such as agencies, academic institutions or professional associations, to ensure that potential negative impacts on the ecosystem and on the genetic integrity of native species and local provenances have been evaluated, and to determine whether negative impacts can be avoided or minimized.

Standard 4: Air, Water and Soil Protection

Forest management practices maintain or enhance the environment and ecosystems, including air, water, soil and site quality.

Performance Measure 4.1

Landowner shall meet or exceed practices prescribed by **state forestry best management practices** (BMPs) that are applicable to the property.

GUIDANCE
Compliance with all **state forestry BMPs** that apply to air, water, soil and site quality elements are required on all ATFS certified properties, even if voluntary in the state of practice. **Landowners** and **designated representatives** are urged to secure a copy of the **state forestry BMP** guide from their state forestry agency and to familiarize themselves with the guidelines in it for harvesting, road building, reforestation, habitat management and other forest activities. For many states, this information is available free online and in printed format.

For states with forest practice acts, the statutes, administrative rules and guidance for the acts is considered the equivalent of **BMPs**. Where the Standards note state forestry BMP, the **inspector** or **third-party assessor** should reference the forest practice act in states where present.

Indicator 4.1.1
Landowner shall implement specific **state forestry BMPs** that are applicable to the property.

GUIDANCE
When planning management activities that will cause any soil disturbance or require chemical application, the **BMP** manual for the state in which the property is located should be consulted and applicable **BMP** methods employed.

Examples of activities requiring BMP application:

- Harvest planning – including block design, haul roads, skidder trails, stream crossings and truck-loading areas
- Reforestation design – mechanical or chemical site preparation, machine or hand planting
- Construction of new roads and maintenance of existing roads
- Prescribed burning plans – fire lane construction, smoke management, agency notification

No field evidence of BMP implementation is expected where no management activity has occurred. However, if the property shows evidence of water quality impairment originating on the property that is not caused by the **landowner's** or **designated representative's** actions, the **landowner** is strongly encouraged to have plans for remediation.

Examples:

- **Landowner** purchases a tract with a forest road that is eroding soil into a water body.
- ATV riders are trespassing on the property and are crossing a stream causing the banks to erode.
- Garbage is being dumped on the property near a stream crossing and some of it is getting into the stream during high-water conditions.
- Storm damage has impaired the performance of road culverts.

Some **BMPs**, such as those that are guidelines to enhance a **desired species**, should only apply where relevant to the property.

Indicator 4.1.2
Landowner shall minimize road construction and other disturbances within riparian zones and wetlands.

GUIDANCE
Activities in riparian zones and wetlands shall comply with applicable **BMPs**. **BMP** manuals are generally quite detailed on recommended practices for road construction and other disturbances of riparian zones. If there is a point of confusion, the **landowner** or **designated representative** is advised to consult with **a qualified natural resource professional** who is experienced in forest road design and installation. In some states, permits may be required for forest roads or other disturbances that intersect a riparian zone. **Landowners** should specify with **qualified contractors** that **BMPs** must be adhered to. In all cases, the primary concern is to avoid contaminating watercourses that are adjacent to the forest activity.

Performance Measure 4.2

Landowner shall consider a range of forest management activities to control pests, pathogens and unwanted vegetation.

Indicator 4.2.1
Landowner should evaluate alternatives to **pesticides** for the prevention or control of pests, pathogens and unwanted vegetation to achieve specific management objectives.

GUIDANCE
Landowners or **designated representatives** should consult with their state forestry agency or **qualified natural resource professional** to learn about the range of recommended management techniques for any particular disease, **invasive species** or pest outbreak on their property. Links to these resources are available at the ATFS website.

Integrated pest management (IPM) is an excellent approach to controlling, suppressing or preventing pests and can take many forms. Preventative measures, efforts to improve **forest health** or, in some other way, protect the property from injurious organisms are often the most practical and effective approaches. **Pesticide** applications may be used when other control measures are ineffective or impractical.

