

**Forest Management and Stump-to-Forest Gate Chain-of-Custody
Certification Evaluation Report for the:**

Wisconsin State Forests

**Managed by the
Wisconsin Department of Natural Resources**

**Conducted under auspices of the SCS Forest Conservation Program
SCS is an FSC Accredited Certification Body**

CERTIFICATION REGISTRATION NUMBER

Note: A Certificate Registration Number will be assigned if certification is awarded

Submitted to:

**Wisconsin Department of Natural Resources
Division of Forestry**

**Date of Field Audit: October/November 2003
Date of Final Report: April 9, 2004**

By:

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Organization of the Report

This report of the results of our evaluation is divided into two sections. Section A provides the public summary and background information that is required by the Forest Stewardship Council. This section is made available to the general public and is intended to provide an overview of the evaluation process, the management programs and policies applied to the forest, and the results of the evaluation. Section B contains more detailed results and information submitted to the client, which controls the distribution, thereof.

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SECTION A. PUBLIC SUMMARY & BACKGROUND INFORMATION

1.0 GENERAL INFORMATION

1.1 FSC DATA REQUEST

Name and contact information for the certification applicant operation:

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- E-mail: Robert.Mather@dnr.state.wi.us
- Products: Hardwood and softwood stumpage
- Number of Acres/hectares seeking to be certified: approximately 490,000 acres (198,000 hectares)
- Nearest Town: Madison, Wisconsin
- Tenure: Public, state owned
- Forest Composition: A mosaic of conifer and hardwood cover types, classified by species dominance; e.g., White Pine, Spruce-Fir, Northern Hardwoods, Central Hardwood, Oak, Red Maple, Aspen, Pine Plantations
- Managed as: Natural Forest

1.2 GENERAL BACKGROUND

Scientific Certification Systems, a certification body accredited by the Forest Stewardship Council (FSC), was retained by Wisconsin Department of Natural Resources to conduct a certification evaluation of its nine state forests:

Black River State Forest
Brule River State Forest
Coulee Experimental Forest
Flambeau River State Forest
Governor Knowles State Forest
Kettle Moraine State Forest- Northern and Southern Units
Northern Highland/American Legion State Forest
Peshtigo River State Forest
Point Beach State Forest

Under the FSC/SCS certification system, forest management operations meeting international standards of forest stewardship (as further elaborated through regional guidelines) can be certified as “well managed”, thereby enabling use of the FSC endorsement and logo in the marketplace.

In October, 2003, an interdisciplinary team of natural resource specialists was empanelled by SCS to conduct the evaluation of the Wisconsin State Forests. The team collected and analyzed written materials, conducted interviews and completed a total of 8 days of field and office audits as part of the certification evaluation. Upon completion of the fact-finding phase of the evaluation, the team assigned performance scores to the 56 FSC Criteria and, from those scores, generated weighted average performance scores for each of the 10 FSC Principles, in order to determine whether award of certification was warranted.¹

This report is issued in support of a recommendation to offer FSC-endorsed certification to the Wisconsin Department of Natural Resources for the management of its 9 state forests. As detailed below, award of certification would be conditioned upon DNR accepting a set of Corrective Action Requests that would be attached to the certificate and that would require closing out over the stipulated time periods. In the event that a certificate is awarded, Scientific Certification Systems will post this public summary of the report on its web site (www.scscertified.com).

1.3 FOREST MANAGEMENT ENTERPRISE

1.3.1 Background Information

The nine Wisconsin State Forests are scattered throughout the state and currently encompass over 490,000 acres of Wisconsin's 16 million forested acres. The temperate forests of Wisconsin were heavily harvested during the Cutover Period, from 1880 to 1920. Forests in Southern Wisconsin, in particular, were cut and burned to aid in the conversion to agricultural use. Forests in the North were cut and sold to immigrant farmers, enticed by the promise of land. Frequent and often intense wildfires followed impacting both the limited forests remaining and the public that moved into the area. The land and climate of the North, however, were not well suited for agriculture and many farmers soon abandoned their land.

The State Constitution was amended in 1924 to allow state funds to be used to acquire, develop and preserve forest resources. During the early and middle 20th century the State Forests were created from a combination of private donations and public funding to maintain watersheds and unique ecosystems in Wisconsin, and manage forests for long-term sustainable use. The Northern Highland State Forest was the first created under the new amendment.

¹ Based upon review of silviculture regimes employed on the Wisconsin State Forests, it is the judgment of the SCS Audit Team that DNR practices "natural forest management," as defined by the Forest Stewardship Council. Accordingly, Principle 10 and its attendant Criteria do not apply and were not scored.

The majority of the State Forests are found in a forested landscape, with the exception of the Kettle Moraine and Point Beach State Forests that are isolated by agricultural and residential development. The Northern Forests form important linkages between Federal, county and industrial forestlands. The Black River, Brule River, Flambeau River, Northern Highland/American Legion and Peshtigo River State Forests also safeguard important riparian corridors along several of the major river systems in the state. The Northern Highland/American Legion State Forest, the largest property at 222,000 acres, includes over 900 lakes within the forest boundary. This Forest also includes a 5,460 acre wilderness area and a total of 27,900 acres of wild areas with limited motor vehicle access. The Flambeau River State Forest also includes 13,000 acres of identified wilderness area along the Flambeau River.

Due to their history, these secondary (second growth) forests within the State Forest System are less than 100 years old. While 84 percent of Wisconsin's forests are hardwood types, several of the State Forests (Brule River, Black River and Northern Highland/American Legion) include significant opportunities to maintain or restore conifer forest communities. Portions of the State Forests also provide important barrens, savanna, wetland and prairie communities and play an important role in maintaining favorable conditions for many of the 1,800 native plant species and 657 vertebrate species found in the state. The State Natural Area Program has grown to 408 sites encompassing more than 150,000 acres of land and water. Thirty-nine State Natural Areas are found in the State Forests and range in size from eight acres to more than 2,500 acres. State Natural Areas protect outstanding examples of native natural communities, significant geological formations, and archaeological sites. They harbor natural features essentially unaltered by human-caused disturbances or that have substantially recovered from disturbance over time. More than 90% of the plants and 75% of the animals on Wisconsin's list of endangered or threatened species are protected on State Natural Areas.

State Forests are essential to rural economic activity, especially in rural economies in close proximity to them. Timber production and tourism contribute significantly to the state's overall economy. In Wisconsin, more than 1,850 wood-using companies produce nearly 20 billion dollars of forest products every year. More than 300,000 Wisconsin jobs rely on the forest products industry. Wisconsin households spend over \$5.5 billion per year on goods and services associated with forest-based recreation. Recreation is one of the primary uses of the State Forests with over two million visitors annually on the Northern Highland/American Legion State Forest alone. Hunting, hiking, boating, fishing, camping, cross country skiing, and snowmobiling are examples of popular recreational activities that occur on the State Forests.

1.3.2 Management Objectives

As contained in the applicant's programmatic materials, the objectives governing and guiding the management of the Wisconsin State Forests are multi-faceted.

These forests are governed by Wisconsin Statute 28.04, which states that "The Department shall assure the practice of sustainable forestry and use it to assure that state forests can provide a full range of benefits for present and future generations." Within this statute 'sustainable forestry' is defined as the practice of managing dynamic forest ecosystems to provide ecological, economic, social, and cultural benefits for present and future generations.

In accordance with Statute 28.04, the forests are managed for a combination of recreational opportunities, timber management and harvests, aesthetics, watershed protection, and as habitat for a variety of plant and animal species (some rare and endangered). The ultimate goal of this management is to benefit the people of Wisconsin, both those here today and those who will follow. The benefits of the state forests are many and include soil protection, public hunting, protection of water quality, production of recurring forest products, outdoor recreation, native biological diversity, aquatic and terrestrial wildlife, and aesthetics.

1.3.3 Silvicultural Systems

Silvicultural systems employed on the Wisconsin State Forest system are guided by the DNR *Silviculture and Forest Aesthetics Handbook* (HB 2431.5), as most recently modified on May 21, 2003. Reflecting the fact that the Wisconsin State Forest system spans the full biogeographic extent of the State of Wisconsin as well as all of the major forest types found in the State, the DNR employs a broad range of silvicultural systems in the management of the timber resources found on the State Forests. That is, the DNR practices a full array of even-aged and uneven-aged silvicultural systems on the State Forest System. With general guidance found in the Handbook, silvicultural systems are defined by forest cover type, of which there are 22 different cover types found on the State Forests. Regardless of the specific system employed on any given cover type within any of the State Forests, the following general objectives apply:

- Encourage stands containing the greatest quality and quantity of timber
- Encourage vigor within all developmental stages of forest stands
- Through modification of silvicultural prescriptions and practices, accomplish desired aesthetic management objectives

Under both even-aged and uneven-aged systems, a fundamental goal is to promptly establish new stands or age-class cohorts with every regeneration entry, relying either upon natural or artificial regeneration, as dictated by site conditions, harvesting method and cover type requirements. Reliance on natural regeneration is most prevalent. Likewise, all intermediate treatments (i.e., harvest entries not categorized as regeneration harvests, such as pre-commercial and commercial thins) are aimed at promoting improved stand health and vigor.

Even-aged regeneration harvests (e.g., clearcutting) are further modified to address wildlife management considerations and objectives. Such considerations are commonly addressed through DNR timber marking guidelines (most timber sales are marked—either for the harvest or the leave trees) that include wildlife reserve trees.

For even-aged systems, the target rotation ages are generally approximate to or beyond culmination of mean annual increment and are generally at least 15-20 years longer than rotation lengths employed on industrial timberlands in the region.

1.3.4 Estimates of Maximum Sustainable Yield

Allowable harvests are set at the forest property level and are not dictated by “top down” production targets established at the headquarters office of the DNR, per guidance found in Section 28.04 of the Wisconsin Administrative Code. Harvests are “regulated” at the forest level using *area control* where the annual allowable harvest, measured in acres per year, is disaggregated to forest cover types. Very simply, the allowable harvest for a given forest cover type (e.g., red pine) is computed as the total *available* area occupied by a cover type within a State Forest divided by the planned “rotation age” for that cover type. Forest areas zoned for special uses such as Natural Areas and Aesthetic Zones (e.g., buffers around lakes) are netted out of the allowable harvest land base.

Accordingly, the allowable harvest calculation process is fundamentally dependent upon accurate data regarding forest cover and land use zoning restrictions, which are provided by the DNR’s forest reconnaissance inventory system (Recon). As Recon data is updated following periodic inventory activities, the allowable harvests are periodically updated. Rotation lengths employed in the allowable harvest calculation process represent a balance between economic and biological optimums and are generally 15-20 years longer than industrial norms for this region.

For over the past decade, actual harvests on the Wisconsin State Forests have been well below allowable levels, as measured in acres treated with partial (intermediate) and regeneration harvest prescriptions. The “under harvest” varies considerably by State Forest but, in total, actual harvests are roughly 60% of allowable levels. The principal reasons for the shortfall are staff shortages as well as ecological considerations and constraints that have not been fully integrated into the reconnaissance database.

1.3.5 Past and Current Timber Production

WISCONSIN STATE FORESTS				Harvest FY1979 History -2003		*Timber Sale report S659-36A	
Fiscal Year	Total Sawtimber (MBF)	Total Cordwood (Cds.)	Cord Equivalents	Stumpage Value	Cut Acres	Cds./Cut Acre	\$ / Cut Acre
1979	Not tracked	electronically	90,053	\$570,478	5,982	15.03	\$95.37
1980		“	162,089	\$1,351,288	8,917	18.20	\$151.54
1981		“	101,960	\$701,866	7,249	14.07	\$96.82
1982		“	88,843	\$688,814	4,946	17.80	\$139.27
1983		“	83,266	\$701,125	5,227	15.90	\$134.14

1984	“	“	81,166	\$649,948	5,084	16.00	\$127.84
1985	“	“	51,362	\$571,361	4,344	11.80	\$131.53
1986	“	“	80,837	\$788,803	5,824	14.40	\$140.28
1987	“	“	55,491	\$450,504	3,801	14.60	\$118.52
1988	“	“	46,480	\$439,277	3,192	14.60	\$137.82
1989	“	“	74,262	\$603,562	5,243	14.20	\$115.12
1990	1459	105,126	109,409	\$880,080	6,628	16.50	\$132.78
1991	1629	105,109	109,190	\$678,994	5,696	19.20	\$119.21
1992	855	93,075	95,237	\$735,439	5,361	17.40	\$137.18
1993	1596	63,578	69,041	706,321	4,639	14.88	\$151.77
1994	1496	55,822	60,200	\$730,324	3,621	16.40	\$198.94
1995	3618	142,324	145,036	\$1,979,399	9,029	16.06	\$219.23
1996	2718	176,967	183,797	\$2,468,755	10,438	17.61	\$236.52
1997	1442	112,854	116,707	\$2,223,443	7,272	16.05	\$305.75
1998	567	84,511	86,352	\$2,353,206	5,403	15.98	\$435.54
1999	1173	66,911	71,005	\$1,555,134	4,594	15.46	\$338.51
2000	897	57,416	59,980	\$1,833,058	3,837	15.63	\$477.73
2001	4165	126,107	136,242	\$4,221,647	8,514	16.00	\$495.85
2002	3416	93,529	102,395	\$3,501,168	5,965	17.17	\$586.95
2003	3701	81,367	90,077	\$2,717,152	5,864	15.36	\$463.36

1.4 ENVIRONMENTAL AND SOCIOECONOMIC CONTEXT

For the interested reader, there is an extensive collection of DNR developed documents that provide additional detail on the environmental and socioeconomic context in which the management of the Wisconsin State Forests operates. Many of these documents are available on the DNR web site or can be requested from the DNR. Some documents of note include:

- Wisconsin Ecological Landscapes Handbook (HB 1805.1)
- Wisconsin Forests at the Millennium; An Assessment (2000)
- Wisconsin DNR Trends and Issues Survey Report (November, 2000)
- Wisconsin’s Northern State Forest Assessments; Socioeconomics in Northwest Wisconsin (December, 1999)
- Wisconsin’s Northern State Forest Assessments; Recreational Supply and Demand (March, 2001)
- State Forest properties Master Plans

1.4.1 Environmental Context

The majority of the State Forests are the result of natural regeneration or tree planting that occurred in the early to mid-1900's. Mid- to late-successional maple-basswood forests and in some cases white pine forests are replacing early succession aspen-birch and oak forests that dominated the areas from 1940 to 1970. Savannas, barrens, and advanced successional stages are ecosystems that are extremely rare in the state. Management opportunities exist within the State Forest System to maintain or restore these components.

Forest disturbance patterns have changed dramatically over the past century on the State Forests. Historically, the short-term disturbance factors were windthrow, fire, disease, and severe weather. Since the 1930's, fire has been widely suppressed. Human-caused disturbance is now predominant in Wisconsin's State Forests. This disturbance has led to the introduction of species not native to Wisconsin to the forests. The gypsy moth, Dutch elm disease, garlic mustard, buckthorn, and Japanese honeysuckle are some of the exotics that pose a major threat to Wisconsin's forests.

The State Forests play an important role in maintaining large tracts of highly forested lands. Wisconsin forests are being fragmented due to road building, agriculture and urban development. The State Forests, especially in the south, provide some of the largest, contiguous forested tracts remaining. Those State Forests located in northern Wisconsin, in conjunction with Federal, county and private land ownerships, make up one of the largest forested tracts in the United States.

1.4.2 Socioeconomic Context

The most notable or salient aspect of the socioeconomic context for the subject forest estate is that it is a public resource owned by the people of the State of Wisconsin, managed for their interests according to a body of statutory and regulatory requirements by the Department of Natural Resources. Additionally, and unlike other states with limited amounts of state-owned forestland or with extensive amounts of federally-owned forestland, the Wisconsin State Forest system represents a very significant public resource for the citizens of Wisconsin and the upper mid-west (particularly Illinois and Minnesota). The significance of this public resource is measured in both market-based and non-market terms. As a source of commercial timber products, the Wisconsin State Forests are clearly an important supply-side player, particularly with respect to support of the region's paper industry. On a more minor scale, the State Forests also provide locally or regionally important non-timber marketable resources such as sphagnum moss and florals.

Of equal significance is the fact the Wisconsin State Forests are a year-round playground for local residents and urban dwellers from around the upper Midwest, but most significantly from the Green Bay-Milwaukee-Chicago urban corridor as well as the Twin Cities in Minnesota. Besides generating highly valued recreational user opportunities, this recreational use also generates very significant employment, revenue and taxing opportunities for the State of Wisconsin and, more significantly on a relative basis, rural counties and municipalities. Recreational activities include: camping, hunting, boating, hiking, Nordic skiing and ATV use.

Aside from consumptive uses, the Wisconsin State Forests provide key environmental services (e.g., open space, forest cover, biodiversity, old growth repositories) that are highly valued by issue-oriented stakeholder groups as well as the general public.

Finally, it is noteworthy that the large industrial purchasers of timber in the upper Midwest (particularly the paper industry) are now encouraging their suppliers (including but not limited to the Wisconsin DNR) to achieve independent, third-party certification on the forestlands that are the source of fiber from which generate finished products. This encouragement is a response to the pressures felt by these producers from their own customers such as large publishing concerns.

With respect to the emerging significance of independent, third-party certification in the Lake States, the leadership being demonstrated by WDNR in initiating the engagement of the Wisconsin State Forest System in the certification process has numerous implications for private landowners in the state, perhaps most significantly the non-industrial forest sector. In one regard, the certification evaluation process that WDNR has now undergone has provided a wealth of exposure to and experience with third-party certification, knowledge that can be beneficially conveyed in various manners to other public as well as private forest owners/managers. That is, the learning process that WDNR has undergone can now be used to the benefit of other forest owners/managers who are considering the possibilities of engaging in the third-party certification process. In another regard, the engagement of the State Forest System in the certification process has the potential to create a momentum for and/or general expectation of more widespread private landowner engagement in certification. Most immediately, two other programs administered by WDNR—the County Forests program and the Managed Forest Law program—underwent certification preliminary evaluations at roughly the same time that the State Forests underwent the full certification evaluation. This momentum, if it continues, presents both opportunities and challenges for non-industrial forest owners. Notably, FSC’s “group certification” protocols are designed to provide a more cost effective pathway for small non-industrial forest landowners to engage the certification process.

1.4.3 Forest Areas of High Conservation Value

As required by FSC Principle 9, the evaluation team emphasized to DNR the importance of identifying sites that meet the FSC's definition of High Conservation Value Forest within the Wisconsin State Forests, and to manage such areas so as to maintain the identified conservation values. HCVF may include unique or threatened ecological areas and/or areas of cultural significance that must be managed so as to maintain the attributes that make them of high conservation value. That is, HCVF cannot be converted to other types of forest cover lacking in the attributes that make these areas HCVF. Appropriate management of HCVF areas does not necessarily require avoidance of active management.

Within the Wisconsin State Forests, the most likely HCV areas include:

- Remnant old growth
- Habitat for endangered species
- Areas containing tribal cultural and archeological resources
- Oak savannas
- Barrens
- State Natural Areas
- Wild rice marshes
- Mesic hemlock-hardwood forests
- Dry-mesic forests including natural pine stands
- Large peatlands
- Northern sedge meadows
- Large blocks of contiguous forests

1.5 ADMINISTRATIVE CONTEXT

Management of the Wisconsin State Forest System is subject to a host of local, state and federal regulations. The principal regulations of greatest relevance to forest managers in the State Forests are associated with the following statutes:

Pertinent Regulations at the Federal Level:

- a) Endangered Species Act
- b) Clean Water Act (Section 404 wetland protection)
- c) Occupational Safety and Health Act
- d) National Historic Preservation Act
- e) Archaeological and Historic Preservation Act
- f) Americans with Disabilities Act
- g) U.S. ratified treaties, including CITES

Pertinent Regulations at State and Local Level:

- a) Wisconsin Environmental Policy Act (WEPA) (Section 1.11, WI Statutes, NR 150, WI Administrative Code)
- b) Wisconsin Pesticide Law (Chapter 94, WI Statutes)

- c) Use of Pesticides on Land and Water Areas of the State of Wisconsin (WI Administrative Code, Chapter NR 80)
- d) Wisconsin Spill Law (Chapter 144, WI Statutes)
- e) Wisconsin Groundwater Law (Chapter 160, WI Statutes)
- f) Management of Public Forests (Chapter 28, WI Statutes)
- g) Navigable Waters (Chapter 30, WI Statutes)
- h) Water Quality Standards for Wetlands (Chapter NR 103, WI Administrative Code)
- i) Endangered and Threatened Species (Chapter NR 27, WI Administrative Code)

Regulatory Context for State and Local Regulations:

The Wisconsin Environmental Policy Act (WEPA) is a state law designed to encourage environmentally sensitive decision-making by state agencies. WEPA spells out the state's environmental policy and requires the DNR and other state agencies to consider the environmental effects of their actions to the extent possible under their other statutory authorities. It also establishes the principle that broad citizen participation should be part of environmental decision-making. WEPA requires the DNR and other state agencies to gather relevant environmental information and use it in their decision-making. The Master Plans for the State Forests are developed to meet WEPA requirements.

At the project level, procedures are in place to pre-review all management activities within the State Forests for compliance with Federal, state and local regulations. Specialists within the DNR are brought in to review proposed activities and propose mitigation measures if needed. Water Regulations and Zoning Staff are available on each Forest to process permits for work related to waterways and wetlands. Archeological Site Inventories are maintained by the Wisconsin State Historical Society and available on each Forest. The State Archeologist as well as interested publics (e.g., tribes) review projects proposed in the vicinity of known sites. The Bureau of Endangered Resources staff works closely with Forest staff to ensure protection of sites of rare or endangered species and communities. The DNR has wildlife specialists for the each Federal Endangered wildlife species who work closely with U.S. Fish and Wildlife Service staff to meet Federal Endangered Species Act requirements.

1.6 PRODUCTS PRODUCED

Species	Primary Use	Secondary Use
White Pine	Lumber	Christmas Trees, Pulpwood
Red Pine	Pulpwood, Lumber	Cabin Logs, Poles
Jack Pine	Pulpwood	Lumber
Tamarack	Posts, Poles	Pulpwood, Lumber
Black Spruce	Pulpwood	
White Spruce	Pulpwood	Lumber, Christmas Trees
Hemlock	Pulpwood	Lumber
Balsam Fir	Pulpwood, Wreaths	Lumber, Christmas Trees
Northern White Cedar	Posts, Poles	Lumber, Shingles

Red Cedar	Lumber, Closet Liners	Posts
White Ash	Handles, Furniture	Lumber
Aspen	Pulpwood, Particleboard	Furniture, Pallets, Plywood
Basswood	Lumber	Furniture, Carving Block
Beech	Handles	Lumber, Pulpwood
White Birch	Toothpicks, Ice Cream Sticks	Pulpwood, Craft Items (Bark)
Yellow Birch	Furniture, Veneer	Pulpwood
Butternut	Furniture, Trim	
Black Cherry	Furniture, Trim	Handles
Cottonwood	Pallets, Boxes	Lumber, Pulpwood
Elm	Furniture	Pulpwood
Shagbark Hickory	Handles	Firewood, Meat Smoking
Red Maple	Pulpwood, Lumber	Furniture, Firewood
Sugar Maple	Pulpwood, Furniture, Floors	Veneer, Firewood, Syrup
Red Oak	Ties, Furniture, Veneer	Trim, Firewood
White Oak	Construction, Trim	Ties, Firewood
Black Walnut	Furniture, Trim	Gunstocks
Sphagnum Moss	Floral Designs	Worm bedding
Wild Rice	Food	
Berries	Food	
Wildlife	Hunting, Fishing, Viewing	Trapping
Mushrooms	Food	

1.7 CHAIN-OF-CUSTODY - TRACKING, TRACING AND IDENTIFICATION OF PRODUCTS

At the request of the certification applicant, SCS conducted a joint forest management and chain-of-custody certification evaluation of the defined forest area. Chain-of-custody certification is required throughout the supply chain if downstream purchasers and processors wish to carry forward the certified status of wood products sourced from the Wisconsin State Forests. With respect to the state forest lands managed by Wisconsin DNR, the chain-of-custody focus is quite narrow, as the DNR exclusively sells standing timber. That is, the DNR does not have control of the flow of wood products from the state forests once the trees have been severed from the stump, by the successful bidder.

In the case of its management of the Wisconsin State Forests, DNR's chain-of-custody obligations will include:

- Effectively notifying all purchasers of State Forest timber sales that maintaining the FSC-certified status of the procured products requires each and every holder/owner of the product, from severance at the stump onward, to hold valid FSC-endorsed chain-of-custody certificates
- Providing SCS and/or the FSC with detailed information regarding all sales of state forest timber: purchaser's name and contact information, species and volume sold, date of sale

- Notifying SCS and/or the FSC of any instances when a purchaser of a state forest timber sale does not hold a valid FSC-endorsed chain-of-custody certificate
- Maintaining records for at least 5 years

During the fieldwork for the forest management evaluation, the evaluation team investigated the extent to which DNR can and is willing to comply with these chain-of-custody requirements. As is detailed in Section 10.1 of this joint FM/COC certification evaluation report, it is the conclusion of the SCS evaluation team that Wisconsin DNR is fully capable of meeting the relevant chain-of-custody requirements.

1.8 OTHER ACTIVITIES

Wisconsin households spend over \$5.5 billion per year on goods and services associated with forest-based recreation. Recreation is one of the primary uses of the State Forests with over two million visitors annually on the Northern Highland/American Legion State Forest alone. Hunting, hiking, bird watching, boating, fishing, camping, cross country skiing, and snowmobiling are examples of popular recreational activities that occur on the State Forests.

Demographers forecast increases in the number of participants in nearly all types of outdoor activities. Over the next 10 years an aging Wisconsin population is expected to increase demand for activities popular with older adults. Several more active sports, jet-skiing, canoeing, cross-country skiing and ATV riding show the greatest estimated increase in participation. Given the projected increasing demands of both non-motorized and motorized recreation, it is likely that conflicts between these user groups on the State Forests will increase.

In addition to commercial timber production and recreational use, the Wisconsin State Forests constitute a resource of importance for other activities such as:

- Academic and government research on forest ecology, wildlife, timber management, public use, etc.
- Gathering of non-timber forest products such as sphagnum moss and florals
- Sale of Christmas trees

2.0 THE CERTIFICATION ASSESSMENT PROCESS

2.1 ASSESSMENT DATES

Pre-Certification Audit:

No pre-certification audit was conducted for this forest operation.

Certification Audit:

The certification audit was conducted over a 6 week period from mid-October to late November, 2003. Two field audits were conducted: October 15-16 and November 10-15, 2003.

2.2 ASSESSMENT TEAM

The audit team for this assessment was comprised of three natural resource management specialists, collectively possessing recognized expertise, credentials and experience in forest management, forest economics, wildlife management, logging systems and forest ecology.

Dr. Robert J. Hrubes, Team Leader: Dr. Hrubes is a California registered professional forester (#2228) and forest economist with 28 years of professional experience in both public and public forest management issues. He is presently Senior Vice-President of Scientific Certification Systems. In addition to serving as team leader for the Wisconsin state forestlands evaluation, Dr. Hrubes worked in collaboration with other SCS personnel to develop the programmatic protocol that guides all SCS Forest Conservation Program evaluations. Dr. Hrubes has previously led numerous SCS Forest Conservation Program evaluations of North American public forest, industrial forest ownerships and non-industrial forests, as well as operations in Scandinavia, Chile, Japan, Malaysia, Australia and New Zealand. As the Wisconsin State Forests evaluation team leader, Dr. Hrubes is the principal author of this report, in collaboration with co-authors, Gary Zimmer and Mike Ferrucci. Dr. Hrubes holds graduate degrees in forest economics, economics and resource systems management from the University of California-Berkeley and the University of Michigan. His professional forestry degree (B.S.F. with double major in Outdoor Recreation) was awarded from Iowa State University. He was employed for 14 years, in a variety of positions ranging from research forester to operations research analyst to planning team leader, by the USDA Forest Service. Upon leaving federal service, he entered private consulting from 1988 to 2000. He has been Senior V.P. at SCS since February, 2000.

Mr. Michael Ferrucci: Michael Ferrucci is a founding partner and President of Interforest, LLC, and a partner in Ferrucci & Walicki, LLC, a land management company that has served private landowners in southern New England for 16 years. Its clients include private citizens, land trusts, municipalities, corporations, private water companies, and non-profit organizations. He has a B.Sc. degree in forestry from the University of Maine and a Master of Forestry degree from the Yale School of Forestry and Environmental Studies. Mr. Ferrucci's primary expertise is in management of watershed forests to provide timber, drinking water, and the protection of other values; in forest inventory and timber appraisal; hardwood forest silviculture and marketing; and the ecology and silviculture of natural forests of the eastern United States. He also lectures on private sector forestry, leadership, and forest resource management at the Yale School of Forestry and Environmental Studies.

For this project, Mr. Ferrucci functioned as an employee of NSF.

Mr. Gary Zimmer: Gary Zimmer is a certified wildlife biologist with 21 years of professional experience in public and private forest management. A native of Northern Wisconsin, Gary is currently the Western Great Lakes Regional Biologist with the Ruffed Grouse Society. He holds a M.S. degree in natural resources from the University of Wisconsin – Stevens Point and also received a B. S. degree from the same academic institution, in wildlife management. He was employed for 18 years with the USDA Forest Service in a variety of positions ranging from forestry technician to district biologist. Since leaving federal service in 2000, Gary has worked closely with public and private land managers throughout a five-state region managing forest wildlife habitat.

2.3 ASSESSMENT PROCESS

The assessment process is geared towards own fundamental objective: to enable the audit team to make an informed judgment as to the degree to which the DNR’s management of the Wisconsin State Forests conforms to the FSC Principles & Criteria, as elaborated by the FSC Lake States Regional Standard. As the scope of these certification standards covers bio-physical issues, socio-economic issues and organizational/financial issues, the due diligence designed to properly inform the audit team includes the following modes of information and data collection:

- Review of pertinent documents
- Interviews with DNR personnel at all levels of the organization and in all relevant disciplines
- Consultation with individuals and organizations that consider themselves to be “stakeholders” in the management of the Wisconsin State Forests
- On-site inspections of forest conditions and forest management operations (including but not limited to timber management operations) based upon a stratified random sample of properties and a strategic selection of sites within each sampled property. For each property within the sample, specific field sites where the team visited included some that were randomly selected and others that were proposed by DNR personnel and/or non-randomly selected by the audit team.

Formal initiation of the certification assessment process for the Wisconsin State Forests began with the execution of a contract between DNR and SCS.² After execution of the contract, and in response to an information request from SCS, DNR began to convey programmatic materials to the SCS audit team that was convened for this project³. The audit team members reviewed these materials in preparation for the field audit.

² Because this FSC certification evaluation was conducted in a “dual format” with a concurrent SFI certification evaluation of the same forest estate, SCS formed a partnership with a SFI-accredited certification body, NSF. For this contract, NSF served as the prime contractor and SCS served as a sub-contractor.

³ The audit team wishes to acknowledge the exemplary manner in which programmatic documents were conveyed to the team. The comprehensive and searchable CD compiled by Paul Pingree was of great value to the team in terms of being able to rely upon one highly mobile and accessible source for a very extensive amount of information.

Stakeholder consultation began 30 days prior to the field component of the evaluation, via a written notice that was sent out to a broad cross-section of stakeholders. In addition to the 30-day notice, members of the audit team began to make one-on-one contacts with selected stakeholders in Wisconsin and the Lake States region. DNR was asked to provide the audit team with a list of and contact information for those stakeholder groups that have most actively engaged DNR over recent years.

The field portion of the evaluation took place in two installments: October 15-16 and November 15-20, 2003. In total, 22 person days of in-state evaluation time were expended by members of the audit team.⁴ The field audit included:

- office based interviews/discussions, both in Madison and in field offices
- telephone and face-to-face interviews with a sample of stakeholders
- site inspections of a variety of sites designed to illustrate a cross-section of stand types and treatments, focusing on harvests and other site-disturbing activities conducted within the last several years; the audit team visited 4 of the 9 State Forests, including the two largest forests, during the field component of the evaluation.

The field audit agenda/itinerary was comprised of the following locations and activities:

Day 1: Thursday, October 15: Headquarters Office in Madison
A.M. and P.M.

Office Interviews and Document Review

- *Introductory overview of the State Forests and DNR*
- *Statutory and policy context for state land management*
- *Allowable harvest planning*
- *Compartment reconnaissance system (RECON)*
- *Master Planning process*
- *Research and monitoring programs*
- *Forest health program*
- *Natural Areas program*

Day 2: Friday, October 16: Headquarters Office in Madison
A.M. and P.M.

Office Interviews and Document Review

- *Silvicultural systems*
- *Tribal interactions*
- *Role and activities of Bureau of Legal Services*
- *Landowner assistance programs*

Day 3: Monday November 10, 2003: Southern Unit Kettle Moraine State Forest
A.M.

Office Interviews and Document Review

⁴ Additionally, audit team members expended approximately 18 person days in other evaluation activities such as document review, consultations, audit planning, and report writing.

- *Introductions and Kettle Moraine overview*
- *Staffing and use of outside personnel*
- *Forest recon system and allowable harvest determination*
- *Invasive species challenges*
- *Role of Water Regulations and Zoning Staff*

P.M.

Office Interviews, Continued

- *Master planning process*
- *Communications with the public*
- *State Natural Areas Program*
- *Monitoring efforts*

Field Stops:

- Stop 1: Timber Sale # 83 Western Eagle Sale (Hanson & Leia L. Co.) 26 acres
Shelterwood harvest, controlled burn, chemical brush control
- Stop 2: Wilton Road buckthorn control and tree planting 41 acres
Third thinning of Red Pine plantation, chemical control of invasive brush
- Stop 3: 1993 Tree Planting Site 33 acre field
Machine planted to mixture of pine, spruce and oak
- Stop 4: Timber Sale # 75-Scuppernong Trails Sale 98 acres
Pine thinning, various stages (first, second, or third entry), recreation and endangered/threatened resource considerations, chemical control of invasive brush
- Stop 5: Timber Sale # 81-Vulture East Sale (JT Forest Products) 55 acres
Pine thinning, second and third entry, recreation concerns of Pinewoods Campground
M. Ferrucci interviewed operator in morning at office (Tom Schulemberg, JT Forest Products 262-363-3413)
- Stop 6: Timber Sale # 82-Main Pinewoods Sale size of sale not provided
Marked but not started Pine thinning including major sections of Pinewoods Campground
- Stop 7: 1993 Tree Planting Site 48.5 acre field
Machine planted to mixture of pine, walnut and oak
- Stop 8: Scuppernong River Habitat Area 3,500 acre prairie & related habitats
This area had centered on a marsh, which was drained and farmed, with loss of most natural conditions. Fire exclusion led to brush encroachment and invasive problems. Restoration work included fund raising, cut and chip brush, chemical treatment of stumps, periodic prescribed burning. Site includes 25 to 30 T&E species

Day 4: Tuesday November 11, 2003: Black River State Forest

A.M.

Office Interviews and Document Review

- *Introductions and Black River overview*
- *Tribal consultations*
- *Archeological site review process*
- *Deferral/consultation process to protect important communities*
- *Water quality and dam concerns*
- *Importance of “other” forest products*
- *Karner blue butterfly management*

A.M. and P.M.

Stop 1: Tribal Mitigation Site

After harvest started managers worked with tribal members to designate no-harvest area around a culturally important area. Some confusion occurred in the tribe, but managers were able to determine an acceptable appropriate course of action.

Stop 2: Jack Pine Clearcut with clumped retention size not provided

Discussed site preparation and replanting issues and options, saw evidence of monitoring of planting success and replanting as needed, also retention patches observed

Stop 3: Timber Sale # 990 (MC Logging, Inc.) 35 acres
red pine first thinning of 34-year old plantation 7-08-03 complete

Stop 4: Timber Sale # 964 (Wiitala Vozka Logging) 78 acres
active clearcut to perpetuate Jack Pine, interviewed Randy Vozka, Forwarder operator, son of one of owners of company

Stop 5: Timber Sale # 938 (D&D Mechanized Pulping) 40 acres
clearcut near Dike 17 Wildlife Management Area selected because 84-year old oak not healthy, brache scarified (scalped in spots), trying to maintain Jack Pine component

Stop 6: Timber Sale # 953 (Magnum Timber Corporation) 52 acres
Commercial improvement thinning, retained some marked wood on steep slopes, adjacent to recently purchased inholding (extended discussion)

Stop 7: Timber Sale # 965 (Becker Forest Products, Inc.) 114 acres
Partial harvest, releasing red and white pine while retaining mixture of other species, located in a wild area, consultation area, and surrounds popular X-C ski trail

Stop 8: Timber Sale # 996, (Lambert Forest Products) 35 acres
regeneration harvest for aspen and Jack pine, also active, interviewed Chad Jensen

Day 5: Wednesday November 12, 2003 Flambeau River State Forest

A.M.

Office Interviews and Document Review

- *Introductions and Flambeau River overview*
- *Staffing shortage*
- *Tornado and windstorm damage/salvage*

- *Wilderness management*
- *Monitoring activities*

A.M. and P.M.

Stop 1: Timber Sale 545 (Steve Dassow) 28 acres
 Selection harvest in poorly-drained red maple/hardwood stand. Also saw old silvicultural trials for yellow birch regeneration (experimented with scarification and pattern of cuts).

Stop 2: Timber Sale 568 (Biewer Wisconsin Sawmill) 30 acres
 Red pine thinning to produce natural looking stands (viewed Tepaske Lane unit bordering Flambeau River). Within wilderness zone, esthetic management to gradually eliminate artificial appearing rows.

Stop 3: Timber Sale 585 (Pine River Lumber Company) 150 acres
 Selection harvest in northern hardwood stand to grow quality sugar maple and increase ash and yellow birch. Road control and maintenance issues discussed. Joint federal-state BMP monitoring protocol assessment team interviewed.

Stop 4: Timber Sale 559 (Jack Hartwig) 151 acres
 Selection harvest in northern hardwood stand to grow quality sugar maple, thinning in red pine stand, and clearcutting of 45-year old aspen stands. Also looked at new road construction. One water turnoff directed water towards small wetland, no harmful impact.

Stop 5: Timber Sale 580 (Steve Dassow) 107 acres
 Salvage of tornado and wind-damaged timber, portions along important ATV / Snowmobile trail.

Day 6: Thursday November 13, 2003 NHAL State Forest, Northern Highlands

A.M.

Office Interviews and Document Review

- *Introductions and Northern Highland overview*
- *Staffing shortage*
- *Master planning update*
- *Public involvement*
- *Insect problems and invasive species*

A.M. and P.M.

Stop 1: Timber Sale 634 Northeast Trout Lake (Stora Enso) 94 acres
 Esthetic issues: lake buffer, nature trail, roadside along Highway M, and parking lot. Also had some cultural and historic considerations. White pine and Red oak thinning, white birch scarification, management of invasive species, removal of over-mature Jack pine over dense white pine.

Stop 2: Timber Sale 532 South Trout Triangle (Wiitala Vozka Logging) 160 acres
 Red pine and hardwood thinnings along high use public roads (Highway M and U.S. Route 51) near natural area and historic sign / photo documentation site.

Stop 3: Snowmobile Trail (drive through)

Stop 4: Timber Sale 649 Mud Creek Fur Farm Sale (Ives Logging) 85 acres
Red pine thinning, jack pine, birch, and aspen regeneration, scattered retention trees for snags and coarse woody debris development.

Stop 5: Timber Sale 658 Little Cloud Lake(Wiitala Vozka Logging) 234 acres
Management of pine for old-growth characteristics (big tree silviculture). Sale borders proposed Mud Creek Natural Area. Stand-level habitat retention example: biologist marked retention aspen near regulated wetland.

Stop 6: Timber Sale 665 Star Lake Oak (Fink Forest Products) 283 acres
Half completed timber sale. Most of site being managed long-term for oak and white pine mixture. Where white birch is a component will scarify post sale. Also there are some aspen clearcuts to maintain aspen type, and same for some Jack Pine areas to be planted following harvest.

Stop 7: Plum Lake Hemlocks Natural Area 500 acres
Viewed large old growth hemlock-hardwood stand and discussed management within and adjacent to area.

Day 7: Friday November 14, 2003 NHAL State Forest, American Legion

A.M.

Office Interviews and Document Review

- *Introductions and American Legion overview*
- *Management strategies for private within holdings*
- *Law enforcement cooperation*
- *Training*
- *Snag, den and reserve tree recommendations*

Stop 1: Timber Sale 669 County H Pine (Fink Brothers) 80 acres
Active red pine thinning using feller-buncher with live saw, grapple skidder and valmet forwarder.

Stop 2: Timber Sale 517 Powerline Oak (Superior Milling) 145 acres
Shelterwood overstory removal harvest completed in 1999.

P.M. Team Synthesis

- *Compilation of notes, group discussion and synthesis, beginning of the scoring process*

Day 8: Saturday, November 15, 2003, Headquarters Office

A.M. Team Synthesis and Scoring, Continued

- *Completion of scoring process and rendering of certification recommendation based upon the SCS scoring thresholds*
- *Formulation of Corrective Action Requests*
- *Preparation for the exit interview*

P.M. Exit Interview with Wisconsin DNR Personnel

- *Presentation of findings of the evaluation including recommendation to award certification subject to Corrective Action Requests*
- *Discussion of subsequent steps in the process*

DNR Personnel Interviewed During the Course of the Audit

Robert Mather, Director, Bureau of Forest Management
 Darrell Zastrow, Director, Office of Forest Sciences
 Paul Pingrey, Private Forest Specialist
 Allison Hellman, Policy Analyst
 Rich LaValley, Forest Tax Law Specialist and certification coordinator
 Paul Schultz, Forester, Northern Highlands and certification coordinator
 Jeff Barkley, County Forests Specialists and certification coordinator
 Linda Depaul, Section Chief, Forest Tax
 Jane Cummings-Carlson, Forest Health Coordinator
 Dale Gasser, Forest Hydrologist
 Kent Van Horn, State Lands Specialist
 Eunice Padley, Forest Ecologist/Silviculturist
 Jimmy Christenson, Bureau of Legal Services
 Eric Ebersberger, Bureau of Legal Services
 Rebecca Gass, Forestry Specialist
 Rebecca Schroeder, Section Chief, Ecosystem and Diversity Conservation
 Richard Denny, Regional Forestry Leader
 Michael Sieger, Forester
 Randy Hoffman, Conservation Biologist
 Andy Galvin, Conservation Biologist,
 Paul Sandgren, Forest Superintendent-Kettle Moraine South
 Jim Jackley, Wildlife Biologist
 Kathy Kramasz, Water Regulation and Zoning Specialist
 Tim Babros, Wildlife Area Supervisor Black River
 Mark Stephenson, Water Regulation and Zoning Specialist
 Mark Schraufnagel, Water Regulation and Zoning Specialist
 Dan Hateli, Fisheries Biologist
 Terry Boone, Ranger, Assistant Property Superintendent, Black River
 Pat Murphy, Regional Forestry Staff Supervisor
 Eric Epstein, Community Ecologist, Bureau of Endangered Resources
 Jamie Schlangen, Natural Heritage Inventory Private Lands Forestry Specialist, Bureau of Endangered Resources
 Tim Beyer, Forest Superintendent, Black River

Colleen Matula, Regional Forest Ecologist/Silviculturist
Jeff Olson, Forestry Team Leader , NHAL
Dean Farr, Forester
Tim Mulhern, Deputy State Forester
Bob Schepper, Recreation Team Leader
Denny Leith, Forest Superintendent, NHAL
Sue Brisk, Forester
Linda Wynn, Wildlife Biologist
Steve Gilbert, Fisheries Biologist
Ron Eckstein, Wildlife Biologist
Jayne Wade, Water Regulation and Zoning Specialist

2.3.1 Justification for Selection of Field Sites Inspected

The field itinerary was expressly laid out so as to provide the audit team with a solid exposure to the breadth and variety of forest conditions and management activities undertaken on the Wisconsin state forests administered by the Department of Natural Resources, with lead responsibility assumed by the Bureau of Forestry. The team traveled over 1,300 miles throughout Wisconsin in six days, visiting four of the nine state forests⁵. Prior to the week of field visits, two of the audit team members spent 2.5 days in detailed interviews with an array of DNR personnel at the Central Office in Madison. In selecting field sites to inspect, the team endeavored to examine recent and older site disturbing projects (e.g., regeneration harvests, commercial thins, pre-commercial thins, planting sites), planned harvesting operations, road construction and maintenance activities, active logging operations, etc. The audit team also overviewed non-timber aspects of state forest management such as recreation facilities (e.g., campgrounds) river buffer areas, wildlife refuges, and reserve areas. At the beginning of each field day, the audit team engaged in a 2-3 hour in-office interview and discussion with DNR staff attached to each state forest. The evaluation team was satisfied that the on-site field inspections of Wisconsin state forest management operations were sufficient in scope and intensity for reaching an informed certification decision.

2.4 STAKEHOLDER CONSULTATION

Identification of Individuals and Entities Perceiving a Stake in the Management of the Wisconsin State Forests

Pursuant to SCS protocols and FSC requirements, consultations with key stakeholders were an integral component of the State Forest evaluation process. Consultation took place prior to, concurrent with, and following the field evaluation. The following were distinct purposes to the consultations:

⁵ The four state forests visited by the audit team were: Kettle Moraine South, Black River, Flambeau River and Northern Highland/American Legion.

- 1) To solicit input from affected parties as to the strengths and weaknesses of Wisconsin DNR's management of the State Forests and the nature of the interactions between Department personnel and the surrounding communities as well as "communities of interest" (e.g., sportsmen's organizations, recreational groups, environmental and conservation organizations).
- 2) To solicit input on whether the Wisconsin DNR has consulted with stakeholders regarding the identification of areas of high conservation value within the State Forests.

The following procedural steps were taken in the stakeholder consultation process:

- A list of stakeholder groups and individuals was compiled from numerous sources, including:
 - A request that WDNR provide SCS with a list of the 20 most active stakeholder groups that it deals with
 - A review of responses received to the Notice of Evaluation that was broadly distributed 30 days prior to the field audit
 - Compilation of additional contacts and stakeholder groups by soliciting names from key contacts in the region
 - Consultation with FSC-US as to possible stakeholder contacts.
- The "master list" of stakeholders was then analyzed and categorized into the three FSC chambers: social, environmental, and economic
- Direct contact was made, initially by telephone or email, by one of the audit team members
- The interviews, most commonly conducted over the telephone, followed a general script that was prepared by the team leader (lead auditor). The script included a general summary of the process and the purpose of the interview. Each interviewee was invited to offer either positive or negative comments. Notes were taken for each interview and are maintained in the SCS files for this project.
- Input received during the stakeholder interviews was shared with all members of the audit team as part of the daily preparation during the week of field audits. As appropriate, issues arising during stakeholder interviews were raised in discussions with DNR personnel.

2.4.1 Summary of Legal and Customary Use-rights

As the subject forest estate is comprised of 9 state-owned public forest properties, there are statutorily established public use rights that exceed those associated with privately-owned forests. Most notably, the state forests are accessible to the general public for outdoor recreational activities such as hiking, hunting, fishing and camping.

As guided by the Public Forest Lands Handbook (HB 2460.5), there are additional special uses allowed on a permit basis on the selected areas within the State Forests, including:

- Military Maneuvers
- Rifle Ranges
- Land Use Agreements/Easements
- Cabin Leases/Permits
- Mineral Exploration, Prospecting, Mining
- Sand and Gravel

With regard to customary uses, the most notable are associated with tribal activities and uses on State Forests, including:

- Gathering of florals, medicinals and other vegetation
- Ceremonial use of sacred and cultural sites
- Hunting and fishing independent of activities allowed under the State fish and game code

Appendix 5 to this certification report contains a document prepared by DNR personnel that provides a summary of established use rights on Wisconsin state lands, in the form of excerpts from the text of NR 1.61, 1.60, 1.24 and references to NR 44 and NR 45.

2.4.2 Summary of People and Organizations Consulted

Prior to, during, and following the field audit component of this certification evaluation, a cross-section of stakeholders were consulted in regard to their relationship with Wisconsin DNR, and their views on the management of the Wisconsin State Forests. Stakeholders included FSC contact persons, government and non-government organizations involved in forest management, local citizens and user groups, employees, contractors, tribal representatives and others. Stakeholders were contacted with a notification mailing soliciting comment and/or phone contact. Comments were received through personal interviews “face-to-face”, phone interviews, and through written comments. A list of individuals and groups that received the email notification and request for comment is maintained on file at the SCS head office. Per FSC requirements, the names of respondents are kept confidential. In total, over 50 organizations and individuals received the email solicitation of comments and follow-up, one-on-one contact was made with some 20 individuals credibly associated with each of the three FSC chambers: social, environmental and economic.

2.4.3 Summary of Stakeholder Concerns and Perspectives and Responses from the Team Where Applicable

Environmental groups

Comment/Concern	Response
<ul style="list-style-type: none"> • Excessive fragmentation of the forest landscape 	This topic was explored with DNR management and field staff during the course of the audit.
<ul style="list-style-type: none"> • DNR has done an excellent job of inventorying the State Forests for benchmark sites (reserves) 	Noted

<ul style="list-style-type: none"> DNR needs to pursue the opportunity to manage for a large block pinery (i.e., >10,000 acres) in NHAL 	This topic was explored with DNR management and field staff during the course of the audit. See CARs 2004.2, 2004.4
<ul style="list-style-type: none"> DNR is a politicized agency driven by the Board of Natural Resources 	Noted
<ul style="list-style-type: none"> The Board of Natural Resources imposes top down mandates that trump bottom up staff decisions 	Noted
<ul style="list-style-type: none"> DNR has done a good job of consulting with stakeholders 	Noted
<ul style="list-style-type: none"> A fear that the Board does not fully support the master planning process 	See CARs 2004.5, 2004.8
<ul style="list-style-type: none"> DNR has done a good job of trying to implement the master plans 	Noted
<ul style="list-style-type: none"> Biotic inventory process has been outstanding 	Noted
<ul style="list-style-type: none"> Master planning process and the supporting studies such as CROG and the state-wide biodiversity report have been very good 	Noted
<ul style="list-style-type: none"> White pine management should be more emphasized 	This topic was explored with DNR management and field staff during the course of the audit. See CAR 2004.4
<ul style="list-style-type: none"> DNR should more actively employ prescribed fire and consider the range of historical variation 	This topic was explored with DNR management and field staff during the course of the audit.
<ul style="list-style-type: none"> There should be less early successional forest cover 	This topic was explored with DNR management and field staff during the course of the audit.
<ul style="list-style-type: none"> Rotations should be longer 	The audit team understands DNR rotations to be significantly longer than industrial norms and a generally appropriate balancing of financial and non-financial objectives.
<ul style="list-style-type: none"> Greater attention should be paid to T&E species 	The audit team notes this comments but considers the level of attention paid to T&E

	species to be generally appropriate.
<ul style="list-style-type: none"> • DNR should not facilitate greater ATV use 	This topic was explored with DNR management and field staff during the course of the audit.
<ul style="list-style-type: none"> • Deer populations are too high 	This topic was explored at length with DNR management and field staff during the course of the audit.
<ul style="list-style-type: none"> • DNR should expend more effort to increase down wood debris—there has been overly aggressive salvage after blowdowns 	This topic was explored at length with DNR management and field staff during the course of the audit.
<ul style="list-style-type: none"> • There should be large buffers around lakes 	Comment noted. The audit team considers DNR buffer policies to be generally appropriate.

Community Groups & Local Residents, Including Indigenous Peoples

Comment/Concern	Response
<ul style="list-style-type: none"> • Master Planning re-planning cycle is too long 	See CAR 2004.5
<ul style="list-style-type: none"> • DNR does a good job of stakeholder consultation 	Noted
<ul style="list-style-type: none"> • DNR personnel are cooperative and sensitive to stakeholder concerns 	Noted
<ul style="list-style-type: none"> • Tribal concerns over extent and ease of access into tribal allotments and cultural sites 	Noted
<ul style="list-style-type: none"> • Some forest supervisors (e.g., Black River) maintain an open door policy regarding tribal interactions 	Noted

Sportsmen and Recreation Organizations

Comment/Concern	Response
<ul style="list-style-type: none"> • DNR has been doing a very job of managing the state forests 	Noted
<ul style="list-style-type: none"> • Preservation groups are perceived as garnering too much influence 	Noted
<ul style="list-style-type: none"> • The extent of early successional forest cover and aspen stands should not be reduced 	This topic was explored with DNR management and field staff during the course of the audit.
<ul style="list-style-type: none"> • The harvest level should be maintained 	This topic was explored with DNR management

	and field staff during the course of the audit.
<ul style="list-style-type: none"> Hunters do not necessarily favor more motorized and non-motorized (e.g., mountain bikers) recreational use 	This topic was explored with DNR management and field staff during the course of the audit.
<ul style="list-style-type: none"> Fuel loads are a problem waiting to happen 	Comment noted. The audit team did not observe excessive fuel loading in the state forests it visited.

Employees and Contractors:

Comment/Concern	Response
<ul style="list-style-type: none"> Budget-induced reductions in DNR workforce has meant that remaining staff must do more with less 	This topic was explored with DNR management and field staff during the course of the audit.
<ul style="list-style-type: none"> Overall compensation packages are attractive even though salaries may be slightly below comparable positions elsewhere 	Noted
<ul style="list-style-type: none"> Most contractor employees are aware that their employers have participated in logger training courses but the employees, themselves, generally have not 	See CAR 2004.6

2.5 GUIDELINES/STANDARDS EMPLOYED

For purposes of determining the applicable FSC standard, the State of Wisconsin is located in the “Lake States Region,” one of 9 regions delineated by the FSC in the U.S. The certification evaluation of the Wisconsin State Forests, therefore, was conducted against the duly-endorsed *FSC Lake States Regional Standard*. The standard is available at the FSC-US web site or is available, upon request, from Scientific Certification Systems.

2.6 SCORING PROCESS

Consistent with SCS Forest Conservation Program evaluation protocols, for scoring purposes the team collectively assigned weights of relative importance to the Criteria within each of the ten Principles. Scores were assigned to each Criterion at the completion of the field phase and importance-weighted means (average scores) were calculated for each Principle. Scoring takes place on a 100-point scale, using a consensus process amongst all members of the evaluation team. Scores less than 80 points connote performance in which there is discernible non-conformance to the breadth of a Criterion. For any Criterion for which the team assigns a score below 80 points, the team is required to specify one or more Corrective Action Requests (CARs), also known as “conditions.” If the weighted average score of any Principle is less than 80, certification cannot be awarded and, instead, the evaluation team

must stipulate one or more Major Corrective Action Requests (Major CARs), also known as “pre-conditions.” The evaluation team also retains the option to specify “discretionary CARs” even when the score for the pertinent Criterion is above 80 points. This may occur when, overall, the Criterion was highly scored but there are issues within the scope of a Criterion where important improvements are, in the judgment of the team, necessary even though these deficiencies are not severe enough to move the score below 80 for the totality of the Criterion. For certification to be awarded, the importance-weighted average score for each of the 10 FSC Principles must be 80 points or higher.

Interpretations of Corrective Action Requests (CARs), Major and Minor

Major CARs: These are corrective actions that must be resolved or closed out prior to award of the certificate. These arise when the importance-weighted average score for a Principle is less than 80 points or where there is observed non-compliance with a “pre-emptive” indicator (e.g., use of GMOs is a “fatal flaw” that precludes award of certification regardless of the strength of the overall management program).

Minor CARs: Corrective Action Requests that are stipulated along with award of certification. Corrective actions must be closed out within a specified time period of award of the certificate. Certification is contingent on the certified operations response to the CAR within the stipulated time frame.

3.0 RESULTS, CONCLUSIONS AND RECOMMENDATIONS

Table 3.1, below, contains the SCS evaluation team’s findings as to the strengths and weaknesses of the Wisconsin State Forest management operation relative to the FSC Principles of Forest Stewardship, as further elaborated by the FSC Lake States Regional Standard. The table also presents the calculated performance scores for each Principle as well as the Corrective Action Request (CAR) numbers, if any, related to each Principle.

TABLE 3.1 NOTABLE STRENGTHS AND WEAKNESSES OF THE FOREST MANAGEMENT ENTERPRISE RELATIVE TO THE P&C

Principle/Subject Area	Strengths	Weaknesses	Performance Score and CAR #s
<p>P1: FSC Commitment and Legal Compliance</p>	<ul style="list-style-type: none"> ▪ DNR personnel demonstrate a strong commitment to manage the state forests in conformance with “manual guidance” and underlying legal mandates ▪ Substantial formal and on-the-job training is undertaken to ensure that DNR foresters have excellent working knowledge of laws, regulations, and policies ▪ PILTs (payments in lieu of taxes) are systematically dispersed to local and county governments ▪ Rangers (trained in law enforcement) actively oversee public use ▪ Managers regularly conduct field activities in or visit most portions of state forestlands 	<ul style="list-style-type: none"> ▪ BMP compliance and working knowledge of the BMP Field Manual is not consistent across State Forests ▪ DNR staff do not appear to have a strong knowledge of relevant treaties and agreements ▪ Illegal ATV use on the state forests is a growing problem ▪ Boundary lines of the state forests are not marked on the ground 	<p style="text-align: center;"><u>85</u></p>

<p>P2: Tenure & Use Rights & Responsibilities</p>	<ul style="list-style-type: none"> ▪ There is no question as to the legal status of the forests in question as owned by the State of Wisconsin and in the statutory authority of DNR to manage the state forests ▪ A broad array of public uses of great social and regional economic interest/value are allowed and encouraged ▪ The Master Planning process, on the forests undergoing plan revisions, has triggered a heightened and more structured level of stakeholder consultation ▪ Forest superintendents seek to resolve stakeholder disputes informally by maintaining regular lines of communication with key stakeholder groups 	<ul style="list-style-type: none"> ▪ Signage could be improved and be more informative where public roads enter state forest property ▪ The general emphasis on stakeholder consultation is largely driven by Master Plan revisions and, thus, uneven across forest properties ▪ Public involvement methods are inconsistent during the long periods between plan development 	<p style="text-align: center;"><u>90</u></p>
<p>P3: Indigenous Peoples' Rights</p>	<ul style="list-style-type: none"> • Some forest superintendents manifest a strong sensitivity to tribal interests and take extra measures to maintain open lines of communication • Forest managers and field foresters demonstrate a commitment to avoiding impacts to tribal resources (e.g., burial sites) found on 	<ul style="list-style-type: none"> • The level of affirmative effort to forge active and open lines of communication could be more consistent across forest properties • Not all forest property managers regularly 	<p style="text-align: center;"><u>90</u></p>

	<p>state forest properties</p> <ul style="list-style-type: none"> • To varying degrees, forest managers manifest a strong mindset of sensitivity towards tribal cultural resources • As appropriate, confidentiality of tribal resources is maintained 	<p>conduct archeological database searches</p>	
<p>P4: Community Relations & Workers' Rights</p>	<ul style="list-style-type: none"> • Despite the lack of a formal program/policy, timber sales span the range from small to large, thus affording opportunities for small, typically local contractors to bid on state timber sales • There is a long average tenure of DNR employment, indicating that the quality of work life (compensation, work hours, job security, intangibles, etc.) is favorable compared to other employment opportunities • Virtually all logging contractors have received logger training, such as through FISTA • The DNR has provided substantial support (speakers, sites for training) for logger training programs • As DNR employees are unionized, the right to organize is clearly demonstrated • DNR demonstrates a pattern of utilizing sensitive, appropriate, and graduated mechanisms for resolving disputes with logging contractors • Particularly in the context of Master 	<ul style="list-style-type: none"> • There is no formal program to structure timber sales for small bidders • Small bidders report an increasingly competitive bidding market • DNR timber sale contracts do not explicitly require that employees of contractors (loggers) are protected by all state and federal labor laws regarding discrimination, wages, benefits and other conditions of employment • While the logging company owners have received logger training (including safety and BMPs), their employees generally have not • For state forests not 	<p style="text-align: center;"><u>86</u></p> <ul style="list-style-type: none"> • CAR 2004.1 • CAR 2004.2

	<p>Planning, DNR employs mechanisms for consulting with people and groups directly affected by management operations on the state forests</p> <ul style="list-style-type: none"> • There is a social impact assessment process that is undertaken in advance of a Master Plan revision 	<p>presently undergoing or preparing to under a Master Plan revision, the level of formal/structured interaction with stakeholder groups is much lower—reliance on <i>ad hoc</i> methods</p> <ul style="list-style-type: none"> • 	
<p>P5: Benefits from the Forest</p>	<ul style="list-style-type: none"> ▪ DNR is clearly a long-term manager, and the state forests are clearly a stable ongoing presence in Wisconsin forest land management ▪ DNR managers and field foresters place a strong emphasis on utilization and value recovery during timber sales ▪ Annual sales include some of small enough size to enable successful bidding by small contractors ▪ DNR is clearly managing for the full suite of forest products and services ▪ Actual harvest levels are non-depletionary (i.e., harvest is less than periodic increment) and generally well below calculated allowable levels (roughly 60% of allowable levels, system wide) 	<ul style="list-style-type: none"> ▪ The state legislature has not maintained DNR, Division of Forestry, funding at adequate levels to fully support the full suite of programs and responsibilities ▪ There is relatively little secondary wood processing activity in the northern part of the state, meaning much of the value-added benefits accrue in the Green Bay-Milwaukee corridor rather than in the regions where the forests are located ▪ 	<p style="text-align: center;"><u>87</u></p> <ul style="list-style-type: none"> • CAR 2004.3

	<ul style="list-style-type: none"> ▪ Rotation lengths are keyed towards biological rather than financial optimums and are generally 10-15 years longer than industrial norms for the region 		
P6: Environmental Impact	<ul style="list-style-type: none"> ▪ DNR manages the State Forests to a high level of environmental protection. ▪ Forest staff work diligently to reduce or eliminate environmental affects of activities and routinely seek out specialist input. ▪ Contract provisions are in place for quick reaction to environmental events to reduce onsite impacts. 	<ul style="list-style-type: none"> ▪ Reduced budgets remain a concern especially when related to managing a vast transportation system and a growing invasive species problem. 	<p style="text-align: center;"><u>90</u></p> <ul style="list-style-type: none"> • CAR 2004.4
P7: Management Plan	<ul style="list-style-type: none"> ▪ Each Forest has a prepared Plan. ▪ DNR field personnel demonstrate a high level of competence and currency of knowledge about forest management ▪ A wide range of quality assessments is supporting the process being used to update Plans. ▪ DNR staff are working hard to bring the public into the planning process and 	<ul style="list-style-type: none"> ▪ Several Forests are operating with Plans that are more than 20 years old and are not yet scheduled to begin a revision process. ▪ Master Planning does not appear to be a high priority within the DNR 	<p style="text-align: center;"><u>85</u></p> <ul style="list-style-type: none"> • CAR 2004.5 • CAR 2004.6

	<p>planning documents are readily available.</p>		
<p>P8: Monitoring & Assessment</p>	<ul style="list-style-type: none"> ▪ The RECON system is an effective mechanism for tracking stand conditions such as stocking levels, growth rates, etc. ▪ DNR is very active in tracking changes in major habitat elements and in the occurrence of sensitive, rare, threatened or endangered species or communities ▪ DNR can accurately provide production/harvest data by species, location and date, which is critical to the overall CoC reconciliation of certified product sourced from the state forests 	<ul style="list-style-type: none"> ▪ DNR is not measuring performance against their own “criteria & indicators of sustainable forest management” which were developed some years ago ▪ The 1998 Master Plan Monitoring document, which provides an overview of the three types of plan monitoring that is supposed to be undertaken, is not being implemented ▪ DNR has failed to request monies for Master Plan monitoring, striking that line item from recent budget packages prior to submittal to the legislature 	<p style="text-align: center;"><u>85</u></p> <ul style="list-style-type: none"> • CAR 2004.7 • CAR 2004.8

<p>P9: Maintenance of High Conservation Value Forest</p>	<ul style="list-style-type: none"> ▪ Numerous assessments have been conducted that address or are relevant to resources of high conservation value ▪ Management plans are consistently oriented towards maintaining important attributes and resource values 	<ul style="list-style-type: none"> • Generally, there is inadequate attention paid to monitoring the effectiveness of measures employed to maintain identified high conservation values on the state forests 	<p style="text-align: center;"><u>83</u></p> <ul style="list-style-type: none"> • CAR 2004.9
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3.2 CERTIFICATION RECOMMENDATION AND JUSTIFICATION

As determined by the full and proper execution of the SCS *Forest Conservation Program* evaluation protocols, the evaluation team recommends that the Wisconsin State Forests, as managed by the Wisconsin Department of Natural Resources, be awarded FSC certification with specified Corrective Action Requests. This recommendation is based upon the audit team's finding of no major non-conformances with the 10 FSC Principles of Forest Stewardship.

Peer Reviewers

After first undergoing review by DNR, the following peer reviewers were engaged to provide technical comment on the review draft of this evaluation report:

Dr. John Kotar, University of Wisconsin

Dr. John Bliss, Oregon State University

The evaluation team carefully considered the comments provided by the peer reviewers and made changes, as deemed appropriate, in response to those comments. The peer review comments are the personal professional opinions of the experts that submit comments and do not constitute the opinions or positions of the organizations with whom they are employed.

3.4 PROPOSED CORRECTIVE ACTION REQUESTS (CARs) ATTACHED TO CERTIFICATION

CAR 2004.1: Implement Advice from DNR Attorneys re Standard Contract Language

Within 4 months of award of certification, DNR must complete a consultative process with departmental attorneys regarding the statutory authority to modify the standard timber sale contract language to include express terms stating that contractors must comply with all applicable worker safety and labor relations (e.g., collective bargaining) regulations. A memorandum must be conveyed to SCS summarizing the legal opinions and, if appropriate, the standard contract language must be modified within two months of the date of the memorandum submitted to SCS.

CAR 2004.2: Institute Tactical-Level Mechanisms for Stakeholder Input

Over the course of the first year after award of certification, DNR must undertake an assessment of new or expanded mechanisms for soliciting stakeholder input with regard to decisions not addressed in the Master Plans or for providing mid-iteration input on Master Plan-level decisions on state forest units with Master Plans older than 5 years.

CAR 2004.3: Take Actions to Accelerate the Rate of Reduction of the RECON Backlog

By the time of the first annual audit after award of certification, DNR must develop and make substantial progress in implementing an *action plan* for accelerating the rate by which the RECON backlog is reduced. Thirty-days prior to the first annual audit, DNR shall submit to SCS a brief

status report on progress made in eliminating the RECON backlog.

CAR 2004.4: Explore Opportunities for Greater Attention to Road Maintenance

Over the first year after award of certification, DNR must undertake a focused inquiry into opportunities for enhancing the overall level of maintenance on the state forest road network. As part of this inquiry and follow-up actions, DNR must develop written and preferably quantitative guidelines for defining the limits of acceptable rutting on roads and trails. A brief report on progress made must be conveyed to SCS prior to the first annual audit.

CAR 2004.5: Institute Interim Measures for Maintaining Currency of Operational Components of the Master Plans

By the time of the first annual audit after award of certification, DNR must make substantial progress in developing and implementing protocols for updating key operational components of the Master Plans for state forest units that will not be undergoing a full re-planning within the next 5 years.

CAR 2004.6: Take Steps to Assure that Employees of Logging Companies Receive Adequate Training

Over the first year after award of certification, DNR must develop—in collaboration with its logging contractors and other relevant organizations—mechanisms or programs aimed at improving the overall level of BMP and safety training received by woods workers (i.e., employees of logging contractors).

CAR 2004.7: Begin to Assess Performance Against DNR’s “Criteria & Indicators of Sustainable Forest Management”

By the time of the first annual audit after award of certification, DNR must make substantial progress in designing and implementing protocols for annually assessing management of the State Forests against its own Criteria and Indicators of Sustainable Forest Management.” DNR must take all actions within its control aimed at having the protocols fully operational by the time of the second annual audit, with a fully functional assessment report issued by the time of the third annual audit after award of certification.

CAR 2004.8: Demonstrate a Commitment to Implementing DNR’s Policies on Master Plan Monitoring

By the time of the first annual audit after award of certification, DNR must make substantive progress in implementing its existing policies on Master Plan monitoring. Prior to the first annual audit, DNR must convey to SCS a briefing report on steps taken and progress made in making the Master Plan monitoring process fully operational.

CAR 2004.9: Develop a Written Crosswalk between HCVF Requirements found in P.9 and DNR's Approach to Identifying and Managing Areas of High Conservation Value

To be completed by the time of the first annual audit after award of certification, DNR must develop a written cross-reference guide (i.e., a "crosswalk") that provides an express description of how DNR conforms to each of the affirmative analytical and consultative requirements concerning forest areas of high conservation value, as set forth in Principle 9 of the FSC Lake States Regional Standard. The written cross-reference guide is to be posted on the DNR web-site upon its completion.

4.0 SURVEILLANCE AUDITS

If certification is awarded, the first surveillance audit will be conducted approximately one year from the date of initial certification.

5.0 PUBLIC INFORMATION ABOUT THE FOREST MANAGEMENT PLAN AND MONITORING

As a public agency managing state-owned forest properties, the Wisconsin DNR makes publicly available a broad array of documents that collectively provide the content of the management plan and supporting assessment/analyses. Much of this documentary material is found on or can be ordered on the DNR's web site, at: <http://www.dnr.state.wi.us/>.

SECTION B. DETAILED RESULTS OF THE FULL EVALUATION

SECTION 1.0 DETAILED OBSERVATIONS & RESULTS

The findings and observations of the evaluation team are presented in this section, structured according to the 9 applicable FSC Principles. To follow are brief descriptions of each Principle and the team’s findings and judgments, disaggregated to the Criteria within each Principle.

SECTION 1.1 PRINCIPLE #1: COMPLIANCE WITH LAWS & FSC PRINCIPLES

This FSC Principle is elaborated through a set of 6 Criteria that focus on issues such as conformance to all applicable national and local laws and regulations, payment of legally prescribed fees, taxes and royalties, protections against illegal harvesting and other unauthorized activities, and demonstrating a long-term commitment to adhere to the FSC Principles & Criteria.

- 1.1 Forest management shall respect all national & local laws and administrative requirements**
- 1.2 All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid**
- 1.3 In signatory countries, the provisions of all the binding international agreements such as CITES, ILO conventions, ITTA, and Convention on Biological Diversity, shall be respected**
- 1.4 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.**
- 1.5 Forest management areas should be protected from illegal harvesting, settlement and other unauthorised activities**
- 1.6 Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria**

<i>Criterion</i>	<i>Strengths</i>	<i>Weaknesses</i>
C1.1 Legal Compliance Score: 85	<ul style="list-style-type: none"> • DNR personnel demonstrate a strong commitment to manage the state forests in conformance with “manual guidance” and underlying legal mandates • By policy, state-wide Best Management Practices for Water Quality are treated as mandatory for management of the state forests 	<ul style="list-style-type: none"> • BMP compliance and working knowledge of the BMP Field Manual is not consistent across State Forests

	<ul style="list-style-type: none"> • DNR specialists work closely with US Fish and Wildlife Personnel when actions may involve Federally listed species • Substantial formal and on-the-job training is undertaken to ensure that DNR foresters have excellent working knowledge of laws, regulations, and policies • Copies of laws, administrative rules, and handbooks are available via intranet; most foresters also maintain printed copies 	
<p>Findings: The audit team is impressed with the collective commitment of DNR staff to: a) understand the breadth and detail of state regulations/policies applicable to management of the State Forests and, b) assure conformance with these requirements. There is a notable commitment to following “manual guidance.” As well, DNR has a strong track record of transparency, as achieved through sharing public information, holding public meetings and following established procedures for public participation.</p> <p>Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C1.2 Payment of Fees</p> <hr/> <p>Score: 90</p>	<ul style="list-style-type: none"> • DNR internally audits their accounts payable performance • PILTs (payments in lieu of taxes) are systematically dispersed to local and county governments 	
<p>Findings: Relative to the one indicator elaborated in the Lake States Regional Standard, the SCS audit team concludes that DNR is operating at a high level with respect to payment of financial obligations to other entities.</p> <p>Accordingly, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C1.3 International Conventions</p> <hr/> <p>Score: 82</p>	<ul style="list-style-type: none"> • There is no observed evidence of non-compliance with relevant treaties and agreements 	<ul style="list-style-type: none"> • DNR staff do not appear to have a strong knowledge of relevant treaties and agreements

Findings: Similar to most—if not all—forest management entities operating in the U.S. that SCS has dealt with in the context of certification evaluations, international agreements and conventions do not have a noticeable day-to-day relevance to DNR and their management of the State Forests. While such agreements may have some degree of relevancy to DNR’s management of the State Forests, conformance is largely occurring in the absence of conscious consideration on the part of DNR personnel. While a more conscious and explicit understanding of potentially applicable international agreements and conventions would result in a higher score with respect to this Criterion, the audit team observed nothing to suggest non-conformance. And if legal issues related to Native American tribes are considered in the framework of this Criterion (while recognizing that Principle 3 is where indigenous peoples issues primarily reside), then the audit team is further satisfied to conclude that DNR is in conformance with this Criterion.

Accordingly, the team has assigned a score that connotes “conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

C1.4 Conflicts with the FSC P&C		
Not Scored		
Findings: As the Wisconsin DNR is not yet certified, it is premature to assess conformance to this Criterion.		
C1.5 Preventing Unauthorized Activities	<ul style="list-style-type: none"> • Roads are generally gated and/or bermed • Rangers (trained in law enforcement) actively oversee public use • Timber theft is apparently a very isolated and limited issue on the state forests and rangers and foresters carefully monitor log hauling operations • Managers regularly conduct field activities in or visit most portions of state forestlands 	<ul style="list-style-type: none"> • Illegal ATV use on the state forests is a growing problem • Boundary lines of the state forests are not marked on the ground • Illegal dumping of garbage and refuse is becoming a problem on some of the state forests
Score: 90		
Findings: There is only one <i>regional indicator</i> elaborated for this Criterion in the Lake States Regional Standard; and that indicator largely just restates the Criterion, itself.		
Based upon interviews with DNR personnel and external stakeholders, the audit team concludes that DNR is very committed to preventing illegal activities on the State Forests. As indicated in the “Strengths” column, above, DNR law enforcement rangers are well deployed throughout the State Forest administrative structure and collectively they have been quite competent in controlling illegal or un-permitted uses.		

Accordingly, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.		
C1.6 Commitment to the FSC P&C	<ul style="list-style-type: none"> • Though DNR has not, as yet, made a commitment to accepting FSC-endorsed certification, they have engaged the evaluation process in earnest and in a spirit of openness • DNR has the institutional capacity to keep the certifier readily informed about any changes in the boundaries of the State Forests or changes in management planning 	<ul style="list-style-type: none"> • DNR has not yet made a public statement in support of the FSC Principles & Criteria, such as on the departmental web site
Score: 80		
<p>Findings: This Criterion is further elaborated by one <i>regional indicator</i>, which is limited in its focus to notifying the certifier of any changes in ownership and/or management planning. On the positive side of the ledger, the SCS audit is very impressed with the earnestness and openness with which DNR has engaged the certification process. We are also quite confident that DNR has the capacity and willingness to keep SCS duly informed of any changes in the management of the State Forests, were they to be certified. We have also been informed that if DNR were to accept FSC-endorsed certification that they would be willing to make a public statement—such as on the DNR web site—expressing support for the FSC Principles & Criteria.</p> <p>But, largely, it is difficult to be more definitive at this point in the process than to say that there is no evidence to suggest that DNR is not/would not be in conformance with this Criterion.</p> <p>Accordingly, the team has assigned a score that connotes “marginal conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		

Overall Findings and Conclusions:

As indicated by the importance-weighted average score for this entire Principle (see below), DNR’s management of the Wisconsin State Forests is found to be in clear conformance. The bulk of scope of this Principle is on the extent to which a forest management operation is conducted in a legally responsible manner, and from that standpoint there is little doubt as to DNR’s overall performance. DNR appears to enjoy wide public acceptance as to the general validity of its management mandate and the manner in which it carries out that mandate, though there are certainly differences of perspective on individual policy matters. More importantly, DNR staff are widely committed to managing the state forests in conformance with what they understand their statutory and administrative (e.g., manual guidance) obligations to be.

The weakest aspect of DNR’s management program relative to this Principle is that DNR has not yet made a positive statement of commitment to the FSC P&C. But the audit team recognizes that at this point in the deliberative process, it is premature to expect DNR to make such an explicit commitment. We note that DNR has indicated that if they subsequently opt to accept FSC certification, they are prepared to make that express/public commitment to the P&C.

Corrective Action Requests:

The audit team has stipulated no CARs with regard to this FSC Principle.

Importance Weighted Aggregate Score for Principle 1:

Employing the PAIRWISE algorithm, the evaluation team assigned weights of relative importance for each of the 6 Criteria in this Principle. Under SCS’ accredited protocols, assignment of weights of relative importance is one means by which certification evaluations recognize and incorporate regional and sub-regional circumstances. In this case, the weights were designed to reflect the regional context in which the subject forest management unit is located:

FSC Principle #1: <i>Compliance with Laws and FSC Principles</i>	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
1.1	.32	85	84.5
1.2	.11	90	
1.3	.14	82	
1.4	--	--	
1.5	.15	90	
1.6	.28	80	

Applying the normalized weights of relative importance to the 5 assigned performance scores, and rounding to the nearest integer, leads to a weighted average score for the Principle of:

85

Per SCS protocols, and as this weighted average score is in excess of 80 points, acceptable overall conformance to this FSC Principle is confirmed.

SECTION 1.2 PRINCIPLE #2: TENURE AND USE RIGHTS/RESPONSIBILITIES

This FSC Principle, detailed through 3 Criteria, focuses on the long-term tenure and use rights to the land that is undergoing the certification evaluation. Forest managers seeking FSC-endorsed certification must establish clear and legal ownership or right to manage the defined forest area that is being evaluated. Customary use rights, if clearly demonstrated, must be appropriately honored.

- 2.1 Clear evidence of long-term tenure and forest use rights to the land (e.g. land title, customary rights, or lease agreements) shall be demonstrated**
- 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.**
- 2.3 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.**

<i>Criterion</i>	<i>Strengths</i>	<i>Weaknesses</i>
C2.1 Land Tenure Score: 92	<ul style="list-style-type: none"> There is no question as to the legal status of the forests in question as owned by the State of Wisconsin and in the statutory authority of DNR to manage the state forests Where timber sale units are laid out near the boundary of state forest property, the property line is located and marked with paint on boundary trees 	<ul style="list-style-type: none"> State forest property boundaries are generally not marked on the ground Signage could be improved and be more informative where public roads enter state forest property
<p>Findings: While there can be no doubt as to the long-term rights of the DNR to manage the Wisconsin State Forests, the two <i>regional indicators</i> elaborated in the Lake States Regional Standard address additional expectation for which DNR is not in as clear of conformance. In particular, it is expected that property boundaries are clearly identified on the ground prior to commencement of management activities. So, while DNR is in unquestionable conformance with the overall thrust of this Criterion, the audit team has reduced the score in response to one of the <i>regional indicators</i>.</p> <p>But overall, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
C2.2 Community Tenure and Use Rights Score: 91	<ul style="list-style-type: none"> A broad array of public uses of great social and regional economic interest/value are allowed and encouraged Forest managers are sensitive to and endeavor to facilitate, as appropriate, tribal customary uses/activities 	<ul style="list-style-type: none"> Modes and frequency of consultation with neighboring tribes is uneven, across forest properties The general emphasis on stakeholder consultation is largely driven by Master Plan revisions and, thus, uneven across forest properties

	<ul style="list-style-type: none"> • DNR managers pursue active interaction and consultation with user groups • The Master Planning process, on the forests undergoing plan revisions, has triggered a heightened and more structured level of stakeholder consultation 	
<p>Findings: The 2 <i>regional indicators</i> associated with this Criterion establish the following expectations: a) that legal and customary use rights are allowed when consistent with conservation and management planning objectives and, b) that forest managers consult with concerned groups when developing management plans and designing forest management activities. Collectively, the Criterion language, as well as the regional indicators, projects a sensitivity towards local communities and the derivation of benefit from forests located within the region. More specific to this Criterion, benefits to local communities are derived through maintenance and protection of local use rights.</p> <p>The term “local” can take on many different connotations including, in this instance, the entire State of Wisconsin. Taken either at that more macro scale or at the county level, the audit team concludes that the DNR affords the citizens of Wisconsin a full measure of their legally established use rights. Further, DNR is managing the State Forests so as to protect the resource for the benefit of future generations of citizens.</p> <p>Relative to the second of the two regional indicators, the audit team observes that consultation with concerned groups could be more systematic and not as dependent on the master planning process, as it is now.</p> <p>Balancing the observed strengths versus weaknesses, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C2.3 Resolving Land Use Disputes</p> <p>Score: 85</p>	<ul style="list-style-type: none"> • Forest superintendents seek to resolve stakeholder disputes informally by maintaining regular lines of communication with key stakeholder groups • Rangers involved in law enforcement oversight of harvesting operations, such as at NHAL, recognize that preventing violations through an active presence during logging as well as regular communications with loggers 	<ul style="list-style-type: none"> • Public involvement methods are inconsistent during the long periods between plan development • At present, DNR has not yet developed a SOP for duly informing SCS about any new and unresolved/ongoing disputes over tenure and use-rights

	is a better solution that pursuing legal sanctions after a problem occurs	
<p>Findings: Of most important note, the laws of the State of Wisconsin provide long-established avenues (e.g., the state courts) of recourse for citizens to air and resolve any grievances regarding tenure and use rights. But the first of two <i>regional indicators</i> for this Criterion also establishes an expectation that managers of certified forests attempt to resolve disputes through open communication, negotiation and/or mediation. With respect to this expectation, the audit team also concludes that DNR is in good overall conformance with respect to maintaining open lines of communication and a willingness to engage in negotiation rather than relying exclusively on civil and criminal litigation. Most notable is the general effort on the part of rank and file DNR employees—particularly those stationed in the field—to foster and maintain good relations with neighbors and user groups.</p> <p>Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		

Overall Findings and Conclusions:

As indicated by the importance-weighted average score for this entire Principle (see below), DNR’s management of the Wisconsin State Forests is found to be in very clear conformance.

Principle 2 focuses on tenure rights, both the rights of the certification applicant to manage the lands for which certification is being sought and the rights (legal and customary) of other parties to use the forest in question. With respect to DNR’s rights to manage the Wisconsin State Forests, there can be no question. The reader may wonder why such a self-evident question is even addressed in the certification evaluation process. The reason is found in the fact that FSC certification is global and in some lesser developed regions of the world, many entities claiming to have established rights to manage state-owned lands in fact do not.

With respect to the extent to which the legal and customary use rights of other parties, the audit team concludes that DNR is in very solid conformance with the expectations elaborated in the Lake States Regional Standard. Indeed, the audit team is impressed with the success in which DNR is managing to maintain a wide array of legal uses on the state forests and to keep to a minimum illegal or unauthorized uses.

With respect to mechanisms for resolving disputes over use and tenure rights, the audit team concludes that DNR is in adequate conformance with bottom-line expectation, but that there could be more formal and explicit protocols (administrative procedures) in place for resolving such matters short of utilizing the state and/or federal courts. Fortunately, the likelihood of significant tenure and use disputes is relatively low in this place and time.

Corrective Action Requests:

The audit team has stipulated no CARs with regard to this FSC Principle.

Importance Weighted Aggregate Score for Principle 2:

Employing the PAIRWISE algorithm, the evaluation team assigned weights of relative importance for each of the 3 Criteria in this Principle. Under SCS' accredited protocols, assignment of weights of relative importance is one means by which certification evaluations recognize and incorporate regional and sub-regional circumstances. In this case, the weights were designed to reflect the regional context in which the subject forest management unit is located

FSC Principle #2 <i>Tenure and Use Rights and Responsibilities</i>	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
2.1	.54	92	89.7
2.2	.16	91	
2.3	.30	85	
			89.7

Applying the normalized weights of relative importance to the 3 assigned performance scores, and rounding to the nearest integer, leads to a weighted average score for the Principle of:

90

Per SCS protocols, and as this weighted average score is in excess of 80 points, acceptable overall conformance to this FSC Principle is confirmed.

SECTION 1.3 PRINCIPLE #3: INDIGENOUS PEOPLES' RIGHTS

This FSC principle is concerned about the rights of indigenous peoples to own, use and manage their lands and territories. The criteria focus on issues such as tenure rights of indigenous people, protection of cultural sites, and compensation for traditional knowledge.

- 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.**
- 3.2 Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.**
- 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.**

3.4 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 shall be formally agreed upon with their free and informed consent before forest operations commence.

<i>Criterion</i>	<i>Strengths</i>	<i>Weaknesses</i>
C3.1 Control of Forest Management Not Scored		
Findings: As this evaluation does not pertain to management of tribally owned and/or controlled forestland, this Criterion is not relevant and, thus, not scored.		
C3.2 Protecting Tribal Resources and Rights Score: 93	<ul style="list-style-type: none"> Some forest superintendents manifest a strong sensitivity to tribal interests and take extra measures to maintain open lines of communication Forest managers and field foresters demonstrate a commitment to avoiding impacts to tribal resources (e.g., burial sites) found on state forest properties 	<ul style="list-style-type: none"> The level of affirmative effort to forge active and open lines of communication could be more consistent across forest properties
<p>Findings: The Lake States Regional Standard has established two <i>regional indicators</i> for this Criterion. The first indicator establishes an expectation that managers of certified forests <i>identify and contact</i> tribal groups having customary or legal use rights and to <i>invite their participation</i> in management planning. The second regional indicator states that managers of certified forests should <i>protect</i> tribal resources that may be affected by forest management activities. Based upon discussions with DNR field managers and staff as well as tribal representatives, the SCS audit team concludes that DNR demonstrates an appropriate level of sensitivity with regard to tribal resources located within the State Forests as well as the concerns and desires that neighboring tribes have with respect to those resources. While the team observed differing levels of sensitivity across individual properties, there were no observed instances where forest managers are simply failing to demonstrate an adequate level of consideration of tribal issues. Indeed, the audit team is well satisfied that, over the breadth of the Wisconsin State Forests, DNR managers endeavor to be highly sensitive to tribal resources and rights.</p> <p>Accordingly, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		

C3.3 Cooperative Identification of Cultural Resources	<ul style="list-style-type: none"> Wisconsin maintains a database of known archeological sites that is widely used by state forest managers 	<ul style="list-style-type: none"> Not all forest property managers regularly conduct archeological database searches
Score: 86	<ul style="list-style-type: none"> To varying degrees, forest managers manifest a strong mindset of sensitivity towards tribal cultural resources As appropriate, confidentiality of tribal resources is maintained 	<ul style="list-style-type: none"> Lack of consistency in property-level approach to tribal issues could reflect inadequate direction from Central Office Field personnel have not been trained, and thus rely on existing information rather than on their own substantial field presence to help find new sites

Findings: In the Lake States Regional Standard, this Criterion is elaborated with three *regional indicators* which establish these expectations of forest managers:

- Undertake systematic efforts to identify cultural, historic and religious sites and invite tribal participation in that process
- Consult with tribal representatives as to the appropriate means for protecting identified tribal resources
- Maintain confidentiality, as appropriate, regarding tribal resources

Based upon interviews conducted, it is the audit team’s judgment that DNR does conform to the basic thrust of this Criterion. That is, the audit team is satisfied that tribal resources located on the State Forests are not being inadvertently damaged due to negligence or insensitivity. But it is our sense that the manner in which DNR field personnel approach this responsibility is largely informal and subject to the general awareness level of the individual forest managers rather than being based upon detailed and affirmative direction from Central Office.

Considering the observed strengths and weaknesses relative to the text of the Criterion as well as the three regional indicators, the team has assigned a score that connotes “conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

C3.4 Compensation for use of Traditional Knowledge		
Not Scored		

Findings: As this evaluation does not pertain to management of tribally owned and/or controlled forestland, this Criterion is not relevant and, thus, not scored.

Overall Findings and Conclusions:

As indicated by the importance-weighted average score for this entire Principle (see below), DNR’s management of the Wisconsin State Forests is found to be in very clear conformance.

In that DNR is managing a forest estate that is not tribal land, only two of the four Criteria in this Principle apply. Those two Criteria (3.2 and 3.3) require that tribal use and tenure rights on the state forests are respected and preserved and that tribal resources found on the state forests are identified (in cooperation with tribal peoples) and appropriately protected. The audit team concludes that DNR, through the day-to-day commitment and sensitivity of its field managers and technical personnel, has forged reasonably viable working relations with neighboring and affected tribes and that traditional tribal uses on the state forests are recognized and respected. Likewise, the audit team is satisfied that DNR is committed to the identification and protection of tribal cultural resources found on the state forests. The extent of express cooperation with neighboring tribes in identifying cultural resources varies across state forest units but is generally found to be adequate, if not somewhat too informal.

Corrective Action Requests:

The audit team has stipulated no CARs with regard to this FSC Principle.

Importance Weighted Aggregate Score for Principle 3:

Employing the PAIRWISE algorithm, the evaluation team assigned weights of relative importance for each of the 4 Criteria in this Principle. Under SCS’ accredited protocols, assignment of weights of relative importance is one means by which certification evaluations recognize and incorporate regional and sub-regional circumstances. In this case, the weights were designed to reflect the regional context in which the subject forest management unit is located.

FSC Principle #3 <i>Indigenous Peoples' Rights</i>	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
3.1	--	--	89.5
3.2	.50	93	
3.3	.50	86	
3.4	--		

Applying the normalized weights to the 2 assigned performance scores, and rounding to the nearest integer, leads to a single weighted average score for this Principle of:

90

Per SCS protocols, and as this weighted average score is in excess of 80 points, acceptable overall conformance to this FSC Principle is confirmed.

SECTION 1.4 PRINCIPLE #4: COMMUNITY RELATIONS & WORKERS' RIGHTS

This FSC Principle, elaborated through 5 Criteria, addresses the effects of forest management on the well being of forest workers and local communities. The Criteria focus on issues such as: preferences for local employment, compliance with employee health and safety regulations, rights of workers to organize, completion of social impact assessments, and employee grievance resolution mechanisms. In short, this principle expresses the position that exemplary forest management must include a conscious sensitivity to the interests of the most directly impacted stakeholders: employees, contractors and local communities.

Forest management operations shall maintain or enhance the long-term social and economic well being of forest workers and local communities.

- 4.1 The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services**
- 4.2 Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families**
- 4.3 The rights of the 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)**
- 4.4 Management planning and operations shall incorporate the results of evaluations of social impact. Consultation shall be maintained with people and groups directly affected by management operations.**
- 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 livelihoods of local peoples. Measures shall be taken to avoid such loss or damage**

<i>Criterion</i>	<i>Strengths</i>	<i>Weaknesses</i>
C4.1 Local Benefits Score: 91	<ul style="list-style-type: none"> • Despite the lack of a formal program/policy, timber sales span the range from small to large, thus affording opportunities for small, typically local contractors to bid on state timber sales • There is a long average tenure of DNR employment, indicating that the quality of 	<ul style="list-style-type: none"> • There is no formal program to structure timber sales for small bidders • Small bidders report an increasingly competitive bidding market • DNR timber sale contracts do not explicitly require that employees of contractors (loggers) are protected by all state and federal labor laws regarding discrimination, wages, benefits and other conditions of

	<p>work life (compensation, work hours, job security, intangibles, etc.) is favorable compared to other employment opportunities</p> <ul style="list-style-type: none"> • Compared to circumstances in other regions, logging contractors consider their business situation to be reasonably viable • There is an active training and continuing education program for DNR employees • DNR is a state leader in contributing to public education about forestry • DNR considers key stakeholder groups (e.g., county governments, chambers of commerce) as “partners” and maintains active lines of communication, accordingly • Environmental education activities associated with state lands management are substantial and documents, signage, and displays were extremely well crafted. 	<p>employment</p> <ul style="list-style-type: none"> • No action is taken by DNR staff to assure that all persons hired by contractors are protected by all state and Federal labor laws, although the WI Department of Labor does conduct labor law checks. • Recent cost-of-living increases for DNR employees have been below actual price increases
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Findings: This Criterion is elaborated in the Lake States Regional Standard through 6 *regional indicators* that establish the following expectations:

- Employment and contracting opportunities do not discriminate against non-local workers
- Employment and contracts provide quality work opportunities
- Forest managers contribute to public education about forestry
- Forest managers participate in regional/local civic activities and invest in the local economies
- Salaries and hiring practices exceed prevailing local norms
- Forest managers assure that employees of contractors and sub-contractors are covered and protected by all applicable labor laws.

As enumerated in the observed strengths, above, the SCS audit team observes that the Wisconsin State Forests play a very important and positive role in rural, regional economies of the state. Through a suite of key services such as commercial timber production, outdoor recreation and habitat maintenance, the State Forests clearly are generating important opportunities for the citizens of Wisconsin and neighboring states, particularly Minnesota

and Illinois.

Compared to circumstances observed in other regions of North America (notably, the Maritime Region of Eastern Canada and northern Maine), woods workers (contractors and their employees) appear to be able to derive quality business opportunities on the State Forests. Interviews with contractors and their employees revealed generally very positive viewpoints towards DNR managers and the logging opportunities available on the State Forests.

With respect to DNR employees, there are some mixed circumstances. On the one hand, there has been a substantial reduction in the work force over the past decade or longer, due to budgetary shortfalls. On the other hand, the remaining/current workforce enjoys competitive compensation packages and attractive general working conditions. The audit team was impressed with the generally very positive demeanor and commitment to their jobs of the DNR employees with whom we interacted. Notably, there is a very long average tenure of the current DNR workforce. DNR employees can benefit from active training programs.

DNR employees appear to be very actively engaged within the communities in which they reside, around the state. With regard to agency-level rather than personal-level interaction with local communities with a stake in the affairs of the State Forests, we note that DNR managers endeavor to hold regular meetings with county and town representatives.

With respect to DNR contributions to public education about forestry and forest practices, we consider DNR’s performance to be clearly exemplary. School groups from primary schools through university classes regularly use the State Forests as “field laboratories.” Numerous university-level research projects are ongoing at any one time throughout the State Forests. In a very substantive sense, the State Forests are a public resource that contribute the general understanding of forestry in the upper Mid-West.

The most significant “weakness” relative to this Criterion is DNR’s tendency to not be adequately involved with or aware about the nature of work conditions for employees of logging contractors. For instance, the standard timber sale contract language does not expressly require that contractors’ employees are covered by all state and Federal labor laws regarding discrimination, wages, benefits and other conditions of employment.

But, on balance and over the breadth of the subject matters addressed within this Criterion, the audit team is highly impressed with the DNR’s approach to management of the State Forests. Accordingly, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

<p>C4.2 Compliance with Health & Safety Requirements</p>	<ul style="list-style-type: none"> • Timber sale contracts explicitly reference safety requirements • Virtually all logging contractors have received logger training, such as through FISTA 	<ul style="list-style-type: none"> • While the logging company owners have received logger training (including safety and BMPs), their employees generally have not
<p>Score: 85</p>		

	<ul style="list-style-type: none"> • The DNR has provided substantial support (speakers, sites for training) for logger training programs • The audit team observed logging machinery that is well maintained and operated safely 	
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Findings: This Criterion is elaborated in the Lake States Regional Standard through 1 *regional indicator* that establishes the following expectation:

- Forest managers and contractors develop and implement safety programs and procedures

The SCS audit team did not observe, during its field reconnaissance, circumstances where the health and safety of forest workers was receiving inadequate attention. DNR is an active supporter of and participant in logger training programs. Logging equipment was observed to be in generally well-maintained condition.

The most significant “weakness” relative to this Criterion is the spotty record of training for the employees of logging contractors. While every contractor we interacted with had participated in FISTA or equivalent training programs, virtually none of their employees had directly participated in such programs. While there has obviously been some effort taken by the contractors to pass on the training they have received to their employees, the audit team believes that there is considerable room for improvement.

But, on balance, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

C4.3 Rights to Organize	<ul style="list-style-type: none"> • As DNR employees are unionized, the right to organize is clearly demonstrated • DNR demonstrates a pattern of utilizing sensitive, appropriate, and graduated mechanisms for resolving disputes with logging contractors 	<ul style="list-style-type: none"> • Timber sale contracts do not explicitly require contractors to afford their employees the right to organize • There is no evidence that DNR has developed its own (or required of its contractors) culturally sensitive means of interacting with migrant workers employed in contracted activities on the state forests, such as silvicultural practices
Score: 82		

Findings: This Criterion is elaborated in the Lake States Regional Standard through 2 *regional indicators* that establish the following expectations:

- Forest workers (employees and contract employees) are free to associate regarding employment matters
- Forest managers and contractors develop culturally sensitive dispute resolution

mechanisms

With respect to this Criterion, the audit team observes a distinction between conformance with respect to DNR employees versus employees of contractors. For DNR employees, the right to organize is clearly well-established as all non-executive staff are unionized. But there is no such parallel assured right that is expressly or affirmatively required for employees of contractors. DNR rightly points out that the general employment laws of the State of Wisconsin do provide for such rights, but we do not see reliance on baseline legal frameworks to constitute exemplary conformance to this Criterion.

With respect to the availability and use of dispute resolution mechanisms, the audit team takes positive note of informal but effective efforts and strategies employed by DNR field personnel to assure that matters of public use and contractor activity are adequately overseen and, when conflicts arise, resolved. We did not, however, observe evidence that DNR has developed or sees the need for assuring that it can deal in a culturally appropriate manner with migrant workers that may work on the State Forests.

Observed weaknesses notwithstanding, the audit team is satisfied that DNR’s performance relative to this Criterion is adequate. Accordingly, the team has assigned a score that connotes “conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

<p>C4.4 Evaluation of Social Impacts Score: 86</p>	<ul style="list-style-type: none"> • Particularly in the context of Master Planning, DNR employs mechanisms for consulting with people and groups directly affected by management operations on the state forests • There is a social impact assessment process that is undertaken in advance of a Master Plan revision • Newsletters and annual meetings are positive but not, in and of themselves, sufficient 	<ul style="list-style-type: none"> • For state forests not presently undergoing or preparing to under a Master Plan revision, the level of formal/structured interaction with stakeholder groups is much lower—reliance on <i>ad hoc</i> methods • For forests not undergoing or preparing to under a Master Plan revision, the overall level of stakeholder consultation is not adequate • System-wide, there is an inadequacy with respect to stakeholder consultation regarding tactical (short-range) planning and decision-making processes • The tactical-level methods of stakeholder interaction that have been developed on Brule River State Forest need to be adopted on all state forests, and not wait upon the Master Planning process to institute these methods • The Master Planning does not include an accessible and affordable appeals process—filing a lawsuit appears to be the first formal avenue of recourse
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<p>Findings: This Criterion is elaborated in the Lake States Regional Standard through 5 <i>regional indicators</i> that establish the following expectations:</p> <ul style="list-style-type: none"> • Land owners are afforded fair and reasonable opportunities to provide input into land management decisions • Input is sought in identifying sites of archeological, historical or cultural significance • Feedback is solicited from affected stakeholders; significant concerns are duly addressed • Managers of mid-sized and large forests provide for public input into management planning • Managers of public forests must develop competent and effective consultation procedures <p>Cumulatively, these indicators suggest a forest management paradigm built upon active and structured solicitation and consideration of the viewpoints of affected stakeholders (e.g., neighbors, special interest groups). In the judgment of the audit team, DNR’s management of the state forests does indeed demonstrate an institutional and statutory mindset of transparency, participatory policy formation, and sensitivity to the diversity of public desires and expectations about how the state forests should be managed. We note that there has been a clear evolution in terms of the extent to which DNR manifests this paradigm and that this evolution is correlated with the Master Planning process. State forests that have recently undergone or are now undergoing the development of new Master Plans provide a clear contrast with respect to the extent and quality of stakeholder consultation, as compared to state forest units with older Master Plans. For instance, we consider the steps taken and procedures implemented as part of the Brule River Master Plan process to be in highest conformance to this Criterion and a model for all state forest units.</p> <p>While the audit team concludes that overall conformance to this Criterion across the 9 state forest units is demonstrated, we conclude that more effort must be undertaken with respect to tactical-level consultative processes. The point is that DNR is strongest with respect to strategic-level consultation in the context of Master Plan development. But Master Plans are developed only once every 10-15 years. The gap is in the day-to-day and year-to-year “tactical” management decisions that take place in these 10-15 year periods between Master Plan revisions. Accordingly, the audit team has stipulated a Corrective Action Request that asks DNR to develop improved procedures for soliciting public input outside of the Master Planning process.</p> <p>This specific deficiency notwithstanding, when considering the full breadth of this Criterion (as elaborated by the Lake States Regional Standard) the team has assigned a score that connotes “clear conformance.”</p>		
C4.5 Resolving Grievances	<ul style="list-style-type: none"> • As exemplified by the timber sale oversight approach 	<ul style="list-style-type: none"> • DNR does not place great emphasis on dispute resolution, as would be

Score: 82	<p>employed by law enforcement rangers on NHAL, DNR attempts to resolve issues and grievances through open communication and negotiation prior to legal/law enforcement action</p> <ul style="list-style-type: none"> • DNR field personnel try to actively interact with state forest users on a day-to-day basis, which helps to preempt most matters before they might rise to the level of a dispute 	<p>evidenced through a well-documented, state-wide formal system</p> <ul style="list-style-type: none"> • Liability insurance is not explicitly required of all contractors engaged in work on the state forests
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Findings: This Criterion is elaborated in the Lake States Regional Standard through 2 *regional indicators* that establish the following expectations:

- Managers attempt to resolve disputes and grievance through open communication and negotiation prior to legal action
- Forest managers and contractors have adequate liability insurance

Timber sales are generally the most likely activity to generate disputes or grievances. The DNR approach to designing, advertising, bidding, awarding, and supervising sales provides a well established, well regarded process to ensure fair treatment to all buyers and potential buyers. Contracts and associated sale documents are clear and well-organized. Important or unusual aspects of each project are emphasized in a summary document (Timber Sale Map and Prospectus). During operations, periodic inspections are made and documented. Loggers interviewed stated that DNR foresters were present often enough and provided clear and reasonable oversight and guidance. The overall approach pre-empts most disputes and resolves them quickly, when they do arise.

Beyond timber sales, DNR management and field personnel demonstrate a culture of openness with the wide variety of private citizens and organizations that derive services and products from the state forests. Field personnel are well integrated into the communities in which they work and live around Wisconsin. Likewise, field personnel endeavor to take opportunities, on a daily basis, to simply stop and converse with state forest users that they may come across during the course of a work day.

But while these informal/de facto mechanisms are indeed effective and responsive to this Criterion, we note that there are no administratively formal mechanisms in place short of the court system.

On balance, the team has assigned a score that connotes “conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

Overall Findings and Conclusions:

As indicated by the importance-weighted average score for this entire Principle (see below), DNR's management of the Wisconsin State Forests is found to be in clear conformance.

Across all five Criteria that elaborate this Principle, the audit team finds DNR to be in adequate to superlative conformance. With respect to the general expectation that the forest provide a full suite of benefits, particularly for people and businesses within the regions surrounding the forest, the audit team concludes that DNR's management of the state forests is quite exemplary. In contrast to similar public forest contexts elsewhere, the Wisconsin State Forests enjoy broad support from the many stakeholders that either use or claim an interest in the estate. That is not to say that there are not differences of opinion over the balancing of commercial uses, recreation uses and biological services. But overall, DNR is pursuing management directions that are responsive to the range of public desires and that provide for a full suite of direct and derived benefits.

As with Principle 2, DNR is weakest with respect to the expectation that it have formal methods for resolving disputes and grievances over how the state forests are managed. With respect to some user groups such as loggers and recreationists, the day-to-day interactions with DNR personnel provides a highly informal but largely effective means of resolving issues before they law enforcement actions. And with respect to long-term issues and policies, the public involvement mechanisms appurtenant to the Master Planning process provides a means for at least airing if not resolving of grievances and differences of perspective. But Master Plans are rewritten on (inappropriately) very long time intervals and during those intervals the mechanisms for public involvement are not nearly as well developed.

Corrective Action Requests:

The audit team has stipulated two CARs with regard to this FSC Principle:

CAR 2004.1: Implement Advice from DNR Attorneys re Standard Contract Language

Within 4 months of award of certification, DNR must complete a consultative process with departmental attorneys regarding the statutory authority to modify the standard timber sale contract language to include express terms stating that contractors must comply with all applicable worker safety and labor relations (e.g., collective bargaining) regulations. A memorandum must be conveyed to SCS summarizing the legal opinions and, if appropriate, the standard contract language must be modified within two months of the date of the memorandum submitted to SCS.

CAR 2004.2: Institute Tactical-Level Mechanisms for Stakeholder Input

Over the course of the first year after award of certification, DNR must undertake an assessment of new or expanded mechanisms for soliciting stakeholder input with regard to decisions not addressed in the Master Plans or for providing mid-iteration input on Master Plan-level decisions on state forest units with Master Plans older than 5 years.

Importance Weighted Aggregate Score for Principle 4:

Employing the PAIRWISE algorithm, the evaluation team assigned weights of relative importance for each of the 6 Criteria in this Principle. Under SCS' accredited protocols, assignment of weights of relative importance is one means by which certification evaluations recognize and incorporate regional and sub-regional circumstances. In this case, the weights were designed to reflect the regional context in which the subject forest management unit is located

FSC Principle #4 <i>Community Relations and Worker's Rights</i>	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
4.1	.25	91	85.9
4.2	.25	85	
4.3	.11	82	
4.4	.22	86	
4.5	.17	82	

Applying the normalized weights to the 5 assigned performance scores, and rounding to the nearest integer, leads to a single weighted average score for this Principle of:

86

Per SCS protocols, and as this weighted average score is in excess of 80 points, acceptable overall conformance to this FSC Principle is confirmed.

SECTION 1.5 PRINCIPLE #5: BENEFITS FROM THE FOREST

This FSC Principle addresses several loosely related issues such as efficiency in the use of forest products, financial viability of the forest management operation, and diversity of environmental and social benefits from forest management. Principle 5 is elaborated through 6 Criteria. Of note, Criterion 5.6 requires that the rate of harvest not exceed levels that can be permanently sustained, perhaps one of the most focused and specific requirements found throughout the P&C. The other 5 Criteria within this principle address matters such as balancing financial objectives with full cost accounting (including environmental costs), optimal use of harvested products and local processing, minimization of waste and residual stand damage, diversification of products from the forest, and protection of forest services such as watershed functions and fisheries values.

- 5.1 Forest management should strive towards 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.
- 5.2 Forest management and marketing operations should encourage the optimal use and local processing of the forest’s diversity of products.
- 5.3 Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.
- 5.4 Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.
- 5.5 Forest management operations shall recognize, maintain and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.
- 5.6 The rate of harvest of forest products shall not exceed levels which can be permanently sustained.

<i>Criterion</i>	<i>Strengths</i>	<i>Weaknesses</i>
C5.1 Economic Viability Score: 84	<ul style="list-style-type: none"> • DNR is clearly a long-term manager, and the state forests are clearly a stable ongoing presence in Wisconsin forest land management • The Master Plans demonstrate a long-term perspective to forest management • Management of the state forests benefits from the fiscal safety net of a dedicated revenue source, though even that source of funds is vulnerable • Very notably, timber harvest levels on the state forests are not dictated by fiscal or revenue generation motives • Timber sale revenues do not return to the source, further eliminating financial incentives to over-harvest the state forests 	<ul style="list-style-type: none"> • The state legislature has not maintained DNR, Bureau of Forestry, funding at adequate levels to fully support the full suite of programs and responsibilities • Staff shortages (both reduced FTEs and vacancies of still-funded FTEs) hinders DNR in fully executing its management responsibilities on the state forests • DNR has not demonstrated a clear commitment to securing funds for Master Plan monitoring • The mil tax is being raided for other program areas, to the detriment of the management of the state forests • There has been a four-fold decrease in road maintenance budgets

	<ul style="list-style-type: none"> • DNR is actively engaged in “capital investment” on the state forests, such as site preparation, planting, pre-commercial thinning, commercial thinning, information systems, management planning, and land acquisitions • Despite budget shortfalls, forest health has not yet been substantively compromised, but active management of the state forests has 	
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Findings: This Criterion is elaborated in the Lake States Regional Standard through 3 *regional indicators* that establish the following expectations:

- Forest managers demonstrably engage in long-term rather than short-term management
- The management plan is not compromised through short-term responses to financial exigencies
- Investments are sufficient to achieve management objectives and restore forest health and productivity

In the judgment of the audit team, there is no doubt as to the long-term perspective to the management of the Wisconsin State Forests. Of relevance:

- Harvest levels are not depletionary
- Prompt and successful regeneration after final harvests is a priority
- Harvest levels are not driven by short term exigencies and pressures
- The dedicated revenue source for forestry (0.2% real estate tax) is a stable and generates an assured revenue stream
- Harvest revenues do not return to source forests, removing incentives to overcut for revenue
- Investments, to the extent that there are funds available, in developing updated Master Plans demonstrates a long-term perspective.

The growing threat to the continuance of a long-term approach to management of the state forests is the eroding fiscal health of the DNR. As budgets have shrunk over the past several years, staffing levels and operating budgets have not kept pace with expanding work loads and management challenges. But these fiscally-induced challenges notwithstanding, the audit team must conclude that DNR is doing a very effective job of maintaining the viability of the management program for the state forests while endeavoring to minimize the disinvestments that budget shortfalls dictate.

On balance over the breadth of this Criterion, the team has assigned a score that connotes “conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

C5.2 Optimal Use and Local Processing	<ul style="list-style-type: none"> • DNR managers and field foresters place a strong emphasis on utilization and value recovery during timber sales • Annual sales include some of small enough size to enable successful bidding by small contractors • DNR executes non-timber forest product contracts such as for mossing operations, which primarily benefit small businesses • Permits are issued for white birch, bough cutting, and Christmas tree harvesting • Except for basswood pulpwood, all timber species harvested on the state forests have a commercial use • There is manual guidance for tribal gathering of non-timber forest products 	<ul style="list-style-type: none"> • There is relatively little secondary wood processing activity in the northern part of the state, meaning much of the value-added benefits accrue in the Green Bay-Milwaukee corridor rather than in the regions where the forests are located • NTFPs are not adequately addressed in the Master Plans
Score: 82	<p>Findings: This Criterion is elaborated in the Lake States Regional Standard through 3 <i>regional indicators</i> that establish the following expectations:</p> <ul style="list-style-type: none"> • Opportunities are provided for local value-added processing • Use of non-timber forest products is incorporated into the management plan • Markets are explored for commonly under-utilized forest products <p>The audit team observes a situation with respect to this Criterion where DNR effectively conforms to the regional indicators despite lacking formal policies and programs that formally assure such conformance. For instance, DNR doesn't have policies requiring that a portion of timber sales go to local processors or policies aimed at marketing under-utilized timber products. But a substantial proportion of timber products and non-timber products sourced from the state forests are processed locally/regionally. Likewise, DNR endeavors to find new markets for the products it offers for sale, in large part to ensure revenues over the long run. Further, it maintains of diversity of commercial activities on the state forests.</p> <p>Accordingly, the team has assigned a score that connotes "conformance" with this Criterion, as elaborated by the Lake States Regional Standard.</p>	
C5.3 Minimizing Waste	<ul style="list-style-type: none"> • Strong emphasis on utilization • Cull logs and tops are 	<ul style="list-style-type: none"> • DNR lacks a clear, quantitative policy on large woody debris retention

<p>Score: 86</p>	<p>marketed to firewood contractors, at least on some of the state forests</p> <ul style="list-style-type: none"> • Excellent avoidance of residual stand damage in partial harvesting operations • Low impact logging equipment is utilized • Mechanized logging equipment designed to ensure excellent utilization is commonly employed, apparently increasingly 	<ul style="list-style-type: none"> • There is a lack of consistent, clear standards for minimizing soil compaction and rutting
<p>Findings: This Criterion is elaborated in the Lake States Regional Standard through 3 <i>regional indicators</i> that establish the following expectations:</p> <ul style="list-style-type: none"> • In the process of removing commercial products, woody debris is left on the forest floor to maintain ecosystem functions • Loss/waste of merchantable forest products is minimized • Harvest practices minimize residual stand damage <p>These indicators collectively address the following underlying objective, in simple terms: managers of certified forests should seek to be efficient in the extraction of commercial forest products but not so efficient as to fail to leave wood debris needed for the biophysical benefit of the forest. With respect to this “dual obligation,” the SCS audit team notes somewhat split conformance regarding DNR’s management of the Wisconsin state forests. On the one hand, DNR clearly has been very successful in keeping loss/waste of merchantable products to a minimum during harvesting operations. As well, the audit team observed only very limited instances of unnecessary damage to residual trees during partial harvest operations. On the other hand, DNR’s focus on retention of woody debris within harvest units is not at the same level. While woody debris can be found to varying (and marginally adequate) levels in harvest units, retentions are not guided by numerical standards. But actual performance is more important than adequacy of policies and guidelines, and in that regard we consider DNR’s performance in retaining woody debris to be adequate if not optimal.</p> <p>Factoring both the efficiency and retention aspects of this Criterion, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C5.4 Diversity of Products and Benefits</p>	<ul style="list-style-type: none"> • DNR is clearly not pursuing strictly timber-centric forest management; to varying degrees, every state forest is 	

<p>Score: 95</p>	<p>actively managed for timber production, recreation (snowmobiles, camping, hiking, etc), hunting, fishing and specialty products (e.g., moss, Christmas trees, birch bark, firewood, edibles)</p> <ul style="list-style-type: none"> • Markets exist for a wide diversity of timber products across a wide range of species and product sizes, allowing managers to grow the best-adapted species without undue concern for marketability 	
<p>Findings: This Criterion is elaborated in the Lake States Regional Standard through 1 <i>regional indicator</i> that establishes the following expectation:</p> <ul style="list-style-type: none"> • Management seeks to diversify forest products and uses while maintaining forest composition <p>In the judgment of the audit team, DNR’s policies and performance with respect to diversifying the suite of products of services produced on/derived from the Wisconsin state forests must be considered as superlative. For the reasons listed in the “Strengths” column of this table, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C5.5 Enhancing Forest Services</p> <p>Score: 93</p>	<ul style="list-style-type: none"> • DNR takes a notably conservative approach to watercourse buffers, especially along larger rivers • State forest management benefits from the active involvement of wildlife biologists, ecologists, naturalists and other specialists • DNR is clearly managing for the full suite of forest products and services • The IDT process is a strongly integrated approach, assuring input from many technical viewpoints 	<ul style="list-style-type: none"> • Most environmental organizations have a concern over what they believe to be inadequate attention to interior habitats and the species reliant on interior habitat conditions
<p>Findings: The Lake States Regional Standard contains no <i>regional indicators</i> for this Criterion.</p> <p>Like the prior Criterion, the audit team is very impressed with the extent to which DNR management policies and practices for the state forests have recognized and maintained a very diverse array of forest services (e.g., outdoor recreation, habitat and biodiversity,</p>		

watercourse buffers) and products, but timber and non-timber products. In clear and favorable contrast with the norm on most industrial forest holdings, the Wisconsin state forests are managed in a manner where the generation of revenue is not the dominant driver that results in the sacrifice of non-commercial aspects of the forest.

Accordingly, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

<p>C5.6 Rate of Harvest</p>	<ul style="list-style-type: none"> • The area control approach to forest regulation that is employed by DNR is relatively simple and straightforward and an appropriate approach, in the judgment of the audit team • Actual harvest levels are non-depletory (i.e., harvest is less than periodic increment) and generally well below calculated allowable levels (roughly 60% of allowable levels, system wide) 	<ul style="list-style-type: none"> • Though actual harvest levels are comfortably below sustainable levels, the calculated annual allowable harvest levels are substantially unrealistic • The allowable harvest calculation process is apparently being used as a “budgetary messaging” tool rather than an exercise in generating realistic and attainable harvest targets
<p>Score: 85</p>	<ul style="list-style-type: none"> • Allowable harvest levels computed with the RECON model, and expressed in terms of acres to be harvested per year but harvest type (regen, thin) are based upon measured and estimated growth, regeneration data, stocking levels, site index, etc. • Rotation lengths are keyed towards biological rather than financial optimums and are generally 10-15 years longer than industrial norms for the region • RECON is an effective stand treatment prioritization algorithm • Salvage harvest activity is integrated into the RECON-based allowable harvest calculation process • Investments in research to better understand relationships between habitat types and growth by funding enhanced 	<ul style="list-style-type: none"> • There is a very substantial backlog of stands scheduled by RECON for reconnaissance and possible harvest that have not been examined, due to budget shortfalls; the longer this backlog persists, the less relevant and viable is the nominal allowable harvest level • Some forest units have done a good job of downward adjusted their harvest targets to reflect the backlog of untreated stands • Not every forest is employing RECON to an appropriate degree for guiding timber management activities

	FIA plots (statewide)	
<p>Findings: This Criterion is elaborated in the Lake States Regional Standard through 3 <i>regional indicators</i> that establish the following expectations:</p> <ul style="list-style-type: none"> • Harvest levels are based upon growth and regeneration data, site index, soil classification and desired future conditions • Harvest levels during any 10-year period are less than net growth over the same time period • Allowable harvest levels are recalculated after catastrophic events that necessitate higher than anticipated salvage harvests <p>Although data on the rate of harvests is collected systematically and thoroughly, inventory information is not updated as often as desired. The forest is not currently regulated, and efforts are being made to move the forest towards a more fully-regulated age-class distribution. Efforts to adjust age-class imbalances are hindered somewhat by inventory and treatment backlogs, which persist due to a fiscally-driven lack of key field personnel. But these shortcomings aside, there is no doubt whatsoever that current and contemplated harvest levels are well below the biological capacity of the state forests. That is, harvest levels are well below maximum sustained yield levels.</p> <p>Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		

Overall Findings and Conclusions:

As indicated by the importance-weighted average score for this entire Principle (see below), DNR’s management of the Wisconsin State Forests is found to be in clear conformance.

With respect to expectations found within this Principle to strive towards optimal use of forest products and to contribute to the diversification of the regional economies, the audit team concludes that DNR demonstrates a high level of competence. With respect the maintenance of forest services such as wildlife habitat and watershed protection, the audit team concludes that DNR policies and practices are fundamentally in conformance, though there are opportunities for improvement such as with respect to restoration of the pinery of northern Wisconsin and the recovery of late successional components throughout the state. With respect to the sustainability of the timber harvests, the audit team concludes that harvest levels on the state forests are relative conservative and, thus, non-depletory though the backlog of processing of stands in the RECON system introduces a not insignificant element of uncertainty.

With respect to minimizing waste and residual stand damage in the extraction of timber products, the audit team has observed exemplary practices.

The issue of economic viability, as addressed in Criterion 5.1, is always difficult to definitively assess in certification evaluations. The audit team is satisfied that DNR is “taking into account the full environmental, social, and operational costs of production” and that it is striving to utilize its shrinking budgets to maximum efficiency. The main issue is, in fact, that budgets are shrinking and that investments in the management of the forest are being reduced as a result. While the current situation can not yet be considered non-viable, continued reductions in personnel and operating budgets could lead to a circumstance where the management of the state forests would not be found to be in conformance with Criterion 5.1.

But overall and at this point in time, the audit team concludes that DNR’s management of the Wisconsin State Forests is in solid conformance with the breadth of this Principle.

Corrective Action Requests:

The audit team has stipulated one CAR with regard to this FSC Principle:

CAR 2004.3: Take Actions to Accelerate the Rate of Reduction of the RECON Backlog

By the time of the first annual audit after award of certification, DNR must develop and make substantial progress in implementing an *action plan* for accelerating the rate by which the RECON backlog is reduced. Thirty-days prior to the first annual audit, DNR shall submit to SCS a brief status report on progress made in eliminating the RECON backlog.

Importance Weighted Aggregate Score for Principle 5:

Employing the PAIRWISE algorithm, the evaluation team assigned weights of relative importance for each of the 6 Criteria in this Principle. Under SCS’ accredited protocols, assignment of weights of relative importance is one means by which certification evaluations recognize and incorporate regional and sub-regional circumstances. In this case, the weights were designed to reflect the regional context in which the subject forest management unit is located

FSC Principle #5 Benefits from the Forest	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
5.1	.21	84	87.2
5.2	.11	82	
5.3	.07	86	
5.4	.11	95	
5.5	.20	93	
5.6	.30	85	

Applying the normalized weights of relative importance to the 6 assigned performance scores, and rounding to the nearest integer, leads to a weighted average score for the Principle of:

Per SCS protocols, and as this weighted average score is in excess of 80 points, acceptable overall conformance to this FSC Principle is confirmed.

SECTION 1.6 PRINCIPLE #6: ENVIRONMENTAL IMPACT

This FSC Principle is elaborated by a set of 10 Criteria that focus on issues such as impact assessments, protection of listed species, biodiversity, reserve areas, streamside and wetlands buffers, erosion control, exotic species, chemical use, high conservation value forests, and forest conversions. Of all the FSC Principles, this one is the most expansive in scope, with an associated high level of emphasis on data and information collection and analysis. Collectively, the thrust of this principle encourages the maintenance and restoration of natural forest conditions.

- 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.**
- 6.2 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.**
- 6.3 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**
- 6.4 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.**
- 6.5 Written guidelines shall be prepared and implemented to: control erosion; minimise forest damage during harvesting, road construction, and all other mechanical disturbances; and protect water resources.**

- 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 Organisation Type 1A and 1B 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 minimise health and environmental risks.**
- 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.**
- 6.8 Use of biological control agents shall be documented, minimised, monitored and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.**
- 6.9 The use of exotic species shall be controlled and actively monitored to avoid adverse ecological impacts**
- 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.**

<i>Criterion</i>	<i>Strengths</i>	<i>Weaknesses</i>
C6.1 Impact Assessment Score: 89	<ul style="list-style-type: none"> • Where Master Planning is active, there is considerable effort engaged in the assessment of current conditions, both biophysically and socio-economically • Timber management prescriptions are designed to attain desired conditions, at the stand level; this is the fundamental purpose/orientation of the RECON model • Master Planning involves the formal elaboration and analysis of alternative courses 	<ul style="list-style-type: none"> • Where Master Planning isn't active (over half of the State Forests, particularly in the south), assessments of current condition are increasingly out of date • At the tactical/project level, the assessment of potential cumulative impacts is deficient

	<p>of action, at the strategic level</p> <ul style="list-style-type: none"> • At the project level, potential impacts to water resources are addressed in the Chapter 30 water quality permitting process • The 2460 timber sale form includes a narrative section that addresses potential environmental impacts • Advice is sought from local experts, both in and outside DNR, during Master Planning and project implementation • Management prescriptions clearly reflect long-term goals and desired future conditions • Overall, DNR manages the state forests to a high level of environmental protection 	
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Findings: There are four regional indicators associated with this Criterion that the audit team considered. Generally, these indicators relate to the use of assessments of environmental impacts in long range planning and project implementation. The DNR has clearly devoted extensive time and resources to developing a wide array of background assessments for recently completed and ongoing Master Plans. Unfortunately, limited efforts have gone into similar assessments on those State Forests that are yet to be scheduled for Master Plan updating. At the project level, a high degree of effort was demonstrated across all Forests to incorporate local expertise to help assess potential environmental impacts of proposed activities and incorporate alternative strategies if necessary. Specialists from outside the DNR as well as within the agency were contacted frequently and their input utilized. Clearly, the DNR is strongly committed to assessing potential environmental impacts their actions may have. Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

<p>C6.2 Listed Species</p>	<ul style="list-style-type: none"> • The Bureau of Endangered Resources plays an active and central role in the management of the State Forests • The NHI database is actively utilized on all forest units; locations of endangered species are kept confidential • DNR manages to a higher 	<ul style="list-style-type: none"> • The “deferral/consultation” protocol is not evenly used across all forest units • 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. •
<p>Score: 93</p>		

	<p>than mandatory level with respect to listed species, such as recognition and management for species of special concern</p> <ul style="list-style-type: none"> • The Endangered Resources Screening Guide document is actively used and helps to provide necessary identification and protection of endangered species • Biotic inventories are a positive contribution to environmental protection • Dike 17 wildlife refuge stands as an example of departmental effort to manage for wildlife on the state forests; likewise for other habitat areas and protective zones • The “deferral/consultation” protocols incorporate a notable level of conservatism to interim management prior to finalization of Master Plans • The Department has various respected species specialists on staff (e.g., wolf, eagle/osprey) • The Karner Blue Butterfly HCP is a positive indication of active consideration of an endangered species 	
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Findings: There are five regional indicators associated with this Criterion that the audit team considered. Collectively, these indicators speak to the ability of the forest manager to protect rare, threatened and endangered species and their habitats. Clearly, the DNR has displayed a genuine concern throughout the State Forest System for the protection and management of these species. The NHI database is a valuable resource that is in high use by forest managers. Managers work closely with specialists to coordinate management activities. Substantial time and resources have been placed on protecting and managing (ie. Karner Blue Butterfly) rare, threatened and endangered species as significant resources of the State Forests. Biotic inventories have been conducted along with ongoing Master Plans and the “deferral/consultation” protocol is in place on most State Forests to address potential impacts during Master Plan development. Accordingly, the team has assigned a score that

connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

<p>C6.3 Ecological Functions</p> <p>Score: 85</p>	<ul style="list-style-type: none"> • The CROG initiative on NHAL is commendable • A Departmental Old Growth Team was recently formed • Most harvest entries are aimed at stand improvement and/or addressing gaps in age class distributions • Over time, and in response to management interventions, forest conditions will be more capable of natural regeneration • Commendation: active efforts to restore white pine on NHAL and to maintain jack pine stands, largely using natural regeneration • Longer rotations help to provide mature forest conditions across the managed forest • The large tree initiative also helps to incorporate mature forest conditions in the managed forest • A robust process (documented on 2460) exists to develop silvicultural prescriptions that includes interdisciplinary review • Harvesting and planting decision clearly driven by biodiversity considerations and species maintenance • DOF actively collaborates with BER, DNR Wildlife Bureau and the F&WS • A substantial portion of the state forest estate is managed under all-aged silviculture • Field foresters, to varying degrees across the state 	<ul style="list-style-type: none"> • Timber sale contracts do not explicitly require contractors to afford their Efforts to develop stand prescriptions that can rely upon natural regeneration is somewhat variable across forest units • DNR has yet to solve the problems associated with excessive deer populations in portions of the state and, in some instances such as with respect to deer feeding and baiting may have exacerbated the problem • Employing a grid pattern for green leaf trees in a shelterwood or seed tree regeneration harvest does not mimic ecological processes • Snag/reserve tree policies could be more explicit, including numerical guides if not hard targets elaborated as “code standards” • Generally, there is inadequate attention paid to enhancing/improving habitat connectivity, particularly at the compartment level—the RECON model is not an effective means of addressing this issue • Inadequate attention to and not planning for large wood debris • Oversight of compaction/rutting is overly informal • Grinding bark and needles for shipment off site is generally not exemplary with respect to soil management, particularly on poorer sites. On the observed harvest operation in NHAL, the audit team acknowledges that DNR had determined the site not to be nutrient poor and that soil management considerations were part of the decision to conduct whole tree chipping • Salvage logging in the large blowdown in Flambeau (some years ago) appeared to be unduly motivated by economic rather than ecological considerations;
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	<p>forests, attempt to retain uncommon trees within harvest units</p> <ul style="list-style-type: none"> • Generally, responses to catastrophic events such as windfall show a reasonable degree of environmental restraint so as to not “heap insult upon injury” <p>Whole-tree harvesting is not employed on nutrient-poor sites</p>	<p>however, the audit team acknowledges that current policies, if followed, would not allow economic considerations to compromise ecological considerations</p>
<p>Findings: There are four regional indicators associated with this Criterion that the audit team considered. These indicators relate to the ability of the forest manager to maintain, enhance or restore ecological functions on the landbase. Clearly, DNR managers have a wide array of credible scientific information available for the resources that they manage. Strong efforts are being made to utilize silvicultural techniques that lead to a distribution of community types and age classes appropriate to each unit. The efforts to restore pine communities especially in the Northern Forests and retain uncommon species throughout the system are commendable. Herbivores, especially deer, are impacting the regeneration of plant species on the State Forests, a concern that is widespread among managers with little end in sight. Guidelines are not provided to managers to maintain snags, den trees and large woody debris yet consideration of these components is being incorporated at the project level. Overall, the audit team feels that DNR is doing a commendable job at addressing ecological concerns within the State Forests. Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C6.4 Representative Areas</p> <p>Score: 88</p>	<ul style="list-style-type: none"> • BER actively conducts analyses of the adequacy of the current network of reserve areas in Wisconsin • The deferral/consultation protocol helps to assure that areas that may later merit inclusion in the reserve system are not harvested prior to a proper determination • Many river corridors are managed as wilderness or natural areas <p>Biotic inventories have been conducted for all recent Master Plans and do an exemplary job of identifying unique and representative ecosystems</p>	<ul style="list-style-type: none"> • DNR has not produced a concise summary of the rationale used to determine the size and extent of representative samples (reserves) • Biotic inventories have not been completed for all properties

Findings: There are four regional indicators associated with this Criterion that the audit team considered. Generally, these indicators relate to the identification and protection of unique and representative ecosystems within the manager’s landbase. Obviously, the most recent Master Plans have had the benefit of extensive biotic inventories that clearly identify and prioritize representative ecosystems during the planning process. Interim protocols are in place to maintain potential sites until a final decision is made. Still hindering efforts is a lack of a complete biotic inventory for the entire State Forest System but staff works closely with BER personnel to reduce potential conflicts. Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

<p>C6.5 Environmental Guidelines</p>	<ul style="list-style-type: none"> • By Departmental policy, BMPs for erosion and sedimentation control are treated as mandatory • Logging damage to regeneration and residual trees is kept to minimum • As a general rule, harvesting is avoided on areas of very steep slopes such as inner gorges of rivers (e.g., along Flambeau River) • Timber sale contracts include clauses suspending or limiting operations during periods when impacts would occur and managers routinely suspend operations • Few new roads are constructed • Generally, DNR finds a good balance between allowing access and closing roads to avoid damage • Generally, aesthetic considerations play a prominent role in the design and execution of timber harvesting • Most timber sales are laid out so as to keep streams and rivers on the periphery, thereby avoiding/minimizing the need for stream crossings • Site preparation methods 	<ul style="list-style-type: none"> • In practice, knowledge of and conformity to the BMPs is uneven across forest units, with less attention paid to BMPs for issues beyond erosion and sediment control • Working knowledge of BMP’s amongst logging contractor employees is variable and indicative of inadequate training • Access to some forest roads is inadequately controlled, resulting in degradation of road surface condition through rutting • There is no active, coordinated program to reduce the road network through closure/abandonment of excess roads • There is a need for more structured procedures for prioritizing road maintenance projects • Road maintenance budgets have been drastically reduced in recent years
<p>Score: 82</p>		

	<p>generally balance soil disturbance concerns with the need for scarification for natural regeneration or site prep for planting (Brache scarifier)</p>	
<p>Findings: There are two regional indicators associated with this Criterion that the audit team considered. These indicators relate to the minimization of environmental impacts during management activities. The DNR has developed an excellent BMP handbook which includes a wide range of protection provisions. Training in BMP's has been provided to all field employees and many private contractors. However, limited training and knowledge in BMP's is being received by employees of the contractors who conduct most of the "on the ground" activities. Commendable examples were observed regarding the planning of sales to minimize site impacts and the efforts of staff to "do the right thing". However, the audit team is concerned that the transportation systems on at least some of the State Forests are inadequately controlled resulting in degradation of road surface conditions, especially by the general public. There was evidence that BMP's were not being applied uniformly across all units. But, on balance, the audit team felt that the DNR is striving to reduce environmental impacts of its actions on the State Forests. Accordingly, the team has assigned a score that connotes "conformance" with this Criterion, as elaborated by the Lake States Regional Standard. This assessment of overall conformance to the Criterion notwithstanding, the audit team has decided to utilize its discretionary prerogative to stipulate a Corrective Action Request that asks DNR to pursue greater efforts at road maintenance (see below).</p>		

<i>Criterion</i>	<i>Strengths</i>	<i>Weaknesses</i>
C6.6 Chemicals	<ul style="list-style-type: none"> • Despite the lack of a formal program/policy, timber sales span the range from small to large, thus affording opportunities for small, typically local contractors to bid on state timber sales • There is a long average tenure of DNR employment, indicating that the quality of work life (compensation, work hours, job security, intangibles, etc.) is favorable compared to other employment opportunities • Compared to circumstances in other regions, logging contractors consider their business situation to be reasonably viable • There is an active training and continuing education program for DNR employees • DNR is a state leader in contributing to public education about forestry 	<ul style="list-style-type: none"> • There is no formal program to structure timber sales for small bidders • Small bidders report an increasingly competitive bidding market • DNR timber sale contracts do not explicitly require that employees of contractors (loggers) are protected by all state and federal labor laws regarding discrimination, wages, benefits and other conditions of employment • No action is taken by DNR staff to assure that all persons hired by contractors are protected by all state and Federal labor laws, although the WI Department of Labor does conduct labor law checks. • Recent cost-of-living increases for DNR employees have been below actual price increases
Score: 85	<ul style="list-style-type: none"> • DNR considers key stakeholder groups (e.g., county governments, chambers of commerce) as “partners” and maintains active lines of communication, accordingly • Environmental education activities associated with state lands management are substantial and documents, signage, and displays were extremely well crafted. 	
<p>Findings: There are five regional indicators associated with this Criterion that the audit team considered. The indicators focus on the use of an integrated pest management system to reduce the use of chemical pesticides. The audit team is convinced that the DNR has implemented a wide ranging integrated pest management approach and clearly limits its use of chemicals in the field. Efforts are being made to reduce the anticipated effects of gypsy</p>		

moths through silvicultural treatments. Some chemicals used in the DNR seed orchards are prohibited by the FSC. All Forests have licensed applicators, however, in many instances these licenses have lapsed. Of concern is the backlog of stands needing treatments that may lead to an increase in susceptibility to pests and pathogens. Accordingly, the team has assigned a score that connotes “conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

C6.7 Chemical Disposal	<ul style="list-style-type: none"> • Logging equipment operators are trained to quickly contain hydraulic fluid leaks/spills • Timber sale contracts include provisions for proper off-site disposal of fluids such as motor oil and hydraulic fluid • Logging equipment observed in the field was well maintained 	
Score: 89		

Findings: There are four regional indicators associated with this Criterion that the audit team considered. The audit team found no evidence of improper disposal of chemicals, lubricants on any of the many sites visited. All contracts include provisions for disposal of fluids and logging equipment was being well maintained by the operators. Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

C6.8 Bio-Agents & GMOs	<ul style="list-style-type: none"> • No use of GMOs on the state forests • Biological control agents are used to control purple loose strife and gypsy moth, but guided by a well-developed strategy and employing the resources of the forest pest management staff • Outreach efforts have been successful in garnering support and even cooperation for the use of biological agents 	
Score: 93		

Findings: There is one regional indicator associated with this Criterion that the audit team considered. The indicator focuses on the use of biological agents in a pest management program. The DNR is not using any GMO’s on the State Forests but is a leader in efforts to use proven biological control agents to counter invasive species even beyond the reaches of the State Forests. Accordingly, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

C6.9	<ul style="list-style-type: none"> • There is a Departmental policy to not plant exotic species, including on plantation sites • Non-invasive grass seed mixes that include exotic varieties are used but with oversight and approval of a staff ecologist • Where invasive exotic understory species are already established efforts are made to reduce or eliminate them as part of silvicultural activities, particularly regeneration treatments 	<ul style="list-style-type: none"> • There are still legacy stands of exotic plantations such as Norway spruce and Scotch Pine • There is insufficient funding devoted to the control of invasive exotic plants
Score: 88		

Findings: There are four regional indicators associated with this Criterion that the audit team considered. The DNR is clearly aware of the problems associated with exotic species introduction and has a policy not to intentionally introduce exotics. Despite limited budgets, efforts are being made on many of the State Forests to address the control of invasive exotics. Staff ecologists are consulted to discuss management options and limit the use of exotics. Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

C6.10 Forest Conservation	<ul style="list-style-type: none"> • Pine plantations are established only in old farm fields and, in very limited circumstances, in degraded forest areas • DNR takes affirmative steps to minimize sub-division of rural parcels adjacent to state forest properties • DNR is engaged in an active land acquisition program 	
Score: 95		

Findings: There are two regional indicators associated with this Criterion that the audit team considered. These indicators relate to the conversion of forests to non-forest land use. The DNR clearly seeks ways to reduce the conversion of forests through an active land acquisition program. Evidence was also provided where plantations were utilized after careful review to begin conversion of former agricultural land back to a forested condition. Accordingly, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

Overall Findings and Conclusions:

As indicated by the importance-weighted average score for this entire Principle (see below), DNR's management of the Wisconsin State Forests is found to be in very clear conformance.

This FSC Principle addresses a wide range of factors that potentially could have significant impacts to the conservation of biological diversity. Within all of the Criteria, the audit team has found the DNR's management of the State Forests to be in solid conformance with the Lake States Regional Standard.

Overall, the DNR manages the State Forests to a high level of environmental protection. Time and resources have been dedicated to assessing unique and representative species and communities prior to management actions. Forest staffs work diligently to reduce or eliminate environmental affects of activities and seek out specialist help from both within and outside the DNR. Contract provisions are in place for quick reaction to environmental events to reduce onsite impacts. Reduced budgets remain a concern especially when related to managing a vast transportation system and a growing invasive species problem.

Corrective Action Requests:

The audit team has stipulated one CAR with regard to this FSC Principle:

CAR 2004.4: Explore Opportunities for Greater Attention to Road Maintenance

Over the first year after award of certification, DNR must undertake a focused inquiry into opportunities for enhancing the overall level of maintenance on the state forest road network. As Part of this inquiry and follow-up actions, DNR must develop written and preferably quantitative guidelines for defining the limits of acceptable rutting on roads and trails. A brief report on progress made must be conveyed to SCS prior to the first annual audit.

Importance Weighted Aggregate Score for Principle 6:

Employing the PAIRWISE algorithm, the evaluation team assigned weights of relative importance for each of the 10 Criteria in this Principle. Under SCS' accredited protocols, assignment of weights of relative importance is one means by which certification evaluations recognize and incorporate regional and sub-regional circumstances. In this case, the weights were designed to reflect the regional context in which the subject forest management unit is located

FSC Principle #6 <i>Environmental Impact</i>	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
6.1	.15	89	
6.2	.11	93	
6.3	.18	85	
6.4	.10	88	

6.5	.07	82	89.8
6.6	.09	85	
6.7	.04	89	
6.8	.05	93	
6.9	.06	88	
6.10	.16	95	

Applying the normalized weights of relative importance to the 10 assigned performance scores, and rounding to the nearest integer, leads to a weighted average score for the Principle of:

90

Per SCS protocols, and as this weighted average score is in excess of 80 points, acceptable overall conformance to this FSC Principle is confirmed.

SECTION 1.7 PRINCIPLE #7: MANAGEMENT PLAN

This Principle is elaborated through 4 Criteria, which collectively call for a very high level of commitment to management planning as well as public transparency of at least a summary of the management plan.

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**

7.2 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 considerations.

7.3 Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plan.

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.

<i>Criterion</i>	<i>Strengths</i>	<i>Weaknesses</i>
<p>C7.1 Plan Content Score: 89</p>	<ul style="list-style-type: none"> • Each state forest is guided by a Master Plan • Each of the new Master Plans is supported by 8 focused analyses • Master Plans include a discussion of desired future conditions • Master Plans generally cover all of the subject areas enumerated in this Criterion • Master Plans include landscape-level considerations • Silvicultural prescriptions are guided by a Silviculture Handbook • The RECON constitutes a rationale for setting the rate of harvest, though the backlog compromises the integrity of the system • The selection of species for planting is ecologically based • Environmental assessments are strong at the landscape level • There are numerous planning documents that focus on rare, threatened and endangered species • DNR has excellent GIS-based mapping capability, with linkages to RECON • Timber sale contracts and other timber harvest plan documentation are relatively comprehensive and well-suited to communicating harvest goals and project requirements to the harvesting contractors 	<ul style="list-style-type: none"> • Some of the Master Plans are very much in need of updates • Some plan components are missing in the older Master Plans • The allowable harvest is not presented in the Brule River Master Plan • The manner in which the allowable harvest level has been updated at Flambeau is rather ad hoc • Brule River Master Plan contains virtually nothing on monitoring • Environmental assessments are relatively weak at the timber sale level • Harvesting machinery and techniques are (probably) not discussed in management planning documents • There is no reference in some timber sale contracts to complying with BMPs Note: I found references that BMP's would be followed in contracts on the Flambeau and NHAL.

	<ul style="list-style-type: none"> • Partial harvest timber sales are marked by DNR foresters 	
<p>Findings: There are nine regional indicators associated with this Criterion that the audit team considered. The indicators focus on the components of an effective management plan at both the Forest and project level. The DNR has made dramatic strides in improving its Master Planning process as shown with the content and analyses behind the most recently approved or ongoing plans. The new plans are supported by a wide range of assessments and inventories and cover all requirements of this Criterion. Of concern, however, is the lack of effort and resources being targeted at old Master Plans that are clearly out of date. Even the most recent Brule River Master Plan lacks an effective monitoring strategy. At the project level, environmental assessments are relatively weak but a review process is in place that incorporates an integrated review. Timber sale contracts are relatively comprehensive and effectively address environmental concerns. Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C7.2 Plan Revisions</p> <p>Score: 72</p>	<ul style="list-style-type: none"> • Current generation Master Plans are clearly an improvement on the old plans 	<ul style="list-style-type: none"> • The (nominal) 15-year re-planning cycle for Master Plans substantially exceeds optimal frequencies, as addressed in the Lake States regional standard; and the 15-year cycle is not being met, to make matters worse • DNR is only infrequently employing the Master Plan amendment process, despite the very long intervals between full rewrites of the plans • In the face of staff shortages, Master Planning does not appear to be a high priority • There are several dysfunctional aspects of the planning process (e.g., lack of adequate coordination with Bureau of Facilities & Lands) that are further drawing out the Master Plan revision process • NHAL Plan revision that began in 1991 is still not completed
<p>Findings: There is one regional indicator associated with this Criterion that the audit team considered. The indicator deals with the periodic revision of management</p>		

plans. It is obvious to the team that the new versions of Master Plans are a dramatic improvement over those of the past. However, the DNR is clearly not meeting the Lake States Regional Standard in its attempt to update these Plans. Several Forests are operating with Plans that are more than 20 years old and are not yet scheduled to begin the revision process. Master Planning does not appear to be a high priority by the DNR or resources would be provided to accelerate the process. Accordingly, the team has assigned a score that connotes “clear non-conformance” with this Criterion, as elaborated by the Lake States Regional Standard. And, per SCS protocols, the audit team must stipulate a Corrective Action Request aimed at raising conformance to this standard to adequate levels over a reasonable time period. The audit team has elected to stipulate a CAR regarding maintaining the currency of operational components of the Master Plans during the long time periods between Master Plans (see below).

<p>C7.3 Worker Training</p> <p>Score: 84</p>	<ul style="list-style-type: none"> • DNR field personnel demonstrate a high level of competence and currency of knowledge about forest management • DNR personnel participate in logger training programs • Logging contractors actively involved in BMP and safety training programs • Field staff appear to be familiar with current Master Plans and actively interested in those Plans being revised • A computerized system exists to track training for each employee, although the record-keeping is not always complete • There are many opportunities for training. New employees receive rigorous, diverse, and systematic training 	<ul style="list-style-type: none"> • BMP training for non-supervisory loggers is generally lacking • “On the job” training is relied upon for oversight of specialty activities such as sphagnum mossing in Black River • The complex organizational structure of the Bureau of Forestry creates some uncertainty regarding who field personnel (including superintendents) should go to for necessary advice, guidance and direction • Pesticide applicator licenses have largely lapsed • It is doubtful that logging contractor employees have a familiarity with the Master Plans
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Findings: There are two regional indicators associated with this Criterion that the audit team considered. The indicators focus on the knowledge and training of field personnel and workers in implementing the management plan. The audit team was impressed with the knowledge level of DNR field personnel whose job it is to properly implement the management plan. While contractors receive training, it was apparent to the audit team that non-supervisory workers had little or no training in BMPs. However, the team found no evidence that this is leading to negative impacts on the worksites. Accordingly, the team has assigned a score that connotes “conformance” with this Criterion, as elaborated by the Lake States Regional

Standard. This assessment of overall conformance to the Criterion notwithstanding, the audit team has decided to utilize its discretionary prerogative to stipulate a Corrective Action Request that asks DNR to take steps aimed at assuring better training for employees of contractors (see below).

C7.4 Public Summary	<ul style="list-style-type: none"> • As a state agency, all DNR planning documents are publicly available, not just summary documents • The DNR maintains a user friendly website providing information that is easily accessible • Planning meetings, open houses and newsletters are used to provide the public with updated planning information • Public planning meetings have been held across the state to reach more interested publics 	<ul style="list-style-type: none"> • Some stakeholders groups would like more ready access to GIS-based information
Score: 95		

Findings: There are two regional indicators associated with this Criterion that the audit team considered. The indicators focus on the availability of elements of the management plan. The DNR has done a commendable job of providing accessible information on Forest management planning to the public through a variety of avenues. As a public agency, state law requires this type of public disclosure and the DNR has exceeded expectations. Accordingly, the team has assigned a score that connotes “superlative conformance” with this Criterion, as elaborated by the Lake States Regional Standard.

Overall Findings and Conclusions:

As indicated by the importance-weighted average score for this entire Principle (see below), DNR’s management of the Wisconsin State Forests is found to be in conformance.

This FSC Principle addresses management plans and the overall planning process. With all but Criterion 7.2, the audit team has found the DNR’s management of the State Forests to be in solid conformance with the Lake States Regional Standard.

The non-conformance identified relates to the updating of outdated Forest Plans. Several Forests are operating with Plans that are more than 20 years old and are not yet scheduled to begin a revision process. Master Planning does not appear to be a high priority within the DNR despite some commendable efforts going on in recent Planning efforts. Staffing shortages were cited as a reason for these delays. A wide range of quality assessments is supporting the process being used to update the Brule River, NHAL and Peshtigo River Plans. DNR staff are working hard to bring the public into the planning process and planning documents appear readily available. The audit team was impressed with the knowledge level of DNR field personnel whose job it is to properly implement the management plans.

Corrective Action Requests:

The audit team has stipulated two CARs with regard to this FSC Principle:

CAR 2004.5: Institute Interim Measures for Maintaining Currency of Operational Components of the Master Plans

By the time of the first annual audit after award of certification, DNR must make substantial progress in developing and implementing protocols for updating key operational components of the Master Plans for state forest units that will not be undergoing a full re-planning within the next 5 years.

CAR 2004.6: Take Steps to Assure that Employees of Logging Companies Receive Adequate Training

Over the first year after award of certification, DNR must develop—in collaboration with its logging contractors and other relevant organizations—mechanisms or programs aimed at improving the overall level of BMP and safety training received by woods workers (i.e., employees of logging contractors).

Importance Weighted Aggregate Score for Principle 7:

Employing the PAIRWISE algorithm, the evaluation team assigned weights of relative importance for each of the 4 Criteria in this Principle. Under SCS’ accredited protocols, assignment of weights of relative importance is one means by which certification evaluations recognize and incorporate regional and sub-regional circumstances. In this case, the weights were designed to reflect the regional context in which the subject forest management unit is located

FSC Principle #7 Management Plan	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
7.1	.44	89	
7.2	.17	72	
7.3	.28	84	

7.4	.11	95	85.4

Applying the normalized weights of relative importance to the 4 assigned performance scores, and rounding to the nearest integer, leads to a weighted average score for the Principle of:

85

Per SCS protocols, and as this weighted average score is in excess of 80 points, acceptable overall conformance to this FSC Principle is confirmed.

SECTION 1.8 PRINCIPLE #8: MONITORING AND ASSESSMENT

As a conceptual and thematic companion to Principle 7, this Principle (elaborated through 5 Criteria) requires certified operations to engage in an aggressive and formal program of periodic monitoring of the impacts of management operations, focusing upon both bio-physical and socio-economic impacts as well as the extent of plan compliance.

- 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.**
- 8.2 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;**
 - e) Costs, productivity, and efficiency of forest management**
- 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”**
- 8.4 The results of monitoring shall be incorporated into the implementation and revision of the management plan**
- 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.**

<i>Criterion</i>	<i>Strengths</i>	<i>Weaknesses</i>
<p>C8.1 Monitoring Frequency and Intensity</p> <p>Score: 71</p>	<ul style="list-style-type: none"> • Several statewide monitoring/research projects are periodically carried out: <ul style="list-style-type: none"> ○ Invasive plants ○ Pests ○ Natural areas ○ Social impacts ○ Old growth ○ Forest health ○ Wildlife surveys • DNR leads and participates in state-wide BMP compliance monitoring • (Put in other column) 	<ul style="list-style-type: none"> • The 1998 Master Plan Monitoring document, which provides an overview of the three types of plan monitoring that is supposed to be undertaken, is not being implemented • DNR does not maintain a CFI on the state forests • DNR is not measuring performance against their own “criteria & indicators of sustainable forest management” which were developed some years ago • DNR has failed to request monies for Master Plan monitoring, striking that line item from recent budget packages prior to submittal to the legislature • There is no regular periodic monitoring at the state forest level, such as an annual “state of the forest” assessment and report • Most monitoring is issue driven and rather piecemeal rather than systematic and comprehensive
<p>Findings: There are three regional indicators associated with this Criterion that the audit team considered. The indicators focus on the development and implementation of monitoring plans. While the DNR is involved or has supported a variety of forest monitoring projects they fail to implement their own 1998 Master Plan Monitoring Guidelines and are not measuring performance against their own “criteria & indicators of sustainable forest management” which were developed some years ago. Monitoring activities identified in the Brule River Master Plan are simplistic and would be expected to do little to determine the effectiveness of the Plan. Monitoring is given a low priority in both the Master Planning process and on budget requests. Accordingly, the team has assigned a score that connotes “clear non-conformance” with this criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C8.2 Research and Data Collection</p>	<ul style="list-style-type: none"> • The RECON system, updated through various methods including 2460 forms for all harvests, is an effective mechanism for tracking stand conditions such as stocking levels, growth rates, etc. • DNR is very active in tracking 	<ul style="list-style-type: none"> • Active monitoring of BMP compliance that focuses exclusively on the State Forests is deficient • Monitoring of road conditions is too casual • RECON data updates are behind schedule • Stand level habitat elements (i.e. snags

<p>Score: 88</p>	<p>changes in major habitat elements and in the occurrence of sensitive, rare, threatened or endangered species or communities</p> <ul style="list-style-type: none"> • DNR carefully monitors costs and revenues of management in order to assess productivity and efficiency 	<p>and course woody debris) that are known to be impacted by active forest management are not monitored</p>
<p>Findings: There are five regional indicators associated with this Criterion that the audit team considered. The indicators focus on the use of research and data collection methods to monitor forest management activities. The DNR RECON system appears to be effective in tracking changes in forest growth and structure but is not being conducted at the planned 10-year schedule. Various surveys conducted by the DNR are providing valuable insight regarding changes in major habitat elements and the occurrence of rare species or communities. BMP monitoring is occurring but needs to focus on the State Forests to be more useful to managers. Overall, the DNR’s forestry program on the state forests is not highly intensive. Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C8.3 Chain-of-Custody Score: 90</p>	<ul style="list-style-type: none"> • The lock box system for submitting load/trip tickets is conscientiously implemented and enforced • DNR can accurately provide production/harvest data by species, location and date, which is critical to the overall CoC reconciliation of certified product sourced from the state forests 	<ul style="list-style-type: none"> • DNR does not yet have written procedures in place for assuring that all necessary reporting of timber sale information takes place
<p>Findings: Because DNR exclusively sells only standing timber on the State Forests, the chain-of-custody obligations that fall upon DNR are quite limited and largely pertain to providing SCS and/or FSC with accurate records of all timber sales: purchaser contact information, species and volume sold, date of sale. Based upon discussions with appropriate DNR personnel, it is the judgment of the SCS evaluation team that DNR has both the capacity and willingness to meet its defined chain-of-custody obligations. Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C8.4 Utilizing Monitoring Results</p>	<ul style="list-style-type: none"> • The 8 supporting analyses conducted as part of the Master Plan revision process are 	<ul style="list-style-type: none"> • For forests, such as those in the south, not gearing up to undergo a Master Plan revision, there isn’t a comparable

Score: 85	<p>comprehensive and are fully integrated into the plan revision process</p> <ul style="list-style-type: none"> • RECON updates lead to periodic adjustments in the allowable harvest levels. These adjustments have demonstrated the system’s ability to adjust allowable harvests following major disturbance or salvage harvests. 	<p>level of analysis and monitoring</p> <ul style="list-style-type: none"> • Recon is not being calibrated for non-catastrophic changes, such as routine differences between expected and actual stand growth and development
<p>Findings: There is one regional indicator associated with this Criterion that the audit team considered. The indicators focus on the use of monitoring efforts to implement and revise management plans. Clearly, the supporting analyses conducted prior to the Northern Forests Master Plan revisions are laying a foundation for the development of the revised plans. However, the lack of updated information and comparable analyses in Forests not in the revision mode is limiting the ability to adapt Plans to meet changing circumstances. RECON is being used across all Forests and is being used to adjust allowable harvest levels. Accordingly, the team has assigned a score that connotes “conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
C8.5 Public Summary	<ul style="list-style-type: none"> • Most assessment reports can be ordered on the DNR web site • Except for tribal cultural resources and endangered species data, all information is publicly available, upon request 	<ul style="list-style-type: none"> • There isn’t a concise “master summary” of monitoring results and the current status of the state forests
Score: 84	<p>Findings: There are two regional indicators associated with this Criterion that the audit team considered. The indicators focus on the availability of monitoring information to the public. The DNR as a public entity is doing a commendable job of making assessments available to the public while retaining confidentiality of critical information that may jeopardize a sensitive site or wildlife species. Of concern, is the lack of a periodic report on forest condition and monitoring results. Accordingly, the team has assigned a score that connotes “conformance” with this criterion, as elaborated by the Lake States Regional Standard.</p>	

Overall Findings and Conclusions:

As indicated by the importance-weighted average score for this entire Principle (see below), DNR’s management of the Wisconsin State Forests is found to be in conformance.

This FSC Principle addresses monitoring to assess forest conditions and the impacts of management plans and activities. With all but the Criterion 8.1, the audit team has found the DNR's management of the State Forests to be in solid conformance with this Principle, as elaborated by the Lake States Regional Standard.

The non-conformance identified relates to the DNR not measuring performance against their own "criteria & indicators of sustainable forest management", a format that would be expected to provide valuable insight on the condition of the Forests. While the DNR has developed a basic framework for monitoring as described in its 1988 Master Plan Monitoring document, it has failed to take the steps necessary to apply this at the Forest level. The recently completed Brule River Master Plan contains few substantive monitoring activities and those that are identified are not united into a comprehensive and useful program. While staffing and budget shortages are cited as a reason for the lack of a monitoring effort it is clear that the DNR itself has not considered this a high priority. Several efforts that are underway including the RECON system and an array of forest research projects are providing good results. The State Forests appear to have a handle on growth and yield estimates but the team is concerned with the continued use of outdated RECON data that may be significantly affecting some of the results. Species driven surveys are being conducted throughout the state and the DNR appears to have a very good handle on these populations. The DNR is to be commended for the assessments developed prior to the Northern Forest Master Plans that do an exemplary job of assessing critical components of these Forests. Information regarding monitoring of the Forests is readily available to publics while confidentiality is maintained for critical elements.

Corrective Action Requests:

The audit team has stipulated two CARs with regard to this FSC Principle:

CAR 2004.7: Begin to Assess Performance Against DNR's "Criteria & Indicators of Sustainable Forest Management"

By the time of the first annual audit after award of certification, DNR must make substantial progress in designing and implementing protocols for annually assessing management of the State Forests against its own Criteria and Indicators of Sustainable Forest Management." DNR must take all actions within its control aimed at having the protocols fully operational by the time of the second annual audit, with a fully functional assessment report issued by the time of the third annual audit after award of certification.

CAR 2004.8: Demonstrate a Commitment to Implementing DNR's Policies on Master Plan Monitoring

By the time of the first annual audit after award of certification, DNR must make substantive progress in implementing its existing policies on Master Plan monitoring. Prior to the first annual audit, DNR must convey to SCS a briefing report on steps taken and progress made in making the Master Plan monitoring process fully operational.

Importance Weighted Aggregate Score for Principle 8:

Employing the PAIRWISE algorithm, the evaluation team assigned weights of relative importance for each of the 5 Criteria in this Principle. Under SCS' accredited protocols, assignment of weights of relative importance is one means by which certification evaluations recognize and incorporate regional and sub-regional circumstances. In this case, the weights were designed to reflect the regional context in which the subject forest management unit is located.

FSC Principle #8 Monitoring and Assessment	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
8.1	.15	71	
8.2	.26	88	
8.3	.08	90	
8.4	.38	85	
8.5	.14	84	
			84.8

Applying the normalized weights of relative importance to the 5 assigned performance scores, and rounding to the nearest integer, leads to a weighted average score for the Principle of:

85

Per SCS protocols, and as this weighted average score is in excess of 80 points, acceptable overall conformance to this FSC Principle is confirmed.

SECTION 1.9 PRINCIPLE #9: MAINTENANCE OF HIGH CONSERVATION VALUE FORESTS

This FSC Principle is elaborated through 4 Criteria that collectively focus on the identification and appropriate management of areas within the defined forest area(s) that possess notable attributes meriting conservation. Such attributes may be ecological or social, in nature. Areas of high conservation value are to be managed so that the defining attributes are maintained or enhanced; focused monitoring must be undertaken with respect to efficacy of HC VF management strategies.

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

9.2. The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.

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

9.4 Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.

<i>Criterion</i>	<i>Strengths</i>	<i>Weaknesses</i>
<p>C9.1 HCVF Assessment</p> <p>Score: 89</p>	<ul style="list-style-type: none"> • Numerous assessments are conducted that address or are relevant to resources of high conservation value, e.g.,: <ul style="list-style-type: none"> ○ CROG ○ Biotic Inventories ○ Regional Ecology Assessment ○ Ecological Landscape Analysis ○ Natural Areas program ○ Wilderness area designation ○ KBB HCP • Peer and public review of key studies does take place; many studies have contributors from outside of the Bureau of Forestry • BER plays an important collaborative role 	<ul style="list-style-type: none"> • DNR has not yet adopted and pursued an initiative that expressly responds to this Principle

Findings: There is one regional indicator associated with this Criterion that the audit team considered. The indicators focus on identifying the attributes and locations of High Conservation Value Forests. BER with the support and cooperation of the BOF has taken the lead in locating and evaluating potential HCV's within the State Forest System as well as other areas through an intensive assessment program. A variety of quality assessments have been conducted at the regional, landscape and community levels and are being utilized in the most recent Master Planning processes. The State Natural Areas program has identified outstanding examples of Wisconsin's native landscape including 39 areas on State Forests. While not yet adopting an initiative that expressly responds to this Principle the DNR is clearly concerned about the conservation of forests that meet these standards. Accordingly, the team has assigned a score that connotes "clear conformance" with this Criterion, as elaborated by the Lake States Regional Standard.

<p>C9.2 Consultation</p>	<ul style="list-style-type: none"> • Outside (of BOF) experts are used extensively • BER is consulted through the “deferral/consultation” process for potential conflicts 	<ul style="list-style-type: none"> • The public has not been expressly consulted on HCVF
<p>Score: 85</p>		
<p>Findings: There is no regional indicator associated with this Criterion. The audit team clearly observed examples that experts both in and outside of the DNR are consulted, prior to management intervention, in unique communities. The “deferral/consultation “ process is in place and is being used on the majority of the State Forests that have not completed updating Master Plans. Publics are aware of the State Natural Area program but have not been consulted regarding the principles of HCVF’s. Accordingly, the team has assigned a score that connotes “clear conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C9.3 Management Prescriptions for HCVF</p>	<ul style="list-style-type: none"> • Management plans are consistently oriented towards maintaining important attributes and resource values 	<ul style="list-style-type: none"> • The planned rate of recovery of the pinery in NHAL is overall modest
<p>Score: 83</p>	<ul style="list-style-type: none"> • DNR management is endeavoring to “keep all the pieces” • The deferral/consultation process clearly manifests a precautionary approach • Other Forest owners or managers are being consulted during the Master Plan process • The State Natural Area Program has identified high value communities across all ownerships • Community restoration is an emphasis in the new Brule River Master Plan 	<ul style="list-style-type: none"> • Salvage after the major blowdown event in the Flambeau natural area, though many years ago, was not an example of precautionary management • There is no express treatment of HCVF in the Master Plans or similar documents
<p>Findings: There are four regional indicators associated with this Criterion that the audit team considered. The indicators focus on the management plans and activities associated with HCVF’s. The DNR is clearly taking the initiative to identify and conservatively manage high quality communities within its State Forests. The “deferral/consultation” process is a proactive effort to reduce potential conflicts that may lead to a reduction in site values. Recent Master Plans have identified</p>		

<p>community restoration opportunities. The audit team is concerned, however, that these restoration goals will be met in light of staffing shortfalls and observed knee-jerk reactions to natural disturbance events. The State Natural Area Program has identified high value communities across the state, not just on public lands. Accordingly, the team has assigned a score that connotes “conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		
<p>C9.4 Effectiveness Monitoring Score: 74</p>	<ul style="list-style-type: none"> • Focused research/monitoring of special issues such as woody debris in the natural areas is responsive to this criterion • Monitoring is occurring on at least some State Natural Areas and is being coordinated by BER 	<ul style="list-style-type: none"> • As with all types of monitoring, monitoring of HCVF is very weak • Generally, there is inadequate attention paid to monitoring the effectiveness of measures employed to maintain identified high conservation values on the state forests
<p>Findings: There is one regional indicator associated with this Criterion that the audit team considered. The indicator focuses on the use of monitoring efforts to address changes in HCVF attributes. While the DNR has targeted research efforts to address several HCVF related issues, there remains little effort being undertaken to identify and conduct effective monitoring on the State Forests, including monitoring associated with HCVF’s other than efforts on State Natural Areas. Again, while staffing and budget shortages reduce the ability of the agency to do everything necessary, a comprehensive monitoring plan should be in place to assist managers in adapting management strategies as necessary. Accordingly, the team has assigned a score that connotes “clear non-conformance” with this Criterion, as elaborated by the Lake States Regional Standard.</p>		

Overall Findings and Conclusions:

As indicated by the importance-weighted average score for this entire Principle (see below), DNR’s management of the Wisconsin State Forests is found to be in conformance.

This FSC Principle addresses the maintenance or enhancement of attributes of high conservation value forests. With all but the Criterion 9.4, the audit team has found the DNR’s management of the State Forests to be in solid conformance with this Principle, as elaborated by the Lake States Regional Standard.

The non-conformance identified relates again to the DNR’s lack of developing an effective monitoring plan, in this case as it relates to HC VF’s. Without a monitoring program, it is doubtful that the agency will be able to adapt management strategies quick enough to ensure the conservation of these important properties. Obviously, waiting until the next Master Plan cycle can be decades in the waiting. Other efforts, including the wide range of assessments being conducted during Master Planning, are providing important background data on a wide range of communities. Biotic Inventories, CROG and the Ecological Landscape efforts, in particular, are providing substantial information leading to the conservation of important high value communities on those State Forests where they have been conducted. The State Natural Program is exemplary and goes beyond the borders of public lands to identify those important areas throughout the state. Valuable research projects have been funded by the DNR to address important questions regarding high value forests.

Corrective Action Requests:

The audit team has stipulated one CAR with regard to this FSC Principle:

CAR 2004.9: Develop a Written Crosswalk between HC VF Requirements found in P.9 and DNR’s Approach to Identifying and Managing Areas of High Conservation Value

To be completed by the time of the first annual audit after award of certification, DNR must develop a written cross-reference guide (i.e., a “crosswalk”) that provides an express description of how DNR conforms to each of the affirmative analytical and consultative requirements concerning forest areas of high conservation value, as set forth in Principle 9 of the FSC Lake States Regional Standard. The written cross-reference guide is to be posted on the DNR web-site upon its completion.

Importance Weighted Aggregate Score for Principle 9:

Employing the PAIRWISE algorithm, the evaluation team assigned weights of relative importance for each of the 4 Criteria in this Principle. Under SCS’ accredited protocols, assignment of weights of relative importance is one means by which certification evaluations recognize and incorporate regional and sub-regional circumstances. In this case, the weights were designed to reflect the regional context in which the subject forest management unit is located.

FSC Principle #9 Maintenance of High Conservation Value Forests	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
9.1	.35	89	83.6
9.2	.11	85	
9.3	.35	83	
9.4	.19	74	

Applying the normalized weights of relative importance to the 4 assigned performance scores, and rounding to the nearest integer, leads to a weighted average score for the Principle of:

84

Per SCS protocols, and as this weighted average score is in excess of 80 points, acceptable overall conformance to this FSC Principle is confirmed.

1.10 PRINCIPLE #10: PLANTATIONS

Per FSC protocols and guidelines, this Principle applies in certification evaluations where the silvicultural regimes employed in the field result in forest conditions that meet the definition of “plantation forest management.” As can be found in the glossary to the FSC P&C as well as the glossary to the Lake States Regional Standards, plantation forests are those that lack “most” of the structure, composition and characteristics of a native forest endemic to the region. Notably, clearcutting and planting, by itself, does not constitute plantation forest management.

Based upon a careful review of the silvicultural regimes employed by Wisconsin DNR on the State Forests, and an examination of the stand and forest structures resulting from the application of these regimes, it is the SCS audit team’s clear conclusion that DNR is practicing natural forest management on the State Forests. Accordingly, the Principle was judged to not be applicable to this certification evaluation.

2.0 TRACKING, TRACING AND IDENTIFICATION OF FOREST PRODUCTS

At the request of the certification applicant, SCS conducted a joint forest management and chain-of-custody certification evaluation of the defined forest area. Chain-of-custody certification is required throughout the supply chain if downstream purchasers and processors wish to carry forward the certified status of wood products sourced from the Wisconsin State Forests. With respect to the state forest lands managed by Wisconsin DNR, the chain-of-custody focus is quite narrow, as the DNR exclusively sells standing timber. That is, the DNR does not have control of the flow of wood products from the state forests once the trees have been severed from the stump, by the successful bidder.

In the case of its management of the Wisconsin State Forests, DNR’s chain-of-custody obligations will include:

- Effectively notifying all purchasers of State Forest timber sales that maintaining the FSC-certified status of the procured products requires each and every holder/owner of the product, from severance at the stump onward, to hold valid FSC-endorsed chain-of-custody certificates
- Providing SCS and/or the FSC with detailed information regarding all sales of state forest timber: purchaser’s name and contact information, species and volume sold, date of sale
- Notifying SCS and/or the FSC of any instances when a purchaser of a state forest timber sale does not hold a valid FSC-endorsed chain-of-custody certificate

- Maintaining records for at least 5 years

During the fieldwork for the forest management evaluation, the evaluation team investigated the extent to which DNR can and is willing to comply with these chain-of-custody requirements. The audit team is satisfied that DNR, were it to accept certification, will competently execute its responsibilities for the limited portion of the chain-of-custody under its control.

The fundamental requirement that must be demonstrated by the forest management operation (the certification applicant) is that product from the certified forest area not be mixed with product from non-certified sources as long as the product is under the control of the certification applicant. This requirement is attained by compliance with the 6 FSC Principles of Chain of Custody, which are appended to this report. It is against these criteria that SCS evaluated Wisconsin Department of Natural Resources for potential award of chain of custody certification as part of award of forest management certification.

Prior to award of certification, DNR will need to provide SCS with a written description of its very limited scope of responsibility with respect to chain-of-custody of logs originating on the state forests.

2.1 Evaluation of Risks of Mixing Certified and Un-Certified Product

In that DNR's CoC responsibilities end at the point of severance of trees from the stump, the risks of mixing certified and un-certified products falls completely on all down-stream owners/handlers, such as loggers, sawmillers, etc.

2.2 Description of the Log Control System

The scope of DNR's control system is limited to keeping accurate records of the volumes (by species) of timber/logs sold: purchaser names, locations of timber, date of sale, and certification number of purchaser (if available). These records need to be compiled in annual reports that are available to SCS and/or FSC. DNR also has an affirmative obligation to inform purchasers that they must hold valid FSC CoC certificates if the wood products are to remain certified.

2.3 End Point of Chain of Custody

For DNR, the end point of chain of custody is severance at the stump.

2.4 Visual Identification at End Point of Chain of Custody

All logs purchased from and hauled off of the state forests are branded and/or marked and accompanied by trip tickets and bills of lading. The audit team is very satisfied that DNR procedures assure that all timber harvested and removed from the state forests are accurately accounted for.

3.0 CONTROVERSIAL ISSUES

FSC requires the certification body to identify and briefly discuss, in a certification report, any controversial issues associated with the forest management unit for which certification is being sought. In the judgment of the SCS audit team, there are no highly controversial or contentious issues associated with DNR's management of the Wisconsin State Forests. That is not to say that there are no aspects of state forest management that generate difference of opinion amongst the array of stakeholder groups who possess an interest in the manner in which these forests are managed. Such issues of active discourse include:

- Deer management—hunters want deer populations kept at maximum levels while environmental NGOs, conservation groups and scientists wish to see populations reduced
- Aspen management—hunters wish to see more early seral forest cover, including but not limited to aspen-dominated stands
- Recovery of the northern pinery/white pine—this is an active agenda item for environmental NGOs
- Forest fragmentation—environmental NGOs wish to see more large contiguous blocks of forest cover
- ATV use—more ATV access is a major objective of ATV user groups and opposed by environmental NGOs and wildlife advocates
- Old growth—environmental NGOs would like to see management aimed at restoring a greater extent of old growth stands on the state forests.

4.0 CERTIFICATION RECOMMENDATION

4.1 EXPLANATION OF SCORING AND WEIGHTING METHODS

The scoring and weighting procedures employed by SCS are discussed elsewhere in this report. They are also described in detail in the SCS *Forest Conservation Program* Operations Manual, available upon request from SCS' Emeryville, California, office.

4.2 RECOMMENDATION

As detailed throughout this report, and consistent with the accredited SCS *Forest Conservation Program* evaluation protocols, certification of the Wisconsin State Forests is recommended by the audit team, with 9 specified Corrective Action Requests. Recommendation for the award of certification is premised on the audit team's finding that there are no major non-conformances with the 10 FSC Principles of Forest Stewardship.

5.0 APPENDICES

5.1 APPENDIX 1: AGREEMENT ON THE IMPLEMENTATION OF CERTIFICATION CONDITIONS

Note: This section applies only if and when Wisconsin DNR were to accept this offer for FSC-endorsed forest management certification.

As part of the certification contract between Scientific Certification Systems (SCS) and Wisconsin DNR, Wisconsin DNR agrees to comply with the conditions stipulated below within the stated time frames. Non-compliance with these conditions could lead to withdraw of certification.

See Section A.3.4 of this report for a **List of Corrective Action Requests**.

Upon execution of a certification contract, a signed copy of Conditions Agreement will be kept on file at the SCS Main Office.

5.2 APPENDIX 2: PEER REVIEWER COMMENTS

Peer Review #1:

“Forest management and stump-to-forest gate chain-of-custody certification evaluation report for the Wisconsin State Forests”

Reviewed by:

John C. Bliss, Professor and Starker Chair in Private and Family Forests,
Oregon State University, Corvallis, Oregon, 97331

john.bliss@oregonstate.edu

March, 2004

This is a review of “Forest management and stump-to-forest gate chain-of-custody certification evaluation report for the Wisconsin State Forests”. The review is based upon a close reading of the document; personal experience with forestry in Wisconsin, including graduate work at the University of Wisconsin-Madison (B.A. Anthropology, M.S. and PhD Forest Management); several years employment as a forester and ranger for the Wisconsin Department of Natural Resources; and 20 years of research on social aspects of private forest management. The review follows the guidelines provided by SCS, with some additional observations about process.

1. Clarity of report

The report is very comprehensive, even somewhat exhausting. It should be reasonably understandable by a lay audience, and certainly clear to forestry professionals. The writing is generally clear throughout, but careful editing is needed to correct some typographical errors scattered about. Specific comments follow.

- Sections 1.3.4, Estimates of Maximum Sustainable Yield, and 1.3.5, Estimated, Current and Projected Production, lack any explanatory text. Given the importance of determining and implementing sustainable production, this oversight must be addressed. The table in 1.3.5 provides the raw data, but no interpretation. Some discussion should be included on area control, maximum sustainable yield goal, and the historical record.

Authors' Response: Additional explanatory text has been added to Section 1.3.4.

- Section 1.4.1 provides good background on environmental context.

Authors' Response: Noted.

- Section 1.4.2, Socioeconomic Context, makes no mention of the importance of non-industrial private forests in Wisconsin's overall ownership mosaic. How might management of the State's public forests impact management of NIPF ownerships? How might certification affect markets for NIPF ownerships? Given that certification is being encouraged by the pulp and paper industry, and a large portion of their furnish comes from NIPF lands, these questions merit some consideration.

Authors' Response: We fully agree with this point and additional text has been added to Section 1.4.2.

- Section 2.3, Assessment Process. The evaluation team selected a "strategic and semi-randomized sample" of properties to visit, and presents these as being representative of WDNR properties overall. The terminology "semi-randomized" has no scientific meaning and detracts from the credibility of the sampling scheme. If this is a convenience sample, state as much. The team audited 4 of 9 state properties. The strategy seems reasonable, if not especially scientific. You might consider adding caveats – the range of conditions across state properties is considerable.

Authors' Response: This discussion in the report has been revised to reflect the peer review comment. For the record, it was not a "convenience sample" but, rather, an express and genuine effort to obtain a representative exposure to the full breadth of the Wisconsin State Forest system while working within a budget that did not allow a direct visit to each of the 9 units within the system. After stratifying by large and small units and north/south location, the actual sample was drawn randomly using a random number generator.

- Section 2.4, Stakeholder Consultation. The process used by the certification team for seeking stakeholder input lacks rigor. There is no systematic sample, no standard protocol, no transparency as to methods, no analytical framework. As a result, the summary of stakeholder concerns (2.4.3) cannot be meaningfully assessed. It is ironic that SCS is requiring considerable corrective action by WDNR in the area of stakeholder involvement when its own process is quite inadequate. In my view, this is an area in which SCS and FSC need to improve.

Authors' Response: The discussion of the stakeholder consultation process has been expanded to better document the approach taken and analytical framework employed. We note that none of the competing certification schemes include stakeholder consultation at all, as part of certification audits. Nonetheless, the audit team acknowledges that stakeholder consultation generally within the FSC scheme could benefit from additional efforts to systematize. SCS will consider this input during its next update to the Forest Conservation Program protocols.

- Principle 10, Plantations. As a social scientist, I cannot help but a comment on the FSC definition of plantation; it is the most wonderful example of “the social construction of nature” I have come across: “clearcutting and planting does not constitute plantation management....Non-forest land being afforested becomes a plantation or a managed natural forest based on the owner’s goals and objectives for the land in question as well as the development of its attributes.” This redefinition of terminology makes clear that forests and plantations are social as well as ecological inventions. I can definitely use this example in class!

Authors' Response: Noted. We remind the reviewer that FSC is a global initiative and, as such, its lexicon may seem awkward in any particular region or locale around the world. As an accredited certification body, SCS' obligation is to evaluate conformance against the P&C, carefully interpreting key components as FSC intends them, including but certainly not limited to FSC's treatment of “plantations.” In simple terms, a “plantation” within the FSC lexicon is a tree-dominated area lacking in most of the attributes and characