Opportunities for Improvement; Practices that Exceed Expectations; and Auditor Notes

Abbreviations: 28.XX: Wisconsin Public Forest Statutes Chapter 28, Subsection XX NRAR: Natural Resources Administrative Rule MP: Management Plan
Opportunities for Improvement:
1. There is an opportunity to improve the Implementation and monitoring of Criteria and Indicators for sustainable forestry. 4.1.1.1.1
2. There is an opportunity to improve the timeliness of inventory updates in the recon system. (4.1.1.1.4 CI 4)
3. There is an opportunity to improve chemical training for DNR responsible person, not just for the contracted applicator. (4.1.2.1.3 CI 8 Designated state-trained or certified applicators supervise forest chemical applications.)
4. There is an opportunity to improve BMP implementation and to clarify criteria for "excessive" rutting. (4.1.2.1.4 CI 7 "criteria to protect soil productivity") and (4.1.3.1.2 CI 4 non-forested wetlands).
5. There is a concern about the backlog of untreated stands which could lead to health problems. (4.1.2.1.5 CI 2)
6. There is an opportunity to clarify the policy for use of genetically improved trees (4.1.2.1.6 CI 1)
7. There is an opportunity to improve record-keeping for training sessions to include all forms of training relevant to the SFI. For example, annual forestry meetings include training sessions that do not appear on training records. (4.1.3.1.1 CI 2) There is also a need for SFI-specific training.(4.2.1.1.5 CI 3)
8. There is an opportunity to clarify policy to encourage logger BMP training & document such training, to better document WI DNR training records, and to address frequency of training. (4.1.3.1.4 CI 1 and 2)
9. There is an opportunity to improve quantitative guidelines for stand level retention to ensure more consistent implementation. (4.1.4.1.1 CI 5)
10. There is an opportunity to improve training or education for field personnel in endangered species identification and protection and in identifying and conserving rare and unique biological communities. (4.1.4.1.1 CI 4 and 4.1.4.1.3 CI 2) and in identification of culturally or historically significant sites (4.1.6.1.1 CI 3)
11. There is an opportunity to improve the precision of the process for calculating the average size of clearcuts. (4.1.5.1.2 CI 3) There is an opportunity to clarify the policy of not placing clearcuts adjacent unless already "green" meaning 3 years old or 5 feet high. (4.1.5.1.3 CI 1)
12. There is an opportunity to maintain a list of trained or otherwise qualified loggers and make this list available to landowners. 4.2.1.1.4 CI 2
13. There is an opportunity to improve the use of regeneration targets for all types. (4.1.2.1.1 CI 3)

SFIS Certification Audit Matrix

NSF-ISR auditors shall use this SFIS Certification Audit Matrix to record their findings for each SFIS Performance Measures and Core Indicator. Where a major or minor non-conformance is found, the auditor shall fully document the reasons for the nonconformity on the Corrective Action Request (CAR) form. If the Performance Measure does not apply, place (N/A) in the appropriate Auditor Note section.

Objective 1: Broaden the implementation of sustainable forestry by employing an array of economically, environmentally and socially sound practices in the conservation of forests including appropriate protection, growth, harvest and use of those forests using the best scientific information available.

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.1.1.1	Program Participants shall have policies to implement and achieve the Sustainable Forestry Standard Principles and Objectives.					X	
CI 1	A written <i>policy</i> for implementing and achieving SFIS <i>Objectives</i> and <i>Performance Measures</i> .	Reviewed Wisconsin 2003 Assembly Joint Resolution of support for sustainable forestry, SFI & FSC. Reviewed Wisconsin Statute 28.04 a legal mandate for sustainable forestry. Neither provides the needed SFI-specific policy.				X	
CI 2	A long-term resource analysis to guide forest management planning at a level appropriate to the size and scale of the operation, including: a. a periodic or ongoing forest inventory; b. a land classification system; c. soils inventory and maps, where available; d. access to growth and yield modeling capabilities; e. up-to-date maps or a Geographic Information System (GIS); f. recommended sustainable harvest levels; and g. a review of non-timber issues (e.g., including pilot projects and economic incentive programs to promote water protection, carbon storage, or biological diversity conservation).	Confirmed the existence of the required analysis by reviewing management plans & Forest Inventory Recon system. System tracks stand data on forest products, types, soils, habitat, management objective, & prescriptions. This method of determining allowable harvest levels uses area control based on recommended rotation length in the silviculture manual. Age and Basal Area are used to grow stands forward. Thinning and harvest defaults can be adjusted by each forest. Other Documents Reviewed: Silvicultural & Aesthetics Handbook; Natural community classification system; Regional Ecological Assessments	X				
CI 3	Staff roles and responsibilities for achieving SFIS <i>Objectives</i> are assigned and fully understood.	There are no SFI-specific assignments.				X	

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
CI 4	Access to relevant laws and regulations in appropriate locations.	Confirmed that printed copies of regulations are maintained at BRSF office, and Intranet available. Confirmed intranet access at Madison office.	X				
	Other Indicators	June 1999 WI Northern Forest State Assessments: Sustainable Forestry provides Criteria and Indicators for sustainable forestry. OFI: Implement and monitor these C&I.	X				X
4.1.1.1.2	Program Participants shall (individually, through cooperative efforts or through associations) provide funding for forest research to improve the health, productivity and management of all forests.		X				
CI 1	Current financial or in-kind support of research to address forest health and productivity.	Reviewed "Final 2003-2005 Biennial Budget Summary" which shows substantial support for science, management, and research, although declining slightly from 2002 base. Reviewed documentation of old-growth research at FRSF.	X				
	Other Indicators	j					
4.1.1.1.3	Program Participants shall provide recreation and education opportunities for the public where they are consistent with their forest management objectives.		X	X			
CI 1	Written <i>policy</i> describing public recreation and education efforts, consistent with forest management objectives.	Confirmed that WI Statutes 28.04 include this policy and confirmed NR45 (administrative rules) Reviewed recreation maps and recreation portions of plans, confirming that all plans include rec.	X	X			
	Other Indicators	WI DNR Forestry Publications distribution statistics (CD) reviewed - 152 different pubs WI Northern Forest State Assessments: Recreation Supply & Demand; Env. Ed & Awareness reviewed programs on SFs & as part of Master Planning process. Improvements recommend. Field Observations of Recreation Programs and various maps/brochures verified, such as "Black River State Forest Campground Maps and Information. Examples of Public Outreach & Involvement for all four forests.	X	X			
4.1.1.1.4	Program Participants shall ensure that long-term harvest levels are sustainable and consistent with appropriate growth and yield models and written plans.		X				

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
CI 1	Recommended sustainable harvest levels.	Reviewed summary tables & Master Plans. Use allowable harvest based on area control – acres of each type to be cut each year. Mgmt Plans provide calculated maximum (also see notes for 41111).	X				
CI 2	Documentation of annual harvest trends in relation to sustainable forest management plan.	Reviewed summary tables provided Annual harvest trend information is based on the recon computer system and associated data from Form 2460. Confirmed accuracy of 2460 forms through observations on inspected timber sales.	X				
CI 3	A forest <i>inventory</i> system and a method to calculate growth.	State-wide Forest Inventory &Analysis is used to calculate growth and yield by cover type. This rolling forest inventory system does not easily provide current aggregated volume information (by forest). Forest inventory system and stand projections oriented towards silvicultural conditions, not products. WI-DNR has requested several times increased funding for CFI, but legislature has not funded.	X				
CI 4	Periodic updates of <i>inventory</i> and recalculation of planned harvests.	Recon surveys are updated prior to and following harvest, with some work done on stands not being treated. Thus some information can be over 10 years old. Linked to site classification systemgrowth and yield information. Recon system is updated regularly and allowable harvest recalculated annually. BRSF documents a case of changing harvest levels in response to damage, salvage, and then re-adjustment period. OFI: Improve the timeliness of inventory updates.	X				X
CI 5	Documentation of forest practices (e.g., planting, fertilization, thinning, etc.), consistent with assumptions in harvest plans.	Reviewed chart providing area of thinnings. Confirmed records of planting and chemical release and observed results. Confirmed thinning/ partial harvests. No other intensive practices are applied.	X				

Objective 2: Ensure long-term forest *productivity* and *conservation* of forest resources through prompt *reforestation*, soil *conservation*, afforestation and other measures.

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.2.1.1	Program Participants shall reforest after final harvest by planting or direct seeding within two years or two planting seasons, or by planned natural regeneration methods within five years.	Exceptional attention paid to ensuring timely and appropriate regeneration following all final harvests.	X	X			
CI 1	Written <i>policy</i> specifying the time frame for <i>reforestation</i> .	"NR Adm Code 1.24" does NOT specify this policy 2210 Silviculture & Forest Aesthetics Handbook has procedures for regeneration harvests and for surveying regeneration, but not for time frame.				X	
CI 2	Designation of all management units for either natural or artificial regeneration.	Confirmed on narrative portion of 2460 Form "Harvest Plan Timbersale Notice" for all sites visited.	X				
CI 3	Clear criteria to judge adequate regeneration and appropriate actions to correct under-stocked areas.	Reviewed 2210 Silviculture & Forest Aesthetics Handbook and confirmed that such criteria exist for all major (Oak, Pine, Aspen) but not all (Hemlock-Hardwood) types. Confirmed that system (Forest recon system, prescription, and habitat type) is quite robust. OFI: Include regeneration targets for all types	X				X
CI 4	Compliance with applicable state laws and regulations mandating successful <i>reforestation</i> .	Confirmed by field observations at all regeneration sites visited. Also verified system of regeneration monitoring and documentation of site preparation and planting practices.	X	X			
CI 5	Plantings of exotic tree species are minimized.	No exotics are planted. Confirmed by field observations at all sites visited, by review of seedling order forms, and by review of "Nursery Tree Distribution / Tree Planting Report 2002".	X	X			
CI 6	Research documentation is available that <i>exotic tree species</i> , planted operationally, pose minimal risk.	No exotics are planted.	NA				
CI 7	Protection of desirable or planned advanced natural regeneration during harvest.	Confirmed by field observations at all sites visited where natural regeneration existed. Reviewed forms for each timber sale for residual stem damage. Few instances of damage recorded.	X				

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
	Other Indicators						
4.1.2.1.2	Program Participants shall promote state-level reporting of overall rates of reforestation success & afforestation.		X				
CI 1	A system to accurately report <i>reforestation</i> information for the SFI annual report and, where applicable, State Implementation Committee (SCI) reports.	2460 Form "Harvest Plan Timbersale Notice", Plantation reports, and recon system provide such a system. Accomplishment reporting system reviewed in Jeff Barkley's office 10-17-03 (excel). Last 5 years activity report obtained and reviewed.	X				
	Other Indicators						
4.1.2.1.3	Program Participants shall minimize chemical use required to achieve management objectives while protecting employees, neighbors, the public and the forest environment.		X				
CI 1	Written <i>policy</i> for the appropriate application and handling of forest chemicals, including legal compliance, storage, transport, spills, drift, signage, public notification and information, restriction of access and retention of records.	Reviewed manual codes: 4221.1 Use and Storage of Hazardous Materials; 4230.1 Pesticide Use and Storage; 4831.1 Hazardous Waste Disposal and confirmed that policies are in place. Reviewed WI Environmental Protection Act and AR NR50. Reviewed records.	X				
CI 2	Minimize chemical use required to achieve management objectives.	Interviewed Jane Cummings Carlson, Forest Health Specialist: confirmed consultations for pest management prescriptions. Reviewed Actual volumes of chemical use shown on "Plantation and Cultural Report" and at NHAL. Over the last three years, the Southern Kettle Moraine State Forest has used Glyphomax Plus exclusively in it's use areas and extensive areas for the control of unwanted vegetation. Small quantities were used at KMSF: "We used 15 gallons in 2001; 7.5 gallons in 2002 and 15 gallons in 2003."	X				
CI 3	Use of narrowest spectrum and <i>least toxic pesticides</i> necessary to achieve management objective.	Interviewed Jane Cummings Carlson, Forest Health Specialist: Other than herbicides, forests chemicals rarely used: for gypsy moth use: BTK, Gypcheck (viral) which are low toxicity and generally narrow	X				
CI 4	Use of Integrated Pest Management where feasible.	Interviewed Jane Cummings Carlson, Forest Health Specialist. Confirmed extensive forest health program 8.5 FTEs. Reviewed Silviculture Handbook "Pest Management Guidelines for White Pine" confirming IPM approach	X				
CI 5	System to achieve continuing compliance with applicable regulatory requirements.	Reviewed herbicide contract and documentation for all aspects of chemical program. Foresters training, chain-of-command, and all indicators collectively comprise a compliance system.	X				

