Large and Public Standards Guidance Document

PRINCIPLE 1. *COMPLIANCE WITH LAWS AND FSC PRINCIPLES* - *Forest management shall respect all applicable laws of the country in which they occur and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.*	
Criteria and Indicators	***Ways to Fulfil the Standard***
1.1. Forest management shall respect all national and local laws and administrative requirements	
1.1.a. Forest management plans and operations demonstrate compliance with all applicable federal, state, county, municipal, and tribal laws and administrative requirements. Violations, outstanding complaints, or investigations are provided to the Center during an assessment.	Center assumes compliance but Group Members must make Center aware of any outside violations.
1.1.b. To facilitate legal compliance, the forest owner or manager ensures that employees and contractors, commensurate with their responsibilities, are duly informed about applicable laws and regulations.	Contractors and employees made aware of certification requirements (SMZs, forms, harvest size openings, etc.).
1.2. Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case-by-case basis, by the certifiers and the involved or affected parties.	
1.2.a. Situations in which compliance with laws or regulations conflicts with compliance with stated principles, criteria, or indicators are documented and referred to the assessors.	The Center has identified no conflicts with local laws and regulations.
1.3. Forest management areas should be protected from illegal harvesting, settlement, and other unauthorized activities.	
1.3.a. Forest owners or managers supports or implements measures intended to prevent illegal and unauthorized activities on the Forest Management Unit.	Signs posted on boundaries, Group Members check boundaries annually, harvest boundaries or trees flagged/marked
1.3.b. If illegal or unauthorized activities occur, the forest owner or manager implements actions designed to curtail such activities and correct the situation to the extent possible for meeting all land management objectives with consideration of available resources.	Group Members are not law enforcement, better signage and gates used if problems are found
1.4. Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.	
1.4.a. The forest owner or manager demonstrates a long-term commitment to adhere to the principles and criteria and the ATFS, FSC, and FSC-US policies, including the FSC-US Land Sales Policy, and have a publicly available statement of commitment to manage the FMU in conformance with principles and standards and policies.	Signing the Center's agreement form and statement in management plan indicating long term goals.
1.4.b. If the certificate holder does not certify their entire holdings, then they document, in brief, the reasons for seeking partial certification referencing FSC-POL-20-002 (or subsequent policy revisions), the location of other managed forest units, the natural resources found on the holdings being excluded from certification, and the management activities planned for the holdings being excluded from certification.	Make Center aware of location of other forested properties and reason for not certifying (i.e. testing out certification for economic reasons, planning on selling land, etc.)
1.4.c. The forest owner or manager notifies the Center of significant changes in ownership and/or	---

significant changes in management planning within 90 days of such change.	

PRINCIPLE *2. TENURE AND USE RIGHTS AND RESPONSIBILITIES - Long-term tenure and use rights to the land and forest resources shall be clearly defined documented and legally established.*	
Criteria and Indicators	***Ways to Fulfil the Standard***
2.1 Clear evidence of long-term forest use rights to the land (e.g. land title, customary rights, or lease agreements) shall be demonstrated.	
2.1.a. The forest owner or manager provides clear evidence or long-term rights to use and manage the FMU for the purposes described in the management plan.	Possession of deed or contract from owner to manage
2.1. b. The forest owner or manager identifies and documents legally established use access rights associated with the FMU that are held by other parties.	Possession of deed or contract from owner to manage
2.1.b. Boundaries of land ownership and use rights are clearly identified on the ground and on maps prior to commencing management activities in the vicinity of boundaries	Survey not required but boundaries during management activities (harvesting, chemical applications) must be delineated and neighbors informed
2.2 Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.	
2.2.a. The forest owner or manager allows the exercise of tenure and use rights established by law or regulation.	If someone else has certain rights to land their rights are not diminished (hunting lease contracts, right-of-way access, etc.)
2.2.b. In FMUs where tenure or use rights held by others exist, the forest owner or manager consults with groups that hold such rights so that management activities do not significantly impact the uses or benefits of such rights.	If someone else has certain rights to land they are notified or informed and their rights are not diminished
2.3 Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified.	
2.3.a. If disputes arise regarding tenure claims or use rights then the forest owner or manager initially attempts to resolve them through open communication, negotiation, and/or mediation. If these good-faith efforts fail, then federal, state, and/or local laws are employed to resolve such disputes.	---
2.3.b. The forest owner or manager documents and significant disputes over tenure and use rights.	If any disputes arise, they're noted in management plan

PRINCIPLE 3. *INDIGENOUS PEOPLE'S RIGHTS - The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.*	
Applicability Note to Principle 3: The terms "tribes", "tribal" or "American Indian groups" in indicators under Principle 3 include all indigenous people in the US, groups or individuals, who may be organized in recognized or unrecognized tribes, bands, nations, native corporations, or other native groups.	
Criteria and Indicators	***Ways to Fulfil the Standard***
3.1 Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and	

informed consent to other agencies.	
3.1.a. Tribal forest management planning and implementation are carried out by authorized tribal representatives in accordance with tribal laws and customs and relevant federal laws.	Center will inform Group Members if tribal resources are on their properties. Assumed compliance.
3.1.b. The manager of a tribal forest secures, in writing, informed consent regarding forest management activities from the tribe or individual forest owner prior to commencement of those activities.	Center will inform Group Members if tribal resources are on their properties. Assumed compliance.
3.2 Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.	
3.2.a. During management planning, the forest owner or manager consults with American Indian groups that have legal rights or other binding agreements to the FMU to avoid harming resources or rights.	Center will inform Group Members if tribal resources are on their properties. Assumed compliance.
3.2.b. Demonstrable actions are taken so that forest management does not adversely affect tribal resources. When applicable, evidence of, and measures for, protecting tribal resources are incorporated in the management plan.	Center will inform Group Members if tribal resources are on their properties. Assumed compliance.
3.3 Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognized and protected by forest managers.	
3.3.a. The forest owners or manager invites consultation with tribal representatives to identify sites of current or traditional cultural, archeological, ecological, economic, or religious significance.	Center will inform Group Members if tribal resources are on their properties. Assumed compliance.
3.3.b. In consultation with tribal representatives, the forest owner or manager develops measures to protect or enhance areas of special significance (see also Criterion 9.1).	Center will inform Group Members if tribal resources are on their properties. Assumed compliance.
3.4 Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. This compensation is formally agreed upon with their free and informed consent before forest operations commence.	
3.4.a. The forest owner or manager identifies whether traditional knowledge in forest management is being used.	Only applies if Native American's are managing any part of the forest land
3.4.b. Where traditional knowledge is used, written protocols are jointly developed prior to such use and signed by local tribes or tribal members to protect and fairly compensate them for such use.	Only applies if Native American's are managing any part of the forest land
3.4.c. The forest owner or manager respects the confidentiality of tribal traditional knowledge and assists in the protection of such knowledge.	Only applies if Native American's are managing any part of the forest land

PRINCIPLE 4. *COMMUNITY RELATIONS AND WORKERS' RIGHTS* - *Forest management operations shall maintain or enhance the long-term social and economic well being of forest workers and local communities.*	
Criteria and Indicators	***Ways to Fulfil the Standard***
4.1 The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.	
4.1.a. Employee compensation and hiring practices meet or exceed the prevailing local norms within the forest industry.	Center will interview employees during internal audits.

4.1.b. Forest work is offered in ways that create high quality job opportunities for employees.	Center will interview employees during internal audits.
4.1.c. Forest workers are provided with fair wages.	Center will interview employees during internal audits.
4.1.d. Hiring practices and conditions of employment are non-discriminatory and follow applicable federal, state, and local regulations	Center will interview employees during internal audits.
4.1.e. The forest owner or manager provides work opportunities to qualified local applicants and seeks opportunities for purchasing local goods and services of equal price and quality.	Local suppliers are given preferential treatment. Going outside of local suppliers must be justified (price, quality).
4.1.f. Commensurate with the size and scale of operation, the forest owner or manager provides and/or supports learning opportunities to improves public understanding of forests and forest management.	Company can support local education activities (Universities, Woodland Owner activities) or sponsor their own,
4.1.g. The forest owner or manager participates in local economic development and/or civic activities, based on scale of operation and where such opportunities are available.	Encouragement in membership of industry or trade associations. Sells timber locally.
4.2 Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.	
4.2.a. The forest owner or manager meets or exceeds all applicable laws and/or regulations covering health and safety of employees and their families (also see Criterion 1.1)	Workers comply with all OSHA rules, Assessors will visit any active logging
4.2.b. The forest owner or manager and their employees and contractors demonstrate a safe work environment. Contracts or other written agreements include safety requirements.	Workers comply with all OSHA rules, Assessors will visit any active logging
4.2. c. The forest owner or manager hires well-qualified service providers to safely implement the management plan.	Documentation of training, using Certified Master Loggers, pesticide applicators have licensing, etc.
4.3 The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labor Organization (ILO).	
4.3.a. Forest workers are free to associate with other workers for the purpose of advocating for their own employment interests.	Assumed compliance with child labor and minimum wage laws
4.3.b. The forest owner or manager has effective and cultural sensitive mechanisms to resolve disputes between workers and management.	Mechanism to resolve disputes in place.
4.4 Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups directly affected by management operations.	
4.4.a. The forest owner or manager understands the likely social impacts of management activities, and incorporates this understanding into management planning and operations. Social impacts include effects on: • Archeological sites and sites of cultural, historical, and community significance • Public resources, including air, water, and food (hunting, fishing, and collecting) • Aesthetics • Community goals for forest and natural resource use and protection such as employment,	Center will make Group Member aware of archaeology sites. Must note any nearby public resources and management impacts on them.

subsistence, recreation, and health • Community economic opportunities • Other people who may be affected by management operations A summary is available to the assessors.	
4.4.b. The forest owner or manager seeks and considers input in management planning from people who would likely be affected by management activities.	During initial certification the Center will help contact your stakeholders to determine how they feel about your management activities. Group Members consider input, they do not have to take it.
4.4.c. People who are subject to direct adverse effects of management operations are apprised of relevant activities in advance of the action that they may express concern.	Any management activities near adjacent neighbors must be made aware a minimum of 14 days.
4.4.d. For public forests, consultation includes the following components: 1. Clearly defined and accessible methods for public participation are provided in both long and short-term planning processes, including harvest plans and operational plans 2. Public notification is sufficient to allow interested stakeholders the chance to learn of upcoming opportunities for public review and/or comment on the proposed management 3. An accessible and affordable appeals process to planning decisions is available Planning decisions incorporate the results if public consultation. All draft and final planning documents, and their supporting data, are made readily available to the public.	**ONLY PUBLICLY OWNED FORESTS.** Center can help arrange these stakeholder discussions. Members discuss public comments during management planning.
4.5 Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihood of local peoples. Measures shall be undertaken to avoid such loss or damage.	
4.5.a. The forest owner or manager does not engage in negligent activities that cause damage to other people.	Assumed compliance unless issues come up during site visit or stakeholder consultation.
4.5.b. The forest owner or manager provides a known and accessible means for interested stakeholders to voice grievances and have them resolved. If significant disputes arise related to resolving grievances and/or providing fair compensation, the forest owner or manager follows appropriate dispute resolution procedures. At a minimum, the forest owner or manager maintains open communications, responds to grievances in a timely manner, demonstrates ongoing good faith efforts to resolve the grievances, and maintains records of legal suites and claims.	Assumed compliance but on Group Member's website and the Center's the contact information must be provided.
4.5.c. Fair compensation or reasonable mitigation is provided to local people, communities, or adjacent landowners for substantiated damage or loss of income caused by the landowner or manager.	Will ask how Group Member how they've dealt with issues in the past. Met mostly with providing public contact information in the event of problems. If you destroyed a fence did you fix or pay to repair it?

PRINCIPLE *5*. BENEFITS FROM THE FOREST - Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.	
Criteria and Indicators	***Ways to Fulfil the Standard***
5.1 Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.	
5.1.a. The forest owner or manager is financially able to implement core management activities, including all those environmental, social, and operating costs, required to meet this standard, and investment and reinvestment in forest management.	Can you actually implement what's in your management plan?
5.1.b. Responses to short-term financial factors are limited to levels that are consistent with this standard.	It is not encouraged to increase harvests or put off maintenance (site prep, road repair) because of short-term financial reasons (market fluctuations, need for equipment, needed cash flow). You can put these activities off short-term but it cannot alter your management strategies radically.
5.2 Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.	
5.2.a. Where forest products are harvested or sold, opportunities for forest product sales and services are given to local harvesters, value-added processing and manufacturing facilities, and other operations that are able to offer services at competitive rates and levels of service.	Group members do not have to actively seek out these individuals or lose money in the process. It's encouraged that if offers are similar the Group Member goes with contractors that are local or regional.
5.2.b. The forest owner or manager takes measures to optimize the use of harvest forest products and explores product diversification where appropriate and consistent with management objectives.	Are Group Members maximizing product diversification off their harvests?
5.2.c. On public lands where forest products are harvested and sold, some sales of forest products or contracts are scaled and structured to allow small business to bid competitively.	**ONLY PUBLICLY OWNED FORESTS.** Are the management activities structured so that all types of firms can bid on them? Could they potentially make them smaller for small firms to bid on?
5.3 Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.	
5.3.a. Management practices are employed to minimize the loss and/or waste of harvested forest products.	Are forest products being under utilized on your harvests? If there's a tie market nearby, are you taking advantage of it to meet objectives?
5.3.b. Harvest practices are managed to protect residual trees and other forest resources, including: • Soil compaction, rutting and erosion are minimized	How is the Group Member minimizing damage? Is it in contracts? Are you doing

• Residual trees are not significantly damaged to the extent that health, growth, or values are noticeably affected • Damage to NTFPs is minimized during management activities • Techniques and equipment that minimize impacts to vegetation, soil, and water are used whenever feasible	post-harvest monitoring to ensure damage levels are low?
5.4 Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.	
5.4.a. The forest owner or manager demonstrates knowledge of their operation's effect on the local economy as it relates to existing and potential markets for a wide variety of timber and non-timber forest products and services.	Is the Group Member knowledgeable in local markets? Audit during interview and can be a line in management plan.
5.4.b. The forest owner or manager strives to diversify the economic use of the forest according to indicator 5.4.a.	Is the Group Member actively seeking new markets? Audit during interview and can be a line in management plan.
5.5 Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.	
5.5.a. In developing activities on the FMU, the forest owner or manager identifies and defines appropriate measures for maintaining and/or enhancing forest services and resources that serve public values, including municipal watersheds, fisheries, carbon storage and sequestration, recreation, and tourism.	These must be addressed but not over the main objectives of the Group Member's management plan. This is generally met by solid management plan preparation indicating protecting water quality and improving wildlife habitat.
5.5.b. The forest owner or manager uses the information from indicator 5.5.a to implement appropriate measures for maintaining and/or enhancing these services and resources.	---
5.6 The rate of harvest of forest products shall not exceed levels that can be permanently sustained.	
5.6.a. In FMUs where products are being harvested, the landowner or manager calculates the sustained yield harvest level for each sustained yield planning unit, and provides clear rationale for determining size and layout of the planning unit. The sustained yield harvest level calculation is documented in the management plan. The sustained yield harvest level calculation for each planning unit is based on: • Documented growth rates for particular sizes, and/or acreage of forest types. Age-classes and species distributions • Mortality and decay and other factors that affect net growth • Areas reserved from harvest or subject to harvest restrictions to meet other management goals • Silvicultural practices that will be employed on the FMU • Management objectives and desired future conditions	Annual allowable cut/sustained yield must be calculated. State FIA data can but used at the beginning but with a few years a plan developed and implemented. It is recommended that a CFI system be set up in large scale forest operations to determine a specific Sustained Yield.
5.6.b. Average annual harvest levels, over rolling periods of no more than 10 years, do not exceed the calculated sustained yield harvest level.	Group Members may go over the harvest amount but the average of rolling 10 years must not be over it.
5.6.c. Rates and methods of timber harvest lead to achieving desired conditions, and improve or maintain health and quality across the FMU. Overstocked stands and stands that have been depleted	Group Members may go over harvest levels to rehabilitate stands. This includes, but not

or rendered to be below productive potential due to natural events, past management, or lack of management, are returned to desired stocking levels and composition at the earliest practicable time as justified in management objectives.	limited do, past land abuses (high grading, grazing damage), weather events, or lack of management areas. Anytime Group Members go over harvest levels data must be presented to support those harvests.
5.6.d. For NTFPs, calculation of quantitative sustained yield harvest levels is required only in cases where products are harvested in significant commercial operations or where traditional or customary rights may be impacted by such harvests. In other situations, the forest owner or manager utilizes available information, and new information that can be reasonably gathered, to set harvesting levels that will not result in a depletion of the non-timber growing stocks or other adverse effects to the forest ecosystem.	Non-timber forest products must have sustained yield calculations as well.