While **landowners** and **designated representatives** are urged to take feasible actions to address pests, pathogens and unwanted vegetation, **third-party assessors** are advised that, in some cases, there may be no feasible options for controlling a pest or outbreak due to severity, **scale** and timing of onset.

Indicator 4.2.2
Pesticides used shall be approved by the Environmental Protection Agency (EPA) and applied, stored and disposed of in accordance with EPA-approved labels and by persons appropriately trained, licensed and supervised.

GUIDANCE
The Environmental Protection Agency (EPA) approves the use of **pesticides** for specific situations and on specific plants or animals, at specified application rates. The **landowner** is responsible for ensuring that the planned use of a **pesticide** is in compliance with the EPA label requirements.

Please consult the ATFS resource page for links to the EPA and other relevant resources for additional information on EPA-approved **pesticides.**

In most states, forestry chemicals must be applied by a licensed applicator. The **landowner** is responsible for ensuring that anyone applying forestry use chemicals is in compliance with state and federal regulations. In some states, **landowners** or **designated representatives** can apply certain **pesticides** on their land without any special permits or licenses. In others, they can apply for and receive a license or permit to apply forestry chemicals on their own lands according to the EPA label limitations. In any event, the requirements for safe use, storage and disposal must be met by **landowners**.

Performance Measure 4.3

When used, **prescribed fire** shall conform with **landowner's objectives** and pre-fire planning.

GUIDANCE
In many states, the state forestry agency employs a permit system for prescribed burning. Many of these agencies provide training for prescribed burning that is available to **landowners** and **designated representatives**. Successful completion of a prescribed burning course is often required before the state forestry agency will issue a burning permit. Many states regulate the amount of open burning that can be conducted on a given day in a county or multi-county zone.

Prescribed burning includes controlled burning of piles, windrows and broadcast fire applications.

A prescribed burning plan is recommended, which will include reconnaissance of the burning block, estimates of fuel condition, required weather conditions and adequate means of controlling the fire after it is set. Oral discussion of a burning plan with all of the parties involved, before the burn is started on the property, is acceptable. A written burning plan record is not required by the Standards but may be required by the state agency that regulates open burning in the state.

Qualified ATFS inspectors and **third-party assessors** may verify compliance through interviews with **landowners** or **designated representatives** and observing the property. The **landowner** or **designated representatives** may have written records to support conformance claims, but is not required to do so.

Indicator 4.3.1

Prescribed fire shall conform with the **landowner's objectives** and state and local laws and regulations.

GUIDANCE
The **landowner's** plans and good-faith actions in using **prescribed fire** should conform to the management objectives and the relevant laws and regulations.

Even the best-laid plans may go awry. **Qualified Tree Farm inspectors** or assessors are advised to look for a pattern of responsible use of **prescribed fire** where it is used.

Standard 5: Fish, Wildlife, Biodiversity and Forest Health

Forest management activities contribute to the conservation of **biodiversity**.

Performance Measure 5.1

Forest management activities shall protect habitats and communities occupied by **threatened or endangered** species as required by law.

GUIDANCE
Under the Endangered Species Act (ESA), **landowners** are required to protect occupied habitat for **threatened or endangered** animal species. If **landowners** or **designated representatives** become aware of the presence of a **threatened or endangered** animal species on their property, it is their duty to review the requirements for protecting the habitat for that species and to take appropriate actions in the management of their property. Under ATFS certification, **landowners** may choose to go above and beyond ESA requirements and protect unoccupied animal habitat.

Although private **landowners** are not required to protect **threatened or endangered** plant species under the ESA, **landowners** are encouraged to do so.

Activities implemented under a federally approved habitat conservation plan (HCP) are deemed in conformance with the ATFS Standard. Additional information on the Endangered Species Act is available at http://www.fws.gov/ENDANGERED/esa-library/pdf/ESA_basics.pdf

In addition to ESA requirements, states maintain their own lists of protected species and legal requirements for protection by **landowners**.

Indicator 5.1.1

Landowner shall confer with natural resource agencies, state natural resource heritage programs, **qualified natural resource professionals** or review other sources of information to determine occurrences of **threatened or endangered** species on the property and their habitat requirements.

GUIDANCE
Although **landowners** are not required to do an exhaustive search for **threatened or endangered** species on their property, under the AFF Standards, **landowners** or **designated representatives** are expected to make a good-faith effort to identify any known occurrences of these species on their property through on-site review and the use of a **qualified natural resource professional** or natural heritage databases. Consultation with appropriate resources is demonstrated in **management plan** documentation.

Threatened or endangered species lists are maintained by the U.S. Fish and Wildlife Service in accordance with the ESA [http://ecos.fws.gov/tess_public/].Nationally listed **threatened or endangered** freshwater fish that migrate to sea are listed by the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) [http://www.nmfs.noaa.gov/pr/species/esa/]. Contacting the state natural resources agency or service representative is usually an effective way to find out if a property or region is known to contain a **threatened or endangered** species.

Some **threatened or endangered** species are also listed separately by the state agencies. Please consult the ATFS website for additional resources on **threatened or endangered** species.

Indicator 5.1.2

Forest management activities shall incorporate measures to protect identified **threatened or endangered** species on the property.

GUIDANCE

If there are known occurrences of **threatened or endangered** species on the property, the **landowner may** be required to make provisions for their protection as specified by regulation. **Landowners** or **designated representatives** are encouraged to consult with a **qualified natural resource professional** for assistance in planning to protect **threatened or endangered** species.

The presence of **threatened or endangered** species on the property is not considered a prohibition of management but may influence the timing or technique of management activities.
Measures for habitat protections may include:

- limited mechanical entry in the habitat area
- restricted **pesticide** use in the habitat area
- residual tree maintenance in the habitat area
- buffer zone establishment and maintenance around the habitat area
- hunting or fishing limitations
- signage or marking of the habitat area

Performance Measure 5.2

Landowner should address the **desired species** and/or desired forest communities when conducting forest management activities, if consistent with **landowner's objectives**.

GUIDANCE

Landowners may wish to increase the presence of one or more **desired species** (fish, wildlife or plants) on their property such as bobwhite quail, longleaf pine or wild berry species. While these goals may be described in the **landowner's objectives**, the body of the **management plan** should provide a description of management activities planned to achieve the stated objective(s). **Desired species** management is only relevant if identified as an objective by the **landowner**.

Indicator 5.2.1

Landowner should consult available and accessible information on management of the forest for **desired species** and/or forest communities and integrate it into forest management.

GUIDANCE

Several good sources for **desired species** management are readily available to the **landowner**:

- Nonprofit organizations that focus on the **desired species**
- State and federal agencies that focus on fish and game species
- Extension Service publications

Please consult the resource pages on the ATFS website for additional information on **desired species** management.

Performance Measure 5.3

Landowner should make practical efforts to promote **forest health**.

Indicator 5.3.1
Landowner should make practical efforts to promote **forest health**, including prevention, control or response to disturbances such as wildland fire, **invasive species** and other pests, pathogens or unwanted vegetation, to achieve specific management objectives.

GUIDANCE
New, previously unknown or under-recognized pests, pathogens and **invasive species** are, unfortunately, emerging as serious and immediate threats to **forest health**. Outbreaks and impacts may be sudden, widespread and profound. Given this and a **landowner's** deployable resources, he or she may have limited ability to prevent, respond or control the impacts of a disturbance.

Landowners or **designated representatives** are advised to take a practical, proactive approach to promoting the resilience, productivity and vitality of their forests. **Landowners** or **designated representatives** are encouraged to work with their **qualified natural resource professional** to understand and identify the range of stressors in which their woodlands may be vulnerable and consider measures to promote the resilience and reduce the susceptibility of their properties.

Qualified natural resource professionals can supply the **landowner** or **designated representative** with information on emerging **forest health** issues and techniques for preventing, mitigating the impacts of and responding to stressors and events. **Landowners** are encouraged to take advantage of opportunities to learn about **forest health** issues and approaches for preventing and responding to stressors and promoting resilience.

On monitoring visits to the property, **landowners** or **designated representatives** should be alert to potential impacts to **forest health**.

Qualified ATFS inspectors and **third-party assessors** may verify compliance through interviews with **landowner** or **designated representative**, review of **management plan** documents or observing the property.

Performance Measure 5.4

Where present, forest management activities should maintain or enhance **forests of recognized importance.**

GUIDANCE
Forests of recognized importance (FORI) represent globally, regionally and nationally significant large landscape areas of exceptional ecological, social, cultural or biological values. These forests are evaluated at the landscape level, rather than the stand level and are recognized for a combination of unique values, rather than a single attribute. **FORIs** may include but are not limited to landscapes with exceptionally high concentrations of one or more of the following:

- protected, rare, sensitive or representative forest ecosystems such as riparian areas and wetland biotopes
- areas containing endemic species and critical habitats of multiple **threatened or endangered** plant and animal species, as identified under the Endangered Species Act (ESA) or other recognized listings

- recognized large-**scale** cultural or archeological sites including sites of human habitation, cities, burial grounds and in situ artifacts
- areas containing identified and protected water resources upon which large metropolitan populations are dependent
- areas containing identified unique or geologic features including geysers, waterfalls, lava beds, caves or craters

In the United States, because of their significance, **FORIs** have, generally, been identified and protected by federal or state governments or are under conservation easement by an environmental nonprofit organization. There is, at this time, no state or federal agency that regulates **FORIs** on private forest lands in the United States. Several conservation organizations have identified areas that they believe are of exceptional status yet there remains no single central clearinghouse of information regarding such forested landscapes.

In an effort to support and facilitate identification of these resources, AFF developed the **Forests of Recognized Importance** Resource as a reference for **landowners** and **qualified natural resource professionals**. This resource is available at the ATFS website. In addition, the AFF National Standards Interpretation Committee (NSIC) also advises consulting state forest action plans, state wildlife action plans and state natural heritage databases as resources for identifying **FORIs**.

Due to the small **scale** and low-intensity of family forest operations, informal assessment for the occurrence of **FORIs** through consultation with experts or review of available and accessible information is appropriate.

Consideration of **FORIs** is relatively new to forestry practice and planning in the United States. As such, adoption of the model has been uneven and a range of terms has been deployed in the identification, protection and management for enhancement of **FORIs**. **Landowners** or **qualified natural resource professionals** may use terms such as "high conservation value forests" or "forests of exceptional value" or other terms to describe this concept, which are considered acceptable in fulfilling this **Standard**. **Qualified ATFS inspectors** and **third-party assessors** are advised to recognize this diversity of terms and the intent in verifying conformance.

Indicator 5.4.1

Appropriate to the **scale** and intensity of the situation, forest management activities should incorporate measures to contribute to the conservation of identified **forests of recognized importance**.

GUIDANCE

Landowners or **designated representatives** who have identified some or all of their forest property as part of a FORI should delineate the area on the maps associated with the **management plan**. Management activities on or adjacent to an identified **FORI** should seek to contribute to or support the values that led to the designation of the area.

For family **landowners**, a more likely scenario is that their property is adjacent to a state or federally protected area and identified as a **FORI** at a landscape **scale**. **Landowners** should consider the impact to a neighboring **FORI** and opportunities to support consideration of specific values or attributes when planning and implementing activities on their forest property. Given the size and **scale** of family ownerships eligible for ATFS certification, **landowners** may be limited in their abilities to significantly impact **FORI** presence and quality through management at the small **scale**.

Standard 6: Forest Aesthetics

Forest management activities recognize the value of forest aesthetics.

Performance Measure 6.1

Landowner should manage the visual impacts of forest management activities consistent with the size of the forest, the **scale** and intensity of forest management activities and the location of the property.

Indicator 6.1.1
Forest management activities should apply **visual quality measures** compatible with appropriate silvicultural practices.

GUIDANCE
Forest aesthetics considerations can be incorporated into management planning with little cost to the **landowner**. Employing forest aesthetics considerations into the **management plan** can produce a much more visually appealing experience on property visits for owners, their guests and passers-by using nearby public roads.

Many state agencies have guidelines for forest aesthetics that **landowners**, **designated representatives** and **qualified natural resource professionals** can use to inform their management. A few good examples include:

Guide to Logging and Aesthetics by Geoffrey T. Jones:
http://www2.dnr.cornell.edu/ext/info/pubs/Harvesting/A%20Guide%20to%20Logging%20Aesthetics.pdf

Georgia's Best Management Practices for Forestry, Section 7:
http://www.gfc.state.ga.us/resources/publications/BMPManualGA0609.pdf

University of New Hampshire Cooperative Extension's *Good Forestry in the Granite State:*
http://extension.unh.edu/goodforestry/toc.htm

Examples of **visual quality measures** include:

- Place log-truck-loading zones out of public view
- Put a bend in the entrance road to block view of tract interior
- Follow contour lines and timber type margins with roads and harvest boundaries
- Close and revegetate idle roads with wildlife-friendly plants

Standard 7: Protect Special Sites

Special sites are managed in ways that recognize their unique historical, archeological, cultural, geological, biological or ecological characteristics.

Performance Measure 7.1

Forest management activities shall consider and maintain any **special sites** relevant on the property.

Indicator 7.1.1
Landowner shall make a reasonable effort to locate and protect **special sites** appropriate for the size of the forest and the **scale** and intensity of forest management activities.

GUIDANCE
Special sites are diverse and can be identified through consultation and consideration processes described below and during property reconnaissance prior to preparing the **management plan**.

Sites of historical, archeological and cultural importance are identified on the National Register of Historic Places, a listing administered by the National Park Service or by State Historic Preservation Offices (SHPOs), state agencies that oversee the preservation efforts in their state. Listing of sites on the National Register (http://www.nps.gov/nr/index.htm) or SHPO directories (http://www.nps.gov/nr/shpolist.htm) reflect a determination of a site's significance to the history of a community, state or the nation. AFF recognizes this determination of significance and requires protections of such sites under certification, as directed by law.

Federal law does not require protections of sites listed on the National Historic Register so long as there are no federal monies attached to the property. However, there may be state or local preservation laws in place. Many SHPOs maintain web-based directories of their listings for reference by **landowners** and **designated representatives**. **Landowners** and **designated representatives** may wish to contact local historical societies and museums for additional information on sites of local significance and any preservation laws applying to them. It is important to note that history agencies vary widely in their staffing and capacities for consultation with **landowners** or **designated representatives**.

Many properties may include historical, cultural or archeological sites that are not listed in National Historic Register or SHPO listings. **Landowners** may choose to designate sites not listed by relevant authorities as **special sites**. To do so, **landowners** and **designated representatives** should evaluate sites for congruence with all of the following criteria:

- Significance: Sites may be significant if (A.) associated with events that have made a significant contribution to the broad patterns of our history; or (B.) associated with the lives of significant persons of the past; or (C.) they embody distinctive characteristics of a type, period or method of construction, or represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or (D.) they yielded or may be likely to yield information important in history or prehistory.

- Age: At least 50 years old.
- Integrity: The site must retain its historical physical integrity with its character-defining features still present. A building, structure or landscape feature must be relatively unchanged. An archaeological site must be relatively undisturbed, with its patterns and layers of artifacts and other archaeological evidence relatively intact. A traditional cultural site must be recognizable to today's affiliated cultural group, evidenced through tradition and still used or revered in some way.

In addition to these criteria, **landowners** may designate sites of personal significance to them, such as a spot their grandparents cherished.

GUIDANCE
Special sites of biological and geological significance may be identified through consultation undertaken related to the identification of **FORIs** and **threatened or endangered** species and communities (Standard 5).

Landowners or **designated representatives** shall identify **special sites** on **management plan** maps and, where appropriate, on the ground. However, some **landowners** may choose not to identify some **special sites** on a map or on the ground in an effort to protect these sites from vandalism or overuse.

Landowners or **designated representatives** shall make efforts to protect any known **special sites** especially during forest management activities. These efforts may include creating a vegetation buffer, fencing the area or otherwise distinguishing it from surrounding areas. Because **special sites** are often in the ground, measures may be taken to control erosion and limit soil disturbance. **Landowners** and **designated representatives** are advised to review their **special sites** map and protection plan with **qualified natural resource professionals** and **qualified contractors** assisting in forest management activities. After harvests, **landowners** and **designated representatives** are encouraged to follow up to ensure adequate protection.

Additional information and guidance about **special sites** are available at the ATFS website at https://www.treefarmsystem.org/special-sites.

Examples:
American Indian burial sites, historical building ruins, cemeteries, cave entrances, spring heads, vernal pools, rare mineral outcroppings, Civil War battle grounds, a champion tree, a bear's den, a pitcher plant bog, a covered bridge, glades, moraines or fish spawning grounds.

Qualified ATFS inspectors and **third-party assessors** may verify for conformance by interviewing the **landowner** or **qualified natural resource professional** for awareness, reviewing planning documents and associated operating records and/or by observing the property.

Standard 8: Forest Product Harvests and Other Activities

Forest product harvests and other management activities are conducted in accordance with the **landowner's objectives** and consider other forest values.

Performance Measure 8.1

Landowner should use **qualified natural resource professionals** and **qualified contractors** when contracting for services.

Indicator 8.1.1
Landowner should seek **qualified natural resource professionals** and **qualified contractors**.

GUIDANCE
The services of **qualified natural resource professionals** and **qualified contactors** can prove very cost-effective for **landowners.**

Many states have registration or licensing systems for foresters and wildlife managers. The people listed by these systems have passed rigorous qualification exams and are required to regularly obtain continuing education.

State forestry and wildlife agencies often can provide referral lists of **qualified natural resource professionals** who are working in the state or county.

The Society of American Foresters has a Certified Forester program
http://www.safnet.org/certifiedforester/index.cfm

The Wildlife Society has a Certified Wildlife Biologist program
www.wildlife.org/certification/index.cfm

The Association of Consulting Foresters is a national association of forestry consultants:
http://www.acf-foresters.org

The American Forest Foundation's www.mylandplan.org has a forester directory.

A **qualified natural resource professional** often will be familiar with the **qualified contractors** who are doing forestry-related work in the area and can make recommendations.

Please consult the resource pages for **landowners** on the ATFS website, for help in finding **qualified contractors** who are trained in BMP and regulatory compliance, as well as assistance in finding **qualified natural resource professionals.**

Indicator 8.1.2

Landowner should engage **qualified contractors** who carry appropriate insurance and comply with appropriate federal, state and local safety and **fair labor rules**, regulations and standard practices[1].

GUIDANCE

Landowners and **designated representatives** are encouraged to stipulate that contractors must be in compliance with all relevant laws and regulations. A **qualified natural resource professional** can help with this process.

Landowners are encouraged to discuss liability issues with their insurance agent and their attorney to gain a perspective on appropriate insurance minimums that they might require of contractors.

Indicator 8.1.3

Landowners should retain appropriate contracts or records for **forest product** harvests and other management activities to demonstrate conformance to the Standards.

GUIDANCE

Landowners or **designated representatives** should review the Standards before planning management activities. When contracting for forestry activities, **landowners** or **designated representatives** should specify that appropriate **state forestry BMPs** must be adhered to.

Other contract specifications might include:

- Protection of special sites or habitats
- Adherence to labor laws
- Requirements for adequate insurance
- Protection of soil and water integrity
- Residual tree damage
- Forest road maintenance and restoration
- Fence and gate protection and/or restoration
- Litter control
- Hazardous material spill prevention and clean-up

Examples of forestry activities requiring review for AFF Standards compliance:

- Harvest operations including timber and nontimber products
- Site preparation and reforestation
- Forest road construction and maintenance
- Mineral extraction
- Hunting and fishing
- **Invasive species** control
- Pest management

As a general rule, **landowners** are encouraged to retain contracts or records for management activities for three years.

[1] Auditors shall consider any **complaints** alleging violation of **fair labor rules** filed by workers or organized labor since the previous third-party certification audit. The auditor shall not take action on any labor issues pending in a formal grievance process or before federal, state or local agencies or the courts, however, until those processes are completed. Absent a record of documented **complaints** or noncompliances, contractors and managers are assumed to be in compliance with this **indicator**.

Performance Measure 8.2

Landowner shall monitor **forest product** harvests and other management activities to ensure they conform to their objectives.

Indicator 8.2.1
Harvest, utilization, removal and other management activities shall be conducted in compliance with the **landowner's objectives** and to maintain the potential of the property to produce **forest products** and other benefits sustainably.

GUIDANCE
The **landowners** may monitor harvesting and other activities personally or they may employ someone else to do it for them. Many **landowners** engage a **qualified natural resource professional** for this function.

If the **landowner's objectives** do not specify directives as to harvest, utilization and removals, regional norms and accepted practices are expected.

The intent of **Performance measure** 8.2 is to ensure the maintenance of "the potential of the property to produce **forest products** and other benefits sustainably." Good planning, utilizing **qualified natural resource professionals**, engaging competent **qualified contractors** and using an effective contract go a long way toward this end.

Glossary of Terms

adaptive management: A dynamic approach to forest management in which the effects of treatments and decisions are monitored and used to modify management on a continuing basis to ensure that objectives are being met (Helms, et al., The Dictionary of Forestry, Society of American Foresters, 1998).

adverse regulatory actions: Written warnings, citations or fines issued by law enforcement or regulatory bodies.

biodiversity: The variety and abundance of life forms, processes, functions and structures of plants, animals and other living organisms, including the relative complexity of species, communities, gene pools and ecosystems at spatial scales that range from local through regional to global (Helms, et al., The Dictionary of Forestry, Society of American Foresters, 1998).

complaint: Labor complaints are those with formal documentation filed through a state's fair labor practices board or similar body.

desired species: Those species of flora and fauna designated in the landowner's management plan and not known to cause negative impacts on the local environment.

designated representative: A person designated by a landowner to represent him or her. Designated representatives may include, but are not limited to, family members, trustees, property managers, qualified natural resource professionals and lawyers.

forest health: The perceived condition of a forest derived from consideration of such factors as its age, structure, composition, function, vigor, vitality, presence of unusual levels of insects or disease and resilience to disturbance and a range of stressors.

forest products: Goods and materials derived from the forest that are tangible and physical objects of biological origin. Such materials may include, but are not limited to, timber, fuelwood, fibers, biomass, leaves, fruit, grass, fungi, berries, resins, gums, animal parts, water, soil, gravel, stone and other minerals on forest land. In addition, products may also include other quantifiable goods or services including carbon storage or water protection.

forests of recognized importance (FORI): Globally, regionally and nationally significant large forest landscape areas of exceptional ecological, social, cultural or biological values. These forests are evaluated at the landscape level, rather than the stand level, and are recognized for a combination of unique values, rather than a single attribute.

group manager: The individual(s) designated by the Independently Managed Group (IMG) organization to manage the administrative elements of an IMG and comply with the American Tree Farm System® (ATFS) IMG Certification Standards (2015-2020).

indicator: Identifies specific actions or activities that demonstrate conformance.

Independently Managed Group (IMG): A company, corporation, firm, authority or institution that is a legal entity. The entity has its own functions and administration and consists of a group manager and individual qualified group members seeking to collectively implement and become certified to the AFF Standards and ATFS IMG Standards. All IMGs are required to undergo audits, by accredited third-party assessors, to ensure conformance with the ATFS Standards and the ATFS IMG Standards.

integrated pest management: A pest control, suppression or prevention approach that utilizes a suite of complementary strategies including mechanical, biological, cultural, physical, genetic and chemical approaches.

invasive species: Plants, animals, or pathogens that are non-native to the ecosystem under consideration and whose introduction causes or is likely to cause harm. (USDA National Invasive Species Information Center, 2014)

landowner: Entity that holds title to the property to be certified.

landowner's objectives: the stated landowner desires, reasons for ownership and potential activities that guide the management of the property.

management plan: Documents that guide actions and that change in response to feedback and changed conditions, goals, objectives and policies. Management plans may incorporate several documents including, but not limited to, harvest plans, activity implementation schedules, permits, research, etc. For the purposes of the American Tree Farm System® eligible mangement plans, plan amendments may include letters, notes and other forms of informal updates in addition to formal plan revisions. The term "management plan" is inclusive of stewardship plans and other similar documents that describe resources, landowner objectives and management strategies.

performance measure: Refines the standard's intent and describes considerations and pathways for conformance.

pesticide: Pesticides include chemicals commonly known as fungicides, herbicides, insecticides and rodenticides.

prescribed fire: A fire ignited by management to meet specific objectives (Helms, et al., The Dictionary of Forestry, Society of American Foresters, 1998).

qualified contractor: Forest contractors who have completed recommended certification, licensing, training or education programs offered in their respective states.

qualified natural resource professional: A person who by training and experience can make forest management recommendations. Examples include foresters, soil scientists, hydrologists, forest engineers, forest ecologists, fishery and wildlife biologists or technically trained specialists in such fields.

qualified ATFS inspector: A qualified natural resource professional who has completed ATFS- required training for certifying forested properties and is eligible to inspect properties on behalf of ATFS. ATFS requires all trained inspectors meet approved eligibility requirements.

scale: The extent of forest operations on the landscape/certified property.

shall: Responsibilities or obligations that include the word "shall" are considered core elements that are required for certification under the American Tree Farm System.

should: Responsibilities or obligations that include the word "should" are directives that draw on personal and professional judgment of foresters, landowners and assessors. These directives allow for latitude in implementation to the greatest practical extent in given circumstances and are justifiable in a third-party verification process.

special sites: Those areas offering unique historical, archeological, cultural, geological, biological or ecological value. Special sites include:

A. Historical, archaeological, cultural and ceremonial sites;

B. Sites of importance to wildlife such as rookeries, refuges, fish spawning grounds, vernal ponds and shelters of hibernating animals;

C. Unique ecological communities such as springs, glades, savannas, fens and bogs;

D. Geological features such as terminal moraines, cliffs and caves;

E. Sites of importance to the landowner.

standard: An overarching principle of sustainability.

state forestry best management practice(s) (BMPs): Forestry BMPs are generally accepted forest management guidelines that have been developed by state forestry agencies with

broad public stakeholder input.

sustainability: The capacity of forests, ranging from stands to ecoregions, to maintain their health, productivity, diversity and overall integrity, in the long run, in the context of human activity (Helms, et al., The Dictionary of Forestry, Society of American Foresters, 1998).

sustainable forest management: Sustainable forest management (SFM) is a holistic approach defined as the stewardship and use of forests and forest land in a way and at a rate that maintains their biodiversity, productivity, regeneration capacity, vitality and potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national and global levels and does not cause damage to other ecosystems (Programme for the Endorsement of Forest Certification, Sustainable Forest Management, PEFC ST 1003:2010).

third-party assessor: A qualified natural resource professional who has completed ATFS-required training for third-party assessors and is contracted or employed by an International Accreditation Forum (IAF)-accredited certification body.

threatened or endangered: Defined and listed under the U.S. Endangered Species Act (ESA) and listed under applicable state or provincial laws as requiring protection.

visual quality measures: Modifications of forestry practices in consideration of public view, including timber sale layout, road and log landing locations, intersections with public roadways, distributing logging residue, tree retention, timing of operations and other factors relevant to the scale and location of the project.