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
CI 6	Available regulatory action information demonstrates a commitment to legal compliance.	Confirmed by telephone interview with David Fredrickson, Director of Investigation and Compliance Department of Agriculture Trade and Consumer Protection that there are no violations or complaints against WI DNR on the state forest system.	X				
CI 7	All persons involved in forest chemical application are required to have appropriate training.	Reviewed training records (see below), and cross-checked training record database against individual records. Some training is not tracked. Some foresters who only use general use pesticides are not maintaining certificates. Contractors trained.	X				
CI 8	Designated state-trained or certified applicators supervise forest chemical applications.	Reviewed training records (all must be state certified) CD:\Training\Pesticide_training_Q201SCR2.pdf applicators for general use not maintaining certificates. OFI: Up-to-date Chemical Training for DNR responsible person, not just for the contracted applicator.	X				X
CI 9	Relevant copies of state and federal laws for forest chemical use are accessible at appropriate locations.	Confirmed information binders and intranet availability at KMSF, BRSF, and NHAL.	X				
CI 10	Participation in research projects to: a. increase efficiency; b. reduce chemical use rates; and c. apply Integrated Pest Management where feasible.	NHAL trial to reduce use of chemicals for Saratoga spittlebug. CD:\intranet\Loosestrife.htm -Purple Loosestrife Biological Control Program rearing Gallerucella beetles	X				
CI 11	Chemicals applied using Best Management Practices appropriate to the situation; for example: a. compliance with label instructions and requirements; b. adjoining landowners or nearby residents notified of applications and chemicals used; c. appropriate multi-lingual signs or oral warnings used; d. public road access controlled during and after applications; e. streamside & other needed buffer strips appropriately des.; f. positive shut-off and minimal drift spray valves used; g. drift minimized by aerially applying forest chemicals parallel to buffer zones; h. water quality monitored or other methods used to assure proper equipment use and stream protection; i. granular formulations & spot/strip applications used appropriately; j. chemicals stored at appropriate locations, or; k. state reports filed as required.	Attempted Phone interview with contractors Reviewed chemical application contracts	X				
	Other Indicators						

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.2.1.4	Program Participants shall implement management practices to protect and maintain forest and soil productivity.					X	
CI 1	Written <i>policy</i> to protect and maintain forest and soil productivity.	Confirmed that WI Statutes 28.04 include this policy. State developed comprehensive BMPs. Policies exist for training and monitoring.	X				
CI 2	Soils maps used where available.	Confirmed by reviewing state forests master plans and habitat type maps and by interviewing field foresters, who were knowledgeable about soils, habitat types, and their use in soil protection. Also interviews with local foresters.	X				
CI 3	A process to identify soils vulnerable to compaction and use appropriate methods to avoid excessive soil disturbance.	Habitat type maps are available. Form 2460 often includes dry season or winter logging designation Interviewed field foresters about use of soils information to avoid excessive soil disturbance.	X				
CI 4	Use of erosion control measures to <i>minimize</i> the loss of soil and site <i>productivity</i> .	Field Observations indicated that a range of measures were used, including timing, design, slash mats, and BMPs. BMP's not applied in all cases. Road maintenance and drainage BMPs are not consistently applied.				X	
CI 5	Field observations indicate that post harvest conditions are conducive to maintaining site <i>productivity</i> (e.g., limited rutting, retained down woody debris, <i>minimized skid trails</i>).	Field Observations at most sites visited generally retained well distributed down woody debris, and very limited rutting (two sites). Whole-tree harvest sites little down woody debris.	X				
CI 6	Field observations indicate that, where practicing partial harvesting, vigorous trees are retained consistent with silvicultural norms for the area.	Field Observations at all sites visited showed that vigorous trees retained consistent with recommended silvicultural practices guidelines. Marked sales visited further confirmed that the best quality and most vigorous trees are retained and the least healthy trees removed.	X	X			
CI 7	Criteria to address harvesting and site preparation to protect soil <i>productivity</i> in place.	BMPs used as guide, but very general. Clear criteria needed. All timber sale contracts reviewed allow foresters to stop jobs, and documentation confirmed that this does occur. OFI: Criteria lacking to define "excessive" rutting.	X				X
CI 8	Road construction is kept to the <i>minimum</i> necessary to meet management <i>objectives</i> efficiently.	Temporary forest logging roads not systematically mapped. State road maintenance contracted with local highway dept. already well roaded, they do reopen old roads, rough balance of new building and road abandonment.	X				
	Other Indicators	CD:\Research\Status of State Nursery Program.htm	X				

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.2.1.5	Program Participants shall manage so as to protect forests from damaging agents such as wildfire, pests and diseases to maintain and improve long-term forest health, productivity and economic viability.		X				
CI 1	Written <i>policy</i> to protect forests from damaging agents.	Confirmed that Chapter 26.30 of Wisconsin state statutes provide such a policy.	X				
CI 2	Forests managed in a healthy and productive condition to <i>minimize</i> susceptibility to damaging agents.	Field Observations at all sites visited showed that vigorous trees retained consistent with recommended silvicultural practices guidelines. Reviewed "2002 forest health condition" annual report and Silviculture Handbook. OFI: Backlog of untreated stands is increasing, and could lead to health problems.	X				X
CI 3	Participation in, and support of, fire and pest prevention and control programs.	Interviewed Jane Cummings Carlson, Forest Health Supervisor. Reviewed "Insects And Pathogens Affecting Forests On The NHAL State Forests-A Summary Of Historical Data And A Look To The Future". 2002 Budget for Fire Control & Prevention \$7,087,000. WI DNR is the lead agency for fire in Wisconsin.	X				
	Other Indicators						
4.1.2.1.6	Program Participants that utilize genetically improved seedlings, including those derived through biotechnology, shall use sound scientific methods and follow all appropriate federal and state regulations and other internationally applicable protocols.		X				
CI 1	Written <i>policy</i> for appropriate research, testing, evaluation and deployment of <i>genetically improved seedlings</i> .	Reviewed WI forest and tree improvement plan and 2002 Annual Report, which describes seed zone approach and general tree improvement approaches. OFI: clarify policy to reflect SFI requirements	X				X
CI 2	All applicable federal and state regulations and international protocols followed for research and deployment of trees derived from <i>genetic tree improvement</i> and <i>biotechnology</i> .	None currently exist.	X				
	Other Indicators	Seed zones used.	X				

Objective 3: Protect the water quality in streams, lakes and other waterbodies.

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.3.1.1	Program Participants shall meet or exceed Best Management Practices developed under Environmental Protection Agency (EPA)-approved state water quality programs and meet or exceed all applicable state water quality laws and regulations and the requirements of the federal Clean Water Act.	At one site lack of road surface or drainage, and lack of road maintenance (BMP's) led to erosion from road and sedimentation into a wetland.				X	
C1 1	Written <i>policy</i> to implement state BMPs during all phases of management activities.	No specific policy mentioning BMP implementation for all phases (WI Statutes 28.04 does NOT include this policy). Chapter 20 of Timber Sale Handbook refers to timber sales.				X	
CI 2	Field staff and contractors trained in water quality laws and state <i>BMPs</i> .	Reviewed training records (see below), and cross-checked training record database against individual records. Some training is not tracked., for example 1994 BMP training done within the department. Most contractors are trained, but field loggers had mixed degree of knowledge of BMPs. OFI: Improve the completeness & retention of training records.	X				X
CI 3	A system to achieve continuing compliance with applicable regulatory requirements.	System: training-timbersale prescriptions-contracts- inspections-closeout. First-line supervisors approve of all key phases. Interdisciplinary review includes fisheries, wildlife specialists. If warranted then they go to the Water Resources Regulation & Zoning for review.	X				
CI 4	Available regulatory action information demonstrates a commitment to legal compliance.	Interviewed wetlands regulators: Cathy Kramesz, DNR Wetlands confirmed compliance (KMNU is in her area). Jane Wade confirmed at NHAL.	X				
CI 5	Contract provisions specify <i>BMP</i> compliance.	Reviewed contract at each site, and BMP provisions are included in all recent contracts under Item 17f.	X				
CI 6	Plans are in place to address wet weather <i>events</i> (<i>e.g.</i> , <i>inventory</i> systems, wet weather tracts, defining acceptable operational conditions, etc.).	Field Observations confirmed that wet weather events are managed. Reviewed individual 2460 forms and contracts and confirmed provisions for operating when ground is frozen or dry. TS inspection reports often included instructions to move to drier places or put down tops.	X				
CI 7	Monitoring of overall <i>BMP</i> implementation.	Reviewed two documents that report on BMP monitoring: "The 2002 State-wide BMP Monitoring Report, Wisconsin's Forestry BMPs for Water Quality"; "The 1995-1997 BMP Monitoring Report". Both reports indicate good to excellent BMP conformance and effectiveness. Discussed with WIDNR that they are currently contracting for review of 28 state timbersales.	X				

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
	Other Indicators						
4.1.3.1.2	Program Participant shall develop (where they do not currently exist), implement and document riparian protection measures based on soil type, terrain, vegetation and other applicable factors.	WI State Forests exceed BMPs for riparian zones.	X	X			
CI 1	Written <i>policy</i> addressing management and <i>protection</i> of waterbody and <i>riparian</i> zones.	Confirmed that WI Statutes 28.04 include this policy. Reviewed individual SF master plans and confirmed management & protection policies. Strong BMPs and shoreland zoning policy (NR 115) confirmed.	X				
CI 2	Perennial streams, lakes and other <i>riparian</i> zones mapped as specified in state <i>BMPs</i> and, where appropriate, identified on the ground.	Confirmed GIS layer for these features in Madison. Confirmed in Field at TS sites RMZ paint or flagging, except where not needed because all trees to be cut were marked and the wetlands boundary clear (large, treeless areas).	X				
CI 3	Field observations indicate that waterbody and <i>riparian</i> zone management and <i>protection</i> plans are implemented.	Field Observations at all sites visited indicated that BMPs and other protections normally implemented.	X				
CI 4	Non-forested wetlands, including bogs, fens, vernal pools and marshes of significant size, are identified and protected.	Non-forested wetlands identified in Master Plans, and BMPs require protection. Most, but not all, are marked on maps or ground. At one site visited there was logging slash and minor rutting within a small (0.1 acre) non-forested wetland. winter road crossings are allowed. OFI: There is an opportunity to improve implementation in this area.	X				X
CI 5	A system in place to achieve continuing compliance with applicable regulatory requirements.	System: training-timbersale prescriptions-contracts-inspections-closeout. First-line supervisors approve of all key phases.	X				
CI 6	Available regulatory action information demonstrates a commitment to legal compliance.	Interviewed wetlands regulators: Cathy Kramesz, DNR Wetlands confirmed compliance (KMNU is in her area). Wetlands regulators at BRSF also confirmed.	X				
CI 7	Where regulations or <i>BMPs</i> do not currently exist to protect <i>riparian</i> areas, experts are involved in identifying appropriate <i>protection</i> measures.	These do exist.	NA				
	Other Indicators						

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.3.1.3	Program Participants shall, individually, through cooperative efforts, or through AF&PA, provide funding for water quality research.		X				
CI 1	Current financial or in-kind support for research.	Confirmed extensive support for research by State of Wisconsin university system, with some direct funding by WI "The 2002 State-wide BMP Monitoring Report, Wisconsin's Forestry BMPs for Water Quality" and confirmed participation by WI DNR in cooperative research and pilot project of USFS by observing work in field and interviewing a monitoring team on the FRSF.	X				
	Other Indicators	BMP Implementation and Effectiveness Research.	X				
4.1.3.1.4	Program Participants shall require BMP training for employees in forest management and wood procurement operations and shall encourage training for forest management and harvesting contractors.		X				
CI 1	Written <i>policy</i> to train those employees and operators responsible for implementing <i>BMPs</i> to protect water quality.	OFI: Clarify policy to encourage training for harvesting contractors.	X				X
CI 2	<i>BMP</i> training sessions for employees are required and documented and similar sessions are encouraged and documented for contractors.	Reviewed Training records to confirm BMP training. Documented training for contractors Confirmed Waupaca BMP Training 3-33-02Curriculum, which includes BMPs and State/Federal Regulations – DNR Water Management Specialist Scott Koehnke OFI: Document contractor training (some occurred in BRSF), WI DNR training records and frequency.	X				X
	Other Indicators						

Objective 4: Manage the quality and distribution of wildlife *habitats* and contribute to the *conservation* of *biological diversity* by developing and implementing *stand-* and *landscape-* level measures that promote *habitat* diversity and the *conservation* of forest plants and animals including *aquatic fauna*.

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.4.1.1	Program participants shall have policies to promote habitat diversity at stand- and landscape- levels.		X				
CI 1	Written <i>policy</i> to promote wildlife <i>habitat</i> diversity, forest types, ecological or natural community types and the <i>conservation</i> of <i>biological diversity</i> .	Confirmed that Wisconsin 28.04 provides a policy on biological diversity and wildlife.	X				
CI 2	Programs to protect federally listed threatened and endangered species.	State endangered species law listing process Interviewed Rebecca Schroeder, Bureau of Endangered Resources. NHI Process (described below). Reviewed new "Endangered Resources Screening Document"	X				
CI 3	Plans to locate and protect known sites associated with viable occurrences of <i>critically imperilled and imperilled species</i> and communities. Plans for <i>protection</i> may be developed independently or collaboratively, and may include <i>Program Participant</i> management, cooperation with other stakeholders, or use of easements, conservation land sales, exchanges or other conservation strategies.	NHI Process: Bureau of Endangered Resources can query the Heritage Database for G1 and G2 species and communities. These sites are listed in the Management Plans, and protection plans included. Most hits aquatic, and thus well protected by riparian practices. DNR Biologists in the regions (counties) are consulted for location, management, & protection advice. Participate in Karner Blue Butterfly Recovery Plan	X				
CI 4	Training or education for appropriate personnel in endangered species identification and <i>protection</i> , and <i>critically imperilled</i> and <i>imperilled</i> species and communities.	Confirmed existence of identification manuals for rare plants and animals. Example: Wisconsin Raptors – Field Identification Cards. Biologist have for most part been the leaders on field work and are often leading specialists, and informal training of other field people occurs. OFI: training.	X				X
CI 5	Policy or plan that sets criteria for stand-level wildlife habitat elements to be retained (e.g., snags, mast trees, down woody debris, den trees, nest trees, etc.).	Review of prescriptions on field visits confirmed stand level elements. Site specific prescriptions do exist, and protection occurring, but little detailed guidance across system. OFI: provide quantitative guidelines for stand level retention to ensure consistent implementation.	X				X
CI 6	System to achieve continual compliance with applicable regulatory requirements.	Core indicators, taken collectively, comprise such a system. Endangered Resources Screening Document is part of the system.	X				
CI 7	Available regulatory action information demonstrates a commitment to legal compliance.	Regulators for R.T.E. species contacted. "Endangered Resources Screening Document" leads WI DNR personnel through a process.	X				
	Other Indicators						

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.4.1.2	Program participants shall, individually, through cooperative efforts or through AF&PA, provide funding for research to improve the science and understanding of wildlife management at stand- or landscape- levels, ecosystem functions and the conservation of biological diversity.		X				
CI 1	Current financial or in-kind support for direct or cooperative research.	WI DNR provides \$80,000 per year as a portion of the base salary of Dr. David Mladenoff, UW Madison Landscape Ecologist. In house research by Forest Wildlife Research group and research on old growth. Reviewed documentation of old-growth research at FRSF (Assessing the Use of Silvicultural Techniques to Create Old-Growth Habitat in Even-aged Northern hardwood Stands, PI Karl Martin WI DNR Bureau of Integrated Services, Rhinelander, WI)	X				
4.1.4.1.3	Program participants shall apply knowledge gained through research, science, technology and field experience to manage wildlife habitat and contribute to the conservation of biological diversity.	Assessments are applied in planning process, especially those dealing with wildlife and biodiversity included CROG, Biological Diversity, Regional Ecology, and Grassland Management examples.	X	X			
CI 1	Collection of information on <i>critically Imperilled</i> and <i>imperilled species</i> and communities and other biodiversity-related data through forest <i>inventory</i> processes, mapping or participation in external programs such as NatureServe, state or provincial heritage programs or other credible systems. Such participation may include providing non-proprietary scientific information, time and assistance by staff, or in-kind or direct financial support.	Interviewed Rebecca Schroeder, Bureau of Endangered Resources to confirm that programs and personnel exist to accomplish required tasks. Confirmed collection of such information by querying database through Jamelle Schlangen. NHI database used extensively. Biotic inventory and other assessments (see above).	X	X			
CI 2	Training or education for appropriate personnel in identifying and conserving rare and unique biological communities.	Review training agendas and list of participants. Foresters work closely with BER and wildlife personnel. OFI: Regular training updates for field personnel, and better record-keeping of training.	X				X
CI 3	A methodology to incorporate research results and field applications of biodiversity and ecosystem research into forest management decisions.	The Office of Forest Sciences provides this service. Reviewed extraordinary number of handbooks and guidelines: Old growth guidelines "Community Restoration & Old Growth on the NHAL State Forest". Confirmed assessments and land legacy report.	X	X			
	Other Indicators						

Objective 5: Manage the visual impact of harvesting and other forest operations.

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.5.1.1	Program Participants shall have policies to manage the impact of harvesting on visual quality.		X	X			
CI 1	Written <i>policy</i> to address <i>visual quality</i> management.	Confirmed that Wisconsin 28.04 provides a policy on aesthetics and by reviewing: NR44 Master plan rule. Confirmed that Silviculture Handbook-2 nd half is aesthetics. Also individual Master plans(old) and land classification system (new Plans). Big Tree Silviculture policy confirmed through field observations of management for large trees.	X	X			
CI 2	Incorporation of aesthetic considerations in harvesting, road, landing design and management and other management activities where visual impacts are a concern.	Field Observations in all four state forests revealed good visual quality practices including management of opening sizes and configurations, buffers, landing cleanup, and variation in techniques.	X	X			
CI 3	Foresters trained in principles of landscape architecture or visual quality management.	Confirmed training in silviculture and aesthetics by reviewing training records of individual foresters. Interviews of several foresters confirmed training received during professional education, which is standard at SAF-accredited forestry schools (UW Stevens Point, MSU, UMinn)	X				
	Other Indicators						
4.1.5.1.2	Program Participants shall develop and adopt appropriate policies for managing the size, shape and placement of clearcut harvests.	Most stand types are not managed using clearcut harvests. Aspen and jack pine regenerated through clearcuts.				X	
CI 1	Written <i>policy</i> to monitor and report on clearcut size and number.	Harvest unit sizes are monitored and recorded. Several clearcuts often included in single unit if they are located within the same forest type (stand).				X	
CI 2	Average size of clearcut harvest areas does not exceed 120 acres, except when necessary to respond to <i>forest health</i> emergencies or other natural catastrophes.	Confirm by field observations at all sites visited in Kettle Moraine Southern Unit, Black River, Flambeau River and Northern Highland-American Legion State Forests. For example, at NHAL average sale size is far smaller than 100 acres, and many of the larger cc are Jack Pine salvage/regeneration cuts due to budworm.	X				

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
CI 3	Documentation through internal records of clearcut size and the process for calculating the average size.	Can not readily summarize clearcut size thru timber sale notice and approval process. Recon system is not able to discriminate patches within silvicultural treatment blocks. Thus current system will overestimate cc size. OFI: Method for calculating cc size.	X				X
CI 4	Access to state laws regulating clearcut size and arrangement at appropriate locations.	No such laws exist	NA				
CI 5	System to achieve continual compliance with applicable regulatory requirements.	No such requirements exist	NA				
CI 6	Available regulatory action information demonstrates a commitment to legal compliance.		NA				
	Other Indicators	GIS systems, compartment examination and prescription review process provide a comprehensive system that manages clearcut size and placement and ensures that visual diversity is exemplary.	X	X			
4.1.5.1.3	Program Participants shall adopt a green-up requirement or other, more comprehensive methods that provide age, habitat, and aesthetic diversity.		X	X			
CI 1	Written <i>policy</i> implementing the <i>green-up</i> requirement.	SFI Specific policy not in place. Current policies and practices for diversity are quite strong, and lead to excellent visual performance. OFI related to policy of not placing clearcuts adjacent unless already "green" meaning 3 years old or 5 feet high.	X				X
CI 2	Harvest area tracking system to demonstrate compliance with the <i>green-up</i> requirement.	GIS or paper maps combined with Recon system (preharvest or compartment exams) provide tracking system.	X				
CI 3	Trees in clearcut harvest areas are at least 3 years old or 5 feet high at the desired level of stocking before adjacent areas are clearcut, or a more comprehensive method to reach the <i>performance measure</i> exists.	Confirmed by field observations at all sites visited. Average sale size is low, under 100 acres, and most clearcuts are substantially smaller. Regeneration on most clearcuts (aspen sprouts) is 5 feet tall in two growing season.	X				
CI 4	Copies of state laws requiring <i>green-up</i> are on file at appropriate locations, where applicable.	No such laws exist	NA				

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
CI 5	A system to achieve continual compliance with applicable regulatory requirements.		NA				
CI 6	Available regulatory action information demonstrates a commitment to legal compliance.		NA				
	Other Indicators	GIS systems, compartment examination and prescription review process provide a comprehensive system that manages clearcut size and placement and ensures that visual diversity is exemplary. At NHAL the compartment system ensures that most of compartment is analyzed and treated at one time, and generally do not re-enter compartments sooner than ten years. Map of current sales is a planning tool used to prevent adjacent clearcuts unless by design.	X				
4.1.5.1.4	Program Participants shall use harvest methods, age classes and judicious placement of harvest units to promote diversity across the forest landscape.	GIS systems, compartment examination and prescription review process provide a comprehensive system that manages clearcut size and placement and ensures that visual diversity is exemplary.	X	X			
CI 1	Written policy to promote diversity of forest cover across the landscape.	Confirmed that Wisconsin 28.04 includes Biodiversity and Aesthetics. A variety of policies are in place which promote and provide for diversity of forest cover including: Forest Management Plan Sections for Visual Management Zones and for Wildlife Habitat Diversity; Guidelines in DNR Manual Codes including Guidelines for Defining Forest-Wildlife Habitat Management (2112) Forest Opening Maintenance and Construction (2112.1) Deeryard Improvement Program (2112.2) and Public Lands Handbook.	X				
	Other Indicators	Observations of actual results showed exceptional visual diversity in most portions of the state forests. At NHAL the compartment system ensures that most of compartment is analyzed and treated at one time, and generally do not re-enter compartments sooner than ten years. Map of current sales is a planning tool used to prevent adjacent clearcuts unless by design.	X				

Objective 6: Manage Program Participant lands of ecologic, geologic, cultural or historic significance in a manner that recognizes their special qualities.

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.6.1.1	Program Participants shall identify special sites and manage them in a manner appropriate for their unique features.		X	X			
CI 1	Written <i>policy</i> to identify, map and manage special sites.	There is a MOU with State Historical Society 1810 in manual code reviewed Chapter 44: Wisconsin's Major Historic Preservation Statutes CD:\Policy_Statements\wi_historical_pres_statutes.pdf	X				
CI 2	Obtain existing natural heritage data and cooperate with those with expertise in identifying or selecting sites for <i>protection</i> of significant ecologic, geologic, <i>cultural</i> or historic qualities.	Consultation: a) NHI Process: Bureau of Endangered Resources b) State Historic Preservation Officer for each land disturbance activity, not for skid trails or timber sales Confirmed inclusion by review of master plans. Two forests with adjacent active tribes do an excellent job of consulting with neighboring tribes. Foresters review archeological database.	X				
CI 3	Map and catalogue existing sites.	Management Plans, GIS system layer and/or maps include: Archeological Sites, and Natural Heritage Inventory (NHI) NHI hits confirmed in Master Plan. Few field foresters know what to look for. OFI: Provide field foresters training on what to look for.	X				X
	Other Indicators						

Objective 7: Promote the efficient use of forest resources.

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.1.7.1.1	Program Participants shall employ appropriate forest harvesting technology, in-woods manufacturing processes and practices to minimize waste and ensure efficient utilization of trees harvested, where consistent with other SFIS objectives.	There is widespread use of CTL harvesting systems for state forest harvests, although there are still some chainsaw felling and yarding with small (JD 440) skidders. Excellent markets exist for all grades and species of trees commonly found within Wisconsin State Forest System.	X				
CI 1	Written <i>policy</i> to address efficient utilization of trees.	Confirmed that contracts include utilization specifications. System for selling wood includes some product differentiated bidding.	X				
CI 2	Auditing or monitoring system to ensure efficient utilization.	Field forms for each timber sale inspection.	X				
	Other Indicators	Confirmed excellent utilization on all sites visited.	X				

Objective 8: Broaden the practice of *sustainable forestry* by cooperating with forest landowners, wood producers, consulting foresters and *Program Participants* employees who have responsibility in wood *procurement* and landowner assistance programs.

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.2.1.1.1	Program Participants shall encourage landowners to reforest following harvest and to use Best Management Practices.	Three state nurseries are maintained, and an extensive private forestry program is provided by WI DNR.	X				
CI 1	Written <i>policy</i> to supply information or services to forest landowners.	Reviewed "Forest Management Guidelines"	X				
CI 2	Support for the development of educational materials, including information packets for use with forest landowners.	Forest Management Guidelines have been developed by WI DNR.	X				
CI 3	<i>BMP</i> or regeneration training courses, as appropriate, provided for <i>procurement</i> staff.		NA				
CI 4	A verifiable auditing or monitoring system in place to evaluate the results of promoting <i>reforestation</i> and use of <i>Best Management Practices</i> within wood supply systems, and the use of that information to set goals for continual improvement.		NA				
CI 5	Cooperation with federal, state or regional government resource assessments.	Reviewed two documents that report on BMP monitoring: "The 2002 State-wide BMP Monitoring Report, Wisconsin's Forestry BMPs for Water Quality"; "The 1995-1997 BMP Monitoring Report" Both reports indicate good to excellent BMP conformance and effectiveness. Forest Health Monitoring and Wildlife Population Monitoring led by WI DNR	X				
	Other Indicators	Cooperative Forestry Mgmt/Landowner Assistance a.) State programs \$5,424,000	X				

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.2.1.1.2	Program Participants shall work closely with state logging or forestry associations, or appropriate agencies and others in the forestry community, to foster improvement in the professionalism of wood producers.					X	
CI 1	Written <i>policy</i> promoting professional training of wood producers.	Although WI DNR is very involved in promoting training, no specific policy exists. Tim Mulhern serves on Bd. of Directors for Wisconsin Professional Loggers Association (WPLA)				X	
CI 2	Participation in or support of SFI Implementation Committees in the development and administration of wood producer training courses that include: a. awareness of sustainable forestry principles; b. Best Management Practices, including road construction and retirement, site preparation, streamside management, etc.; c. regeneration, forest resource conservation and aesthetics; d. awareness of responsibilities under the Endangered Species Act and other measures to protect wildlife habitat; e. logging safety; f. Occupational Safety and Health Administration (OSHA) and wage and hour rules; g. transportation issues; h. business management; and i. public policy and outreach.	Certified loggers program agenda's reviewed, confirming participation by WI DNR personnel. Darrell Zastrow is a member of the Wisconsin SFI S.I.C. minutes FISTA provides comprehensive training, and WI DNR supports FISTA training with speakers and technical content. This was confirmed by interview with Barb Henderson, Executive Director FISTA-Forest Industry Safety and Training Alliance: 1-800-551-2656 * Phone: (715) 282-4979 E-mail: fista@newnorth.net Manny Oradei serves on Bd. of Directors for FISTA	X				
	Other Indicators						

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.2.1.1.3	Program Participants shall annually report relevant information.		X				
CI 1	Maintenance of a system to report information annually including: a. the number of landowners who receive information about the SFI program, forest regeneration, <i>BMPs</i> , and wildlife <i>habitat</i> management from contractors, company employees and others; and b. the percentage of wood delivered by qualified logging professionals.	a. Cooperative Forestry Mgmt/Landowner Assistance National Association of State Foresters, State Forestry Statistics Questionnaire 2002Number of landowner contacts per year -13,355 b. Not applicable	X				
CI 2	Support of SFI Implementation Committee efforts to collect and report appropriate information.	Darrell Zastrow is a member of WI S.I.C.	X				
4.2.1.1.4	Program Participants shall encourage landowners to utilize the services of qualified resource professionals and qualified logging professionals in applying principles of sustainable forest management on their lands.	Forest Management Guidelines and considerable advice are provided to a large number of landowners. This includes a program of cooperating consultants and suggestions on timber sale administration. "DNR foresters do maintain lists of timber producers, but we are not able to specifically "blacklist" anyone. In the past there was concern about liability issues. DNR foresters do, however, encourage landowners who have a plan that prescribes a harvest to contact the WI Dept. of Agriculture, Trade and Consumer Protection for complaints against loggers and to check references."	X				
CI 1	Written <i>policy</i> to promote the use of <i>qualified resource</i> and logging professionals.	Specific policy for promoting logging professionals is lacking. Reviewed 2003 Directory of Foresters and Cooperating Consulting Foresters agreement.				X	
CI 2	List of qualified logging professionals maintained.	Master Logger Program is just now getting implemented in Wisconsin, but no list currently maintained. OFI: Maintain a list of trained loggers and provide to landowners.	X				X

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.2.1.1.5	Program Participants shall ensure that their commitment to the SFIS Principles is communicated throughout their organization.	These principles are being followed as the basis of the entire program. However no specific policy exists				X	
CI 1	Written <i>policy</i> statement of commitment to the SFIS that is communicated throughout the organization, particularly to mill and woodland managers, wood <i>procurement</i> operations and field foresters.	The WI Natural Resources Board has not committed to the implementation of SFI as yet. The same general sustainability principles are being followed.				X	
CI 2	Participation in training programs for appropriate personnel.	Reviewed of training records for selected employees. SFI- specific training is not adequate. SIC participation by Darrell Zastrow confirmed.				X	
CI 3	The number of staff completing training programs is documented and reported.	Reviewed of training records for selected employees Reviewed New Employee Training OFI: more formal SFI training	X				X
	Other Indicators						
4.2.1.1.6	Program Participants shall support and promote efforts by consulting foresters, state and federal agencies, state or local groups and programs like the American Tree Farm System, to educate and assist forest landowners, and to encourage them to apply principles of sustainable forest management.		X				
CI 1	Support for efforts of SFI Program Implementation Committees.	Confirmed SIC participation by Darrell Zastrow	X				
	Other Indicators – Tree Farm	Confirmed by reviewing "Certified Tree Farm Inspectors Employed by WI DNR - October 29, 2003" which lists 148 DNR personnel and Wisconsin Tree Farm Committee – DNR Memorandum of Understanding 7-6-01; and Cooperative Agreement between the Wisconsin Department Of Natural Resources and the Wisconsin Tree Farm Committee	X				

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.2.1.1.7	Program Participants shall clearly define and implement their own policies to ensure that mill inventories and procurement practices do not compromise adherence to the Principles of Sustainable Forestry.		NA				
CI 1	Procurement policy in place for the purchase of raw material from qualified logging professionals, wood producers and other wood suppliers.		NA				
CI 2	Policies in place to address adverse weather conditions.		NA				
	Other Indicators						
4.2.1.1.8	Procurement practices contribute to protection of legally designated conservation areas.		NA				
CI 1	Procurement policies in place that contribute to elimination of illegal logging.		NA				
	Other Indicators						
4.2.1.1.9	Procurement policies promote conservation of biodiversity hotspots and major tropical wilderness areas.		NA				
CI 1	Procurement policies that promote conservation of forests in areas outside of North America identified as biodiversity hotspots and major tropical wilderness areas.		NA				
	Other Indicators						

Objective 9: Publicly report Program Participants progress in fulfilling their commitment to sustainable forestry.

	Criteria	Auditor Notes	FC	EXR	Maj	Min	OFI
4.3.1.1.1	Program Participants shall report annually to the SFI program on their compliance with the SFIS.	This activity can not take place until the program is joined.				X	
CI 1	Record keeping tracks all the categories of information needed for annual progress reports.	Reviewed record-keeping database with Jeff Barkley and confirmed the records are comprehensive and current	X				
CI 2	Prompt response to the annual SFI survey questionnaire.	Although no surveys have yet been conducted, a system is in place. Darrell Zastrow facilitates information for state committee				X	
CI 3	Copies of past reports maintained to document progress and improvements to demonstrate conformance to the SFIS.	WI DNR is not yet in program, so there are no past reports.	NA				

Objective 10: Provide opportunities for the public and the forestry community to participate in the commitment to sustainable forestry.

Criteria		Auditor Notes		EXR	Maj	Min	OFI
4.3.2.1.1	Program Participants shall support and promote, at the state or other appropriate levels, mechanisms for public outreach, education and involvement related to forest management.		X				
CI 1	Support for the SFI Implementation Committee program to address outreach, education and technical assistance (e.g., 800 numbers, environmental education, or private and public sector technical assistance programs).	Confirm that Darrell Zastrow is on S.I.C.	X				
	Other Indicators	Public meetings, open houses, meetings with town officials discussed. Reviewed documentation of assignments for employee liaisons to various groups. Reviewed WI DNR Forestry Publications Distribution report (CD) statistics. Reviewed memo from Wendy M McCown, Director DNR Bureau of Forestry Services Re: Overview of Education & Outreach Initiatives for Certification Audit confirming a range of educational activities	X				
4.3.2.1.2	Program Participants shall establish, at the state, or other appropriate levels, procedures to address concerns raised by loggers, consulting foresters, employees, the public or Program Participants regarding practices that appear to be inconsistent with the SFIS Principles and Objectives.		X				
CI 1	Support for SFI State Implementation Committee efforts to address concerns raised by loggers, consulting foresters, employees, <i>Program Participants</i> and the public.	Confirm that Darrell Zastrow is on S.I.C.	X				
	Other Indicators						

Objective 11: Promote continual improvement in the practice of *sustainable forestry* and monitor, measure and report performance in achieving the commitment to *sustainable forestry*.

Criteria		Auditor Notes	FC	EXR	Maj	Min	OFI
4.4.4.1.1	Program Participants shall establish a management review system to examine findings and progress in implementing the SFI program and policies, to make appropriate improvements in policies, and to inform their employees of changes.	Existing state-wide management review system is not specific to SFI.				X	
CI 1	A system to review commitments, <i>policies</i> and procedures to evaluate effectiveness.	Biennially budget process-identifies problems and needs. Management Review rotates among the five regions and central office on a 3-year cycle.	X				
CI 2	A system for collecting, reviewing and reporting information to senior management regarding progress in achieving SFI <i>Objectives</i> and <i>Performance Measures</i> .	Existing state-wide management review system is not specific to SFI.				X	
CI 3	Senior management annually reviews progress and determines what changes and improvements are necessary to continue achieving SFI conformance.	Existing state-wide management review system is not specific to SFI.				X	
	Other Indicators						