PRINCIPLE 6. *ENVIRONMENTAL IMPACT- Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.*	
Criteria and Indicators	***Ways to Fulfil the Standard***
6.1 Assessment of environmental impacts shall be completed -- appropriate to the scale, intensity of forest management and the uniqueness of the affected resources -- and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.	
6.1.a. Using the results of credible scientific analysis, best available information (including relevant databases), and local knowledge and experience, an assessment of conditions on the FMU is completed and includes: 1. Forest community types and development, size class and/or successional stages, and associated natural disturbance regimes 2. Rare, Threatened, and Endangered (RTE) species and rare ecological communities (including plant communities) 3. Other habitats and species of management concern 4. Water resources and associated riparian habitats and hydrologic functions 5. Soil resources Historic conditions on the FMU related to forest community types and development, size class, and/or successional stages, and a broad comparison of historic and current conditions.	These five factors must be addressed in your management plan. Center will assist in RTE species site identification with state agencies.
6.1.b. Prior to commencing site-disturbing activities, the forest owner or manager assesses and documents the potential short and long-term impacts of planned management activities on elements 1-5 listed in Indicator 6.1.a. The assessment must incorporate the best available information, drawing from scientific literature and experts. The impact assessment will at a minimum include identifying resources that may be impacted by management (e.g., streams, habitats of management concern, soil nutrients). Additional detail (i.e., detailed description or quantification of impacts) will vary depending on the uniqueness of the resource, potential risks, and steps that will be taken to avoid and minimize risks.	Experts and scientific literature include state agency documents, silviculture textbooks, University staff. A complete and full analysis does not have to be done for every single site disturbing activity.

6.1.c. Using the findings of the impact assessment (Indicator 6.1.b), management approaches and field prescriptions are developed and implemented that: 1) avoid or minimize negative short-term and long-term impacts; and, 2) maintain and/or enhance the long-term ecological variability of the forest.	Any information gained from assessments are used to alter or bolster future prescriptions.
6.1.d. On public lands, assessments developed in indicator 6.1.a and management approaches developed in indicator 6.1.c are made available to the public in draft form for review and comment prior to finalization. Final assessments are also made available.	**ONLY PUBLICLY OWNED FORESTS.** Draft management plans are available for stakeholder consultation during planning process.
6.2. Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping and collecting shall be controlled	
6.2.a. If there is a likely presence of RTE species as identified in indicator 6.1.a the either a field survey to verify the species' presence or absence is conducted prior to site-disturbing management activities, or management occurs with the assumption that potential RTE species are present. Surveys are conducted by biologists with the appropriate expertise in the species of interest and with appropriate qualifications to conduct surveys. If a species is determined to be present, its location should be reported to the manager of the appropriate database.	Center will collaborate with the appropriate state agency to determine if RTE species are likely to be present.
6.2.b. When RTE species are present or assumed to be present, modifications in management are made in order to maintain, restore, or enhance the extent, quality, and viability of the species and their habitats. Conservations zones and/or protected ares are established for RTE species, including those S3 species that are considered rare, where they are necessary to maintain or improve the short and long-term viability of the species. Conservation measures are based upon relevant science, guidelines, and/or consultation with the relevant independent experts as necessary to achieve the conservation goal of the indicator.	If RTE species are present or assumed present Group Member's management plan must be updated and address the RTE presence.
6.2.c. For medium and large public forests (e.g state forests), forest management plans and operations are designed to meet species' recovery goals, as well as landscape level biodiversity conservation goals.	**ONLY PUBLICLY OWNED FORESTS.** Group Members must be aware of landscape level conservation goals.
6.2.d. Within the capacity of the forest owner or manager, hunting, fishing, trapping, collecting, and other activities are controlled to avoid the risk of impacts to vulnerable species communities (See Criterion 1.5)	Apply cautionary approach to conserve RTE species and communities.
6.3 Ecological functions and values shall be maintained intact, enhanced, or restored, including: **a) Forest regeneration and succession.** **b) Genetic, species, and ecosystem diversity.** **c) Natural cycles that affect the productivity of the forest ecosystem**.	
6.3.a. Forest regeneration and succession	
6.3.a.1. The forest owner or manager maintains, enhances, and/or restores under-represented successional stages in the FMU that would naturally occur on the types of sites found on the FMU. Where old growth of different community types that would naturally occur on the forest are under-represented in the landscape relative to natural conditions, a portion of the forest is managed to	

enhance and/or restore old growth characteristics.	
6.3.a.2. When a rare ecological community is present, modifications are made in both the management plan and its implementation in order to maintain, restore, or enhance the viability of the community. Based on the vulnerability of the existing community, conservation zones, and/or protected areas are established where warranted.	Center will work with state agencies to help Group Members identify these areas and maintain or enhance these rare communities.
6.3.a.3. When they are present, management maintains the area, structure, composition, and processes of all Type 1 and Type 2 old growth. Type 1 and 2 old growth are also protected and buffered as necessary with conservation zones, unless an alternative plan is developed that provides greater overall protection of old growth values. Type 1 old growth is protected from harvesting to the extent necessary to maintain the area, structures, and functions of the stand. Timber harvest is Type 2 old growth must maintain old growth structures, functions, and components including individual trees that function as refugia (See indicator 6.3.g). On public lands, old growth is protected from harvesting, as well as from other timber management activities, except if needed to maintain the values associated with the stand(e.g., remove exotic species, conduct controlled burning, and thinning from below in forest types when and where restoration is appropriate). On American Indian lands, timber harvest may be permitted in Type 1 and Type 2 old growth in recognition of their sovereignty and unique ownership. Timber harvest is permitted in situations where: 1. Old growth forests comprise a significant portion of the tribal ownership 2. A history of forest stewardship by the tribe exists 3. High Conservation Value Forest attributes are maintained 4. Old-growth structures are maintained 5. Conservation zones representative of old growth stands are established 6. Landscape level considerations are addressed 7. Rare species are protected	Type 1: 3 acres or more that have never been logged Type 2:20 acres or more that have been logged that retain significant old-growth characteristics
6.3.b. To the extent feasible within the size of the ownership, particularly on larger ownerships, management maintains, enhances, or restores habitat conditions suitable for well-distributed populations of animal species that are characteristics of forest ecosystems within the landscapes.	
6.3.c. Management maintains, enhances, and/or restores the plant and wildlife habitat of Riparian Management Zones (RMZs) to provide: a) Habitat for aquatic species that breed in surrounding uplands b) Habitat for predominantly terrestrial species that breed in adjacent aquatic habitats c) Habitat for species that use riparian areas for feeding, cover, and travel d) Habitat for plant species associated with riparian areas e) Stream shading and inputs of wood and leaf litter into the adjacent aquatic ecosystem	
6.3.d. Management practices maintain or enhance plant species composition, distribution, and frequency of occurrence similar to those that would naturally occur on the site.	
6.3.e. When planting is required, a local source of known provenance is used when available and when the local source is equivalent in terms of quality, price, and productivity. The use of non-local sources are justified, such as in situations where other management objectives (e.g. disease resistance or	Local source procurement of seedlings are highly encouraged.

adapting to climate change) are best served by non-local sources. Native species suited to the site are normally selected for regeneration.	
6.3.f. Management maintain, enhances, or restores habitat components and associated stand structures, in abundance and distribution that could be expected from naturally occurring processes. These components include: a) Large live trees, live trees with decay or declining health, snags, and well-distributed coarse down and dead woody material. Legacy trees where present are not harvested b) Vertical and horizontal complexity Trees selected for retention are generally representative of the dominant species naturally found on the site.	
6.3.g.1. In the Southeast, Appalachia, Ozark-Ouchita, Mississippi Alluvial Valley, and Pacific Coast Regions, when even-aged systems are employed, and during salvage harvests, live trees and other native vegetation are retained within the harvest unit as described in Appendix C for the applicable region. In the Lake States, Northeast, Rocky Mountain, and Southwest Regions, when even-aged silvicultural systems are employed, and during salvage harvests, live trees, and other native vegetation are retained within the harvest unit in a proportion and configuration that is consistent with the characteristic natural disturbance regime unless retention at a lower level is necessary for the purposes of restoration or rehabilitation. See Appendix C for additional regional requirements and guidance.	In Lake States and Appalachia, even aged management (shelterwood, clearcut, deferment, seed tree) openings are limited to 10 acres. Openings may be separated by appropriate buffers (SMZs, wildlife corridors, aesthetic). Uneven age openings are less than 2.5 acres.
6.3.g.2. Under very limited situations, the landowner or manager has the option to develop a qualified plan to allow minor departure from the opening size limits described in indicator 6.3.g.1. A qualified plan: 1. Is developed by qualified experts in ecological and/or related fields (wildlife biology, hydrology, landscape ecology, forestry/silviculture) 2. Is based on the totalilty of the best available information including peer-reviewed science regarding natural disturbance regimes for the FMU 3. Is spatially and temporally explicit and includes maps of proposed openings or areas 4. Demonstrates that the variations will result in equal or greater benefit to wildlife, water quality, and other values compared to the normal opening size limits, including for sensitive and rare species 5. Is reviewed by independent experts in wildlife biology, hydrology, and landscape ecology, to confirm the preceding findings	You can go over harvest size maximums but must meet the 5 criteria.
6.3.h. The forest owner or manager assesses the risk of, prioritizes, and, as warranted, develops, and implements a strategy to prevent or control invasive species, including: 1. A method to determine the extent of invasive species and the degree of threat to native species and ecosystems 2. Implementation of management practices that minimize the risk of invasive establishment, growth, and spread 3. Eradication or control of established invasive populations when feasible **4.** Monitoring of control measures and management practices to assess their effectiveness in	

preventing or controlling invasive species	
6.3.i. In applicable situations, the forest owner or manager identifies and applies site-specific fuels management practices, based on: natural fire regimes, risk of wildfires, potential economic losses, public safety, and applicable laws and regulations	
6.4 Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources.	
6.4.a. The forest owner or manager documents the ecosystems that would naturally exist on the FMU, and assesses the adequacy of their representatives and production in the landscape (see criterion 7.1). The assessment for the medium and large forests include some or all of the following: a) GAP analysis; b) collaboration with state natural heritage programs and other public agencies; c) regional, landscape, and watershed planning efforts; d) collaboration with universities and/or local conservation groups. For an area that is not located on the FMU to qualify as a Representative Sample Area (RSA), it should be under permanent protection in its natural state.	The Center will assist Group Members in the identification and management of RSAs.
6.4.b. Where existing areas within the landscape, but external to the FMU, are not of adequate protection, size, and configuration to serve as representative samples of existing ecosystems, forest owners or managers, whose properties are conductive to the establishment of such areas, designate ecologically viable RSAs to serve these purposes. Large FMUs are generally expected to establish RSAs of purpose 2 and 3 within the FMU.	The Center will assist Group Members in the identification and management of RSAs.
6.4.c. Management activities within RSAs are limited to low impact activities compatible with the protected RSA objectives, except under the following circumstances: a) Harvesting activities only where they are necessary to restore or create conditions to meet objectives of the protected RSA, or to mitigate conditions that interfere with achieving the RSA objectives; or b) Road-building only where it is documented that it will contribute to minimizing the overall environmental impacts within the FMU and will not jeopardize the purpose for which the RSA was designated.	The Center will assist Group Members in the identification and management of RSAs.
6.4.d. The RSA assessment (indicator 6.4.a) is periodically reviewed and if necessary updated (at a minimum every 10 years) in order to determine if the need for RSAs has changed; the designation of RSAs (indicator 6.4.b) is revised accordingly.	The Center will assist Group Members in the identification and management of RSAs.
6.4.e. Managers of large, contiguous public forests establish and maintain a network of representative protected areas sufficient in size to maintain species dependent on interior core habitats.	The Center will assist Group Members in the identification and management of RSAs.
6.5 Written guidelines shall be prepared and implemented to: control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and protect water resources.	
6.5.a. The forest owner or manager has written guidelines outlining conformance with the indicators of this criterion.	Written guidelines must be available for factors mentioned in 6.5. New materials do not have to be developed. Group Members may use state agency materials such as BMP guides.
6.5.b. Forest operations meet or exceed Best Management Practices (BMPs) that address components	---

of the criterion where the operation takes place.	
6.5.c. Management activities including site preparation, harvest prescriptions, techniques, timing, and equipment are selected and used to protect soil and water resources and to avoid erosion, landslides, and significant soil disturbance. Logging and other activities that significantly increase risk of landslides are excluded in areas where risk of landslides is high. The following actions are addressed: • Slash is concentrated only as much as necessary to achieve the goals of the site preparation and the reduction of fuels to moderate or low levels of fire hazard • Disturbance of topsoil is limited to the minimum necessary to achieve successful regeneration of species native to the site • Rutting is compaction is minimized • Soil erosion is not accelerated • Burning is only done consistent with natural disturbance regimes • Natural ground cover disturbance is minimized to the extent necessary to achieve regeneration objectives • Whole tree harvesting on any site over multiple rotations is only done when research indicates soil productivity will not be harmed • Low impact equipment and technologies is used where appropriate	---
6.5.d. The transportation system, including design and placement of permanent and temporary haul roads, skid trails, recreation trails, water crossings and landings, is designed, constructed, maintained, and/or reconstructed to reduce short and long-term environmental impacts, habitat fragmentation, soil and water disturbance and cumulative adverse effects, while allowing customary uses and use rights. This includes: • Access to all roads and trails (temporary and permanent), including recreational trails, and off-road travel, is controlled, as possible, to minimize ecological impacts • Road density is minimized • Sediment discharge to streams is minimized • There is free upstream and downstream passage for aquatic organisms • Impacts of transportation systems on wildlife habitat and migration corridors are minimized • Area converted to roads, landings, and skid trails is minimized • Habitat fragmentation is minimized • Unneeded roads are closed and rehabilitated	Only major concern different from normal BMPS is free passage of aquatic organisms. If fish are present Group Member stream crossings must allow them to pass through.
6.5.e.1. In consultation with appropriate expertise, the forest owner or manager implements written Streamside Management Zone (SMZ) buffer management guidelines that are adequate for preventing environmental impact, including protecting and restoring water quality, hydrologic conditions in rivers and stream corridors, wetlands, vernal pools, seeps and springs, lake and pond shorelines, and other hydrologically sensitive areas. The guidelines include vegetative buffer widths and protection measures that are acceptable within those buffers.	In Lake States and Appalachia SMZs are determined by slope and are in the back of the FSC-US standards. Maximum SMZ widths are 165' for slopes >41% with no harvesting in 25' and 50% retention in the other 140'.
6.5.e.2. Minor variations from the stated minimum SMZ widths and layout for specific stream segments, wetlands, and other water bodies are permitted in limited circumstances, provided the forest owner or	Variations in the SMZ are allowed but written documentation must accompany it and data to

manager demonstrates that the alternative configuration maintains the overall extent of the buffers and provides equivalent configuration or greater environmental protection than FSC-US regional requirements for those stream segments, water quality, and aquatic species, based on site-specific conditions and the best available information. The forest owner or manager develops a written set of supporting information including a description of the riparian habitats and species addressed in the alternative configuration. The Center will verify that the variations meet the requirements, based on the input of an independent expert in aquatic ecology or closely related field.	support changes provided.
6.5.f. Stream and wetland crossings are avoided when possible. Unavoidable crossings are located and constructed to minimize impacts on water quality, hydrology, and fragmentation of aquatic habitat. Crossings do not impede movement of aquatic species. Temporary crossings are restored to original hydrological conditions when operations are finished.	---
6.5.g. Recreation use on the FMU is managed to avoid negative impacts to soils, water, plants, wildlife, and wildlife habitats.	---
6.5.h. Grazing by domesticated animals is controlled to protect in-stream habitats and water quality, the species composition and viability of the riparian vegetation, and the banks of the stream channel from erosion.	---
6.6 Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.	
6.6.a. No products on the FSC list of Highly Hazardous Pesticides are used (see FSC-POL-30-001 EN FSC Pesticides policy 2005 and associated documents).	List provided to Group Member.
6.6.b. All toxicants used to control pests and competing vegetation, including rodenticides, insecticides, herbicides, and fungicides are used only when and where non-chemical management practices are: a)not available; b) prohibitively expensive, taking into account overall environmental and social costs, risks, and benefits; c) the only effective means for controlling invasive and exotic species; or d) result in less environmental damage than non-chemical alternatives (e.g., top soil disturbance, loss of soil litter, and down wood debris). If chemicals are used, the forest owner or manager uses the least environmentally damaging formulation and application method practical. Written strategies are developed and implemented that justify the use of chemical pesticides. Whenever feasible, an eventual phase-out of chemical use is included in the strategy. The written strategy includes an analysis of options for, and the effects of, various chemical and non-chemical pest control strategies, with the goal of reducing or eliminating chemical use.	Group Members can use chemicals but reasons must be stated from the list in 6.6.b.
6.6.c. Chemicals and application methods are selected to minimize risk to non-target species and sites. When considering the choice between aerial and ground application, the forest owner or manager evaluates the comparative risk to non-target species and sites, the comparative risk of worker exposure, and the overall amount and type of chemicals required.	Group Members must use the least chemicals as possible while still meeting management objectives.
6.6.d. Whenever chemicals are used, a written prescription is prepared that describes the sire specific hazards and risks, and includes a map of the treatment area. Chemicals are applied only by workers	Group Member must complete pesticide form from Center to document each usage.

who have received proper training in application methods and safety. They are made aware of the risks, wear proper safety equipment, and are trained to minimize environmental impacts on non-target species and sites.	
6.6.e. If chemicals are used, the effects are monitored and the results are used for adaptive management. Records are kept of pest occurrences, control measures, and incidences of worker exposure to chemicals.	Monitoring must take place to ensure chemicals are having desired effect and non-target damage is minimized. Group Members could visit a site after application to document non-target effects. Management plans are altered potentially based upon these monitoring.
6.7 Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations.	
6.7.a. The forest owner or manager, and employees and contractors, have equipment and training necessary to respond to hazardous spills.	Hazardous spill kits are available. During outdoor usage is a safety kit present that includes an eye wash kit? Are applicators trained in the safety kit's usage?
6.7.b. In the event of a hazardous material spill, the forest owner or manager immediately contains the material and engages qualified personnel to perform the appropriate removal and remediation, as required by applicable laws and regulations.	---
6.7.c. Hazardous materials and fuels are stored in leak-proof containers in designated storage areas, that are outside riparian management zones and away from other ecological sensitive features, until they are used or transported to an approved off-site location for disposal. There is no evidence of persistent fluid leaks from equipment or of recent groundwater or surface water contamination.	Center will ask to see storage areas during on site visits.
6.8. Use of biological control agents shall be documented, minimized, monitored, and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.	
6.8.a. Biological control agents are used only as part of a pest management strategy for the control of invasive plants, pathogens, insects, or other animals when other pest control methods are ineffective, or are expected to be ineffective. Such use is contingent upon peer-reviewed scientific evidence that the agents in question are non-invasive and are safe native species.	---
6.8.b. If biological control agents are used, they are applied by trained workers using proper equipment.	---
6.8.c. If biological control agents are used, their use is documented, monitored and strictly controlled in accordance with state and national laws and internationally accepted scientific protocols. A written plan will be developed and implemented justifying such use, describing the risks, specifying the precautions workers will employ to avoid or minimize such risks, and describing how potential impacts will be monitored.	---
6.8.d. Genetically Modified Organisms (GMOs) are not used for any purposes.	No GMOs but trees bred using traditional breeding techniques are acceptable such as the American chestnut seedlings.
6.9 The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.	

6.9.a. The use of exotic species is contingent on the availability of credible scientific data indicating that any such species is non-invasive and its application does not pose a risk to natural biodiversity.	---
6.9.b. If exotic species are used, their provenance and the location of their use are documented, and their ecological effects are actively monitored.	---
6.9.c. The forest owner or manager takes timely action to curtail or significantly reduce any adverse impacts resulting from their use of exotic species.	---
6.10. Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion: **a) Entails a very limited portion of the forest management unit; and** **b) Does not occur on high conservation value forest areas; and** **c) Will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit.**	
6.10.a. Forest conversion to non-forest land uses does not occur, except in circumstances where conversion entails a very limited portion of the forest management unit (note indicators 3.10.a, b, and c are related and all need to be conformed with or conversion to be allowed).	Forest conversion only allowed when all three factors are met in criterion 6.10.
6.10.b. Forest conversion to non-forest land uses does not occur on high conservation value forest areas (note that indicators 6.10.a, b, and c are related and all need to be conformed with for conversion to be allowed).	If Group Members convert HCVF to non-forest land, certification will be revoked.
6.10.c. Forest conversion to non-forest land uses does not occur, except in circumstances where conversion will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit (note that indicators 6.10.a, b, and c are related and all need to be conformed with for conversion to be allowed).	**---**
6.10.d. Natural or semi-natural stands are not converted to plantations. Degraded, semi-natural stands may be converted to restoration plantations.	Natural stands have exhisted with minimal human intervention. A semi-natural stands exhibit many characteristics as native ecosystems but have a history of human disturbance. Semi-natural stands are very common and include most of the unmanaged and managed land other than plantations in the U.S.
6.10.e. Justification for land-use and stand-type conversions is fully described in the long-term management plan, and meets to biodiversity conservation requirements of criterion 6.3 (see also criterion 7.1.1).	**---**
6.10.f. Areas converted to non-forest use for facilities associated with subsurface mineral and gas rights transferred by prior owners, or other conversion outside the control of the certificate holder, are identified on maps. The forest owner or manager consults with the Center to determine of removal of these areas from the scope of the certificate is warranted. To the extent allowed by these transferred rights, the forest owner or manager exercises control over the location of the surface disturbances in a manner that minimizes adverse environmental and social impacts. If the certificate holder at one point held these rights, and then sold them, then subsequent conversion of forest to non-forest use would be subject to indicator 6.10.a-d.	Maps are generated that indicate who owns what subsurface rights.

PRINCIPLE 7*. <u>MANAGEMENT PLAN</u> - A management plan -- appropriate to the scale and intensity of the operations -- shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.*	
<u>Criteria and Indicators</u>	***<u>Ways to Fulfil the Standard</u>***
7.1. The management plan and supporting documents shall provide: **a) Management objectives.** **b) Description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands.** **c) Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories.** **d) Rationale for rate of annual harvest and species selection.** **e) Provisions for monitoring of forest growth and dynamics.** **f) Environmental safeguards based on environmental assessments.** **g) Plans for the identification and protection of rare, threatened and endangered species.** **h) Maps describing the forest resource base including protected areas, planned management activities and land ownership.** **i) Description and justification of harvesting techniques and equipment to be used.**	
7.1.a. The management plan identifies the ownership and legal status of the FMU and its resources, including rights held by the owner and rights held by others.	---
7.1.b. The management plan describes the history of land use and past management, current forest types, and associated development size class and/or successional stages, and natural disturbance regimes that affect the FMU (see indicator 6.1.a).	---
7.1.c. The management plan describes: a) current conditions of the timber and non-timber forest resources being managed; b) desired future conditions; c) historical ecological conditions; d) applicable management objectives and activities to move the FMU toward desired future conditions.	---
7.1.d. The management plan includes a description of the landscape within which the FMU is located and describes how landscape-scale habitat elements described in criterion 6.3 will be addressed.	---
7.1.e. The management plan includes a description of the following resources and outlines activities to conserve and/or protect: • Rate, threatened, and endangered species (see criterion 6.2) • Plant species and community diversity and wildlife habitats (see criterion 6.3) • Water resources (criterion 6.5) • Soil resources (criterion 6.3) • Representative Sample Areas (see criterion 6.4) • High Conservation Value Forests (see principle 9) • Other special management areas	---
7.1.f. If invasive species are present, the management plan describes invasive species conditions, applicable management objectives, and how they will be controlled.	Not every plant must be controlled or identified. Scale and size always considered.
7.1.g. The management plan describes insects and diseases, current or anticipated outbreaks on forest	---

conditions and management goals, and how insects and diseases will be managed (see criterion 6.6 and 6.8).	
7.1.h. If chemicals are used, the management plan describes what is being used, applications, and how the management system conforms to criterion 6.8.	---
7.1.i. If biological controls are used, the management plan describes what is being used, applications, and how the management system conforms to criterion 6.8.	---
7.1.j. The management plan incorporates the results of the evaluation of social impacts, including: • Traditional cultural resources and rights of use (see criterion 2.1) • Potential conflicts with customary uses and use rights (see criterion 2.2, 2.3, 3.2) • Management of ceremonial, archeological, and historic sites (see criterion 3.3 and 4.5) • Public access to and use of the forest, and other recreation issues • Local and regional socioeconomic conditions and economic opportunities, including creation and/or maintenance of quality jobs (see indicator 4.1.b and 4.4.a), local purchasing opportunities (see indicator 4.1.e) and participation in local development opportunities (see indicator 4.1.g)	---
7.1.k. The management plan describes the general purpose, condition, and maintenance needs of the transportation network (see indicator 6.5.e).	---
7.1.l. The management plan describes the silvicultural and other management systems used and how they will sustain, over the long term, forest ecosystems present on the FMU.	---
7.1.m. The management plan describes how species selection and harvest rate calculations were developed to meet the requirements of criterion 5.6.	---
7.1.n. The management plan includes a description of monitoring procedures necessary to address requirements of criterion 8.2.	---
7.1.o. The management plan includes maps describing the resource base, the characteristics of general management zones, special management areas, and protected areas at a level of detail to achieve management objectives and protect sensitive sites.	---
7.1.p. The management plan describes and justifies the types and sizes of harvesting machinery and techniques employed on the FMU to minimize or limit impacts to the resource.	---
7.1.q. Plans for harvesting and other significant site-disturbing management activities required to carry out the management plan are prepared prior to implementation. Plans clearly describe the activity, the relationship to objectives, outcomes, any necessary environmental safeguards, health, and include maps of adequate detail.	"Prior" being the key word of this criterion.
7.1.r. The management plan describes the stakeholder consultation process.	Center will help with stakeholder consultation.
7.2 The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.	
7.2.a. The management plan is kept up to date. It is reviewed on an ongoing basis and is updated whenever necessary to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social, and economic circumstances. At a minimum,	---

a full revision occurs every 10 years.	
7.3. Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plan.	
7.3.a. Workers are qualified to properly implement the management plan; all forest workers are provided with sufficient guidance and supervision to adequately implement their respective components of the plan.	Qualified means trained or licensed according to state and federal guidelines.
7.4. While respecting the confidentiality of information, forest managers shall make publicly available a summary of the primary elements of the management plan, including those listed in Criterion 7.1.	
7.4.a. While respecting landowner confidentiality, the management plan summary that outlines the elements of the plan described in criterion 7.1 is available to the public either at no charge or a nominal fee.	Center will help develop Group Members summary respecting confidentiality.
7.4.b. Managers of public forests make draft management plans, revisions, and supporting documentation easily accessible for public review and comment prior to their implementation. Managers address public comments and modify the plans to ensure compliance with this standard.	**ONLY PUBLICLY OWNED FORESTS.** Center can host documents on the website for stakeholders to easily allow for review if necessary. Group Members may use their own sites.

PRINCIPLE 8. MONITORING AND ASSESSMENT - Monitoring shall be conducted -- appropriate to the scale and intensity of forest management -- to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.	
Criteria and Indicators	***Ways to Fulfil the Standard***
8.1 The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations as well as the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.	
8.1.a. Consistent with the scale and intensity of management, the forest owner or manager develops and consistently implements a regular, comprehensive, and replicable written monitoring protocol.	Monitoring must be written out for each type of management activity. Monitoring includes inspecting BMPs during and post-harvest logging jobs. Monitoring for
8.2. Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators: **a) yield of all forest products harvested,** **b) growth rates, regeneration, and condition of the forest,** **c) composition and observed changes in the flora and fauna,** **d) environmental and social impacts of harvesting and other operations, and** **e) cost, productivity, and efficiency of forest management.**	
8.2.a.1. For all commercially harvested products, an inventory system is maintained. The inventory system includes at a minimum: a) species, b) volumes, c) stocking, d) regeneration, and e) stand and forest composition and structure; and f) timber quality.	Inventory can be qualitative all the way up to harvest point. Quantitative data must accompany harvests.
8.2.a.2. Significant, unanticipated removal or loss or increased vulnerability of forest resources is monitored and recorded. Recorded information includes date and location of occurrence, description of disturbance, extent and severity of loss, and may be both qualitative and quantitative.	Any unanticipated large loss of volumes (tornado, wind) must be documented and recorded along with description of

	disturbance.
8.2.b. The forest owner or manager maintains records of harvested timber and NTFPs (volume and product and/or grade). Records must adequately ensure that the requirements under criterion 5.6 are met.	Records of harvest volumes are maintained and provided to the Center.
8.2.c. The forest owner or manager periodically obtains data needed to monitor presence on the FMU of : • Rare, threatened, and endangered species and/or their habitats • Common and rare plant communities and/or habitat • Location, presences, and abundance of invasive species • Condition of protected areas, set-asides, and buffer zones • High Conservation Value Forests (see criterion 9.4)	Center will periodically review RTE species, communities, and archaeology sites with state agencies. Any changes to HCVF requirements will be relayed to Group Members.
8.2.d.1. Monitoring is conducted to ensure their site specific plans and operations are properly implemented, environmental impacts of site disturbing operations are minimized, and that harvest level prescriptions are guidelines are effective.	
8.2.d.2. A monitoring program is in place to assess the condition and environmental impacts of the forest-road system.	Monitoring can just be walking the roads periodically. Are culvert clogged? Broad-base dips still functioning? Program must be written into the management plan.
8.2.d.3. The landowner or manager monitors relevant socio-economic issues (see indicator 4.4.a), including the social impacts of harvesting, participation in local economic opportunities (see indicator 4.1.g), the creation and/or maintenance of quality job opportunities (see indicator 4.1.b), and local purchasing opportunities (see indicator 4.1.e).	Assume compliance but Group Members will adapt economic activities to the changing marketplace (new loggers, better efficiencies, etc).
8.2.d.4. Stakeholder responses to management activities are monitored and recorded as necessary.	Center will assist in stakeholder involvement.
8.2.d.5. Where sites of cultural significance exist, the opportunity to jointly monitor sites of cultural significance is offered to tribal representatives (see principle 3).	Center will assist in activities involving Native American contacts.
8.2.e.1. The forest owner or manager monitors the costs and revenues of management in order to assess productivity and efficiency.	Center will audit during desk audits.
8.3. Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the "chain-of-custody."	
8.3.a. When forest products are being sold as FSC-certified, the forest owner or manager has a system that prevents mixing of FSC-certified and non-certified forest products prior to the point of sale.	Center can assist Group Members in developing systems for Chain-of-Custody requirements.
8.3.b. The forest owner or manager maintains documentation to enable the tracing of the harvested material from each harvested products from its origin to the point of sale.	Center can assist Group Members in developing systems for Chain-of-Custody requirements.
8.4. The results of monitoring shall be incorporated into the implementation and revision of the management plan.	
8.4.a. The forest owner or manager monitors and documents the degree to which the objectives stated in the management plan are being fulfilled, as well as significant deviations from the plan.	Areas are monitored post-management activity (harvest, chemical usage, etc.) to ensure adequate basal area has been

	removed according to specific prescription. Changes are made if prescription goals are not met.
8.4.b. Where monitoring indicates that management objectives and guidelines, including those necessary for conformance with this standard, are not being met or if changing conditions indicate that a change in management strategy is necessary, the management plan, operations plans, and/or other plan implementation measures are revised to ensure the objectives and guidelines will be met. If monitoring shows that the management objectives and guidelines themselves are not sufficient to ensure conformance with this standard, then the objectives and guidelines are modified.	---
8.5. While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2. *Applicability Note to Criterion 8.5: Forest owners or managers of private forests may withhold proprietary information (e.g., the nature and extent of their forest resource base, marketing strategies, and other financial information).*	
8.5.a. While protecting landowner confidentiality, either full monitoring results or an up-to-date summary of the most recent monitoring information is maintained, covering the indicators listed in criterion 8.2, and is available to the public, free or at a nominal price, upon request.	Center will help develop Group Members summary respecting confidentiality.

PRINCIPLE 9. MAINTENANCE OF HIGH CONSERVATION VALUE FORESTS - Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.	
Criteria and Indicators	***Ways to Fulfil the Standard***
9.1. Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management.	
9.1.a. The forest owner or manager identifies and maps the presence of High Conservation Value Forests (HCVF) within the FMU and, to the extent that data are available, adjacent to their FMU, in a manner consistent with the assessment process, definitions, data sources, and other guidance described in Appendix F. Given the relative rarity of the old growth forests in the contiguous United States, these areas are normally designated as HCVF, and all old growth must be managed in conformance with indicator 6.3.a.3 and requirements for legacy trees in indicator 6.3.f.	Center will assist in identification of HCVFs using FSC guidelines. These will be added to Group Members management plans. Maps of HCVF must be in management plan.
9.1.b. In developing the assessment, the forest owner or manager consults with qualified specialists, independent experts, and local community members who may have knowledge of areas that meet the definition of HCVs.	Center will assist in identification of HCVFs using FSC guidelines. These will be added to Group Members management plans.
9.1.c. A summary of the assessment results and management strategies (see criterion 9.3) is included in the management plan summary that is made available to the public.	Center will help develop Group Members summary respecting confidentiality.
9.2 The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.	
9.2.a. The forest owner or manager holds consultations with stakeholders and experts that confirm that	Center will assist in identification of HCVFs

proposed HCVF locations and their attributes have been accurately identified, and that appropriate options for the maintenance of their HCV attributes have been adopted.	using FSC guidelines. These will be added to Group Members management plans.
9.2.b. On public forest, a transparent and accessible public review of proposed HCV attributes and HCVF areas and management is carried out. Information for stakeholder consultations and other public review is integrated into HCVF descriptions, delineations, and management.	**ONLY PUBLICLY OWNED FORESTS.** Center will assist in identification of HCVFs using FSC guidelines. These will be added to Group Members management plans.
9.3 The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary.	
9.3.a. The management plan and relevant operational plans describe the measures necessary to ensure the maintenance and/or enhancement of all high conservation values present in all identified HCVF areas, including the precautions required to avoid risks or impacts to such values (see principle 7). These measures are implemented.	Maintain or enhance, *not* protect or preserve. Harvesting or management activities may take place in HCVFs if it can enhance those attributes that make it special and unique. Those activities must be detailed in the management plan.
9.3.b. All management activities in the HCVFs must maintain or enhance the high conservation values and the extent of the HCVF.	Maintain or enhance, *not* protect or preserve. Harvesting or management activities may take place in HCVFs if it can enhance those attributes that make it special and unique.
9.3.c. If HCVF attributes cross ownership boundaries and where maintenance of the HCV attributes would be improved by coordinated management, then the forest owner or manager attempts to coordinate conservation efforts with adjacent landowners.	A *reasonable* attempt must be undertaken.
9.4. Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain and enhance the applicable conservation attributes.	
9.4.a. The forest owner or manager monitors, or participates in a program to annually monitor, the status of the specific HCV attributes, including the effectiveness of the measures employed for their maintenance or enhancement. The monitoring program is designed and implemented consistent with the requirements of principle 8.	Group Members must monitor HCVFs attributes that make it unique.
9.4.b. When monitoring results indicate increasing risk to a specific HCV attribute, the forest owner/manager re-evaluates the measures taken to maintain or enhance that attribute, and adjusts the management measures in an effort to reverse the trend.	Group Members must adapt to information gained during monitoring.

PRINCIPLE 10. <u>PLANTATIONS</u> - Plantations shall be planned and managed in accordance with Principles and Criteria 1 - 9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.	
Applicability Note to Principle 10: Plantations are not prevalent in the Appalachian Region and do not represent the preferred method of managing a typical Appalachian forest. While adjoining regions may contain ecosystems that have been historically managed with plantations and landowners may have land in more than one region, plantation management in the Appalachian region is only appropriate where they already exist, and for restoration purposes.	
<u>Criteria and Indicators</u>	***<u>Ways to Fulfil the Standard</u>***
10.1 The management objectives of the plantation, including natural forest conservation and restoration objectives shall explicitly stated in the management plan, and clearly demonstrated in the implementation of the management plan.	
10.1.a. Consistent with all indicators within principle 10 and requirements of principle 7, the management plan contains clear descriptions of the management goals and prescriptions for plantations on the FMU, of the rationale for plantation management within the FMU, and the relationship between the plantations and natural forest conservation and restoration objectives within the unit.	
10.1.b. The forest owner or manager demonstrates clear progress in implementation of the components of the management plan addressing natural forest conservation and restoration objectives as they pertain to plantation management	
10.2 The design and layout of plantations should promote the protection, restoration, and conservation of natural forests, and not increase pressures on natural forests. Wildlife corridors, streamside zones, and a mosaic of stands of different ages and rotation periods shall be used in the layout of the plantation, consistent with the scale of the operation. The scale and layout of plantation blocks shall be consistent with the patterns of forest stands found within the natural landscape.	
10.2.a. For plantations established on soils capable of supporting natural forests, harvest units shall be arranged to provide or maintain areas of vegetative cover that allows populations of mid to late successional and sedentary native plant and animal species to survive or be reestablished within the plantation.	
10.2.b. New plantation establishment does not replace, endanger, or otherwise diminish the ecological integrity of any existing ecosystems won the FMU, including primary, natural, or semi-natural forests on the FMU. Note that restoration plantations may be established on degraded, semi-natural forests (see criterion 6.10). Plantations can be established on the following sites: former plantations; agricultural lands; and non-forested lands; and non-forested lands that were historically naturally forested but have been used for non-forest purposes since before 1994 (see additional conditions in criterion 10.9). New plantations are not established on rare or threatened non-forest habitats or ecosystems.	
10.2.c. Openings lacking within-stand retention are limited to a 40 acre average and an 80 acre maximum. Harvest openings larger than 80 acres must have retention as required in indicator 10.2.d and be justified by credible scientific analysis. The average for all openings (with and without retention) does not exceed 100 acres. Departures from these limits for restoration purposes are permissible but also must be justified by credible scientific analysis.	
10.2.d. On openings larger than 80 acres that are justified by credible scientific analysis, live trees, and	

native vegetation are retained in a proportion and configuration that are consistent with the characteristic natural disturbance regime in each community type, unless retention at a lower level in necessary for restoration purposes.	
10.2.e. In all regions except the Southeast, before an area is harvested, regeneration in adjacent forest areas (either natural forest or plantation) on the FMU must be of the subsequent advanced successional habitat stage, or exceed ten feet in height, or achieve canopy closure along at least 50% of its perimeter. In the Southeast Region, harvest units are arranged to support viable populations of native species of flora and fauna. For hardwood ecosystems, regeneration in previously harvested areas reaches a mean height of at least ten feet or achieves canopy closure before adjacent areas are harvested. For southern pine ecosystems, (e.g. upland pine forests, pine flatwoods forests, sand pine scrub), harvest areas are located, if possible, adjacent to the next youngest stand to enable early successional or groundcover-adapted species to migrate across the early successional continuum.	
10.3 Diversity in the composition of plantations is preferred, so as th enhance economic, ecological, and social stability. Such diversity may include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes, and structures.	
10.3.a. Plantation management alone or in combination with natural forest management contributes to the economic stability of the local community, or helps the owner maintain the property as a working forest.	
10.3.b. On plantations established on soils capable of supporting natural forests, the forest owner or manager maintains, conserves, and/or restores forest health and diversity, including wildlife habitat and soil productivity, by maintaining appropriate diversity of size, structures, age classes, species, and genetics across the plantation FMU.	
10.4 The selection of species for planting shall be based on their overall suitability for the site and their appropriateness to the management objectives. In order to enhance the conservation of biological diversity, native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems. Exotic species, which shall be used only when their performance is greater than that of native species, shall be carefully monitored to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts.	
10.4.a. Species shall be used for planting that are suitable and appropriate to the site and are consistent with maintaining FMU health and productivity. Species native to the region are preferred to other species (not native to the region).	
10.4.b. For Ouachita/Ozark region the uses of exotic species (i.e. species not native to the region) is contingent on credible scientific analysis confirming that the species in question is non-invasive, will not create significant risk to forest health, and performs better than species native to the region. If exotic plants are used, their provenance and the location of their use are documented and their ecological effects are monitored. In the Mississippi Alluvial Valley, Appalachian, and Southeast regions, the planting of exotic species is used only for site remediation. Justification for such plantings is provided. The species in question shall be non-invasive, shall not create significant risk to forest health, and shall perform better than native species. Their provenance and the location of their use are documented and their ecological	

effects are monitored.	
10.5. A proportion of the overall forest management area, appropriate to the scale of the plantation, and to be determined in regional standards, shall be managed so as to restore the site to natural cover.	
10.5.a. Areas of forest and/or plantation to be restored to natural conditions are chosen through a landscape analysis that focuses on enhancing principle characteristics of the native ecosystem or providing important ecological benefits at the stand or landscape level.	
10.5.b. Areas to be restored to natural conditions are prioritized where the analysis indicates the greatest conservation gain and are designed for long-term restoration.	
10.5.c. Management plans should clearly state the extent and location of areas selected for such restoration, as well as the rationale for their selection.	
10.5.d. Areas of forest and/or plantation to be restored or maintained as natural forests are managed to provide a diversity of community types, wildlife habitats, and ecological functions native to the site.	
10.5.e. The ratio and spatial distribution for plantations, with respect to natural and semi-natural forests, maintains and/or restores the landscape diversity of community types, wildlife habitats, and ecological functions similar to a mosaic of natural forests.	
10.5.f. Where natural ecosystems were previously converted to plantations, a percentage of the total area of the FMU must be maintained and/or restored to natural or semi-natural cover. The minimum percentage area that is maintained and/or restored in natural or semi-natural state is: • For 100 acres or less, at least 10 percent • For 101-1,000 acres, at least 15 percent • For 1,001-10,000 acres, at least 20 percent • For >10,000 acres, at least 25 percent In limited situations where restoration on an FMU is not ecologically achievable (e.g. cases of irreversibly altered geophysical conditions such as former flood plains where rivers have been dammed), restoration efforts may be allocated to areas outside the FMU. Forest managers may secure cooperative conservation agreements for those areas, and count them towards the requirements of 10.5.f. To be eligible, the areas outside the FMU must be of equal or higher priority for conservation and/or restoration than are areas within the FMU.	
10.5.g. Only for public lands, all plantations on forest soils on public lands are managed to restore and maintain natural forest vegetation, structure, function, and habitats, and fully meet, at the earliest possible time, all aspects of principles and criteria 1-9 that are relevant to natural forests for the area.	
10.6 Measures shall be taken to maintain or improve soil structure, fertility, and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course drainage patterns.	
10.6.a. Forest operations do not result in long-term adverse impacts to soil productivity, water resources, and hydrology. Soil disturbance is minimized during road/trail work and site preparation, and site preparation is done in accordance with BMPs.	
10.6.b. Tree seedlings are planted in a way that minimizes damage to the soil, while facilitating seedling survival. Tree seedling species are selected appropriate for maintaining long-term productivity.	

10.6.c. Thinning is implemented in a manner that minimizes site disturbance and damage to the residual stand of crop trees and other desired vegetation (see criterion 6.5).	
10.6.d. Fertilizer is applied only when all the following conditions are met: • Soil classification or foliar analysis indicates one or more nutrients are a limiting factor for forest productivity • Data and/or scientific literature suggest that the response to fertilization is economically justified • Where necessary due to topography, soils, or other conditions, measures are taken to prevent damage from fertilizer runoff or leaching. This includes preventing influences on native low-nutrient ecological systems, such as pitcher plant bogs, or on ground and surface water quality • Fertilizer application maintains or enhances soil condition and site productivity	
10.6.e. Sufficient woody debris and other organic matter is retained within plantation stands to ensure adequate soil structure and nutrient recycling.	
10.7 Measures shall be taken to prevent and minimize outbreaks or pests, diseases, fire, and invasive plant introductions. Integrated pest management shall form an essential part of the management plan, with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilizers, including their use in nurseries. The use of chemicals is also covered in criteria 6.6 and 6.7.	
10.7.a. Outbreaks of pests and disease are controlled by maintaining plantation vigor. Management regimes in plantation areas are designed to minimize forest damage from fire, pests, disease, wind, and other factors. Where applicable: • Periodic thinning are scheduled and conducted to reduce competition for light, water, and nutrients • The forest owner or manager is aware of the potential pest problems associated with the tree species in the plantation and region, and has some knowledge of control procedures • Habitat for predators of plantation pests is maintained within or adjacent to the plantation • Diversity of tree species is encouraged in the stand • Management techniques are used that minimize reliance on chemicals	
10.7.b. A strategy is in place to control fire damage. Where applicable, prescribed burns are conducted according to BMPs and with adequate planning, equipment, training, and weather conditions to maintain control of the burn within the burn plan area.	
10.7.c. The forest owner implements a strategy to prevent or control invasive species, as noted in indicator 6.3.h.	
10.8 Appropriate to the scale and diversity of the operation, monitoring of plantations shall include regular assessment of potential on-site ecological and social impacts, (e.g. natural regeneration, effects on water resources and soil fertility, and impacts on local welfare and social well-being), in addition to those elements addressed in principles 8, 6, and 4. No species should be planted on a large scale until local trials and/or experience have shown that are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. Special attention will be paid to social issues of land acquisition for plantations, especially the protection of local rights of ownership, use, or access.	
10.8.a. Monitoring of the impacts of plantations, both on and off-site, is conducted in the same manner as the monitoring of natural forests, in accordance with principles 4, 6, and 8.	

10.9 Plantations established in areas converted from natural forests after November 1994 normally shall not qualify for certification. Certification may be allowed in circumstances where sufficient evidence is submitted to the Center that the manager/owner is not responsible directly or indirectly of such conversion.	
10.9.a. For plantations established in areas converted after 1994, the forest owner or manager demonstrates to the Center that the manager/owner was not directly or indirectly responsible for the conversion of the natural forest to the plantation.	
10.9.b. For plantations established in areas converted after 1994, the forest owner or manager develops and implements a plan to restore the plantation stands to conditions characteristic of natural forests and to manage those stands in compliance with indicators of principles 1-9 as quickly as feasible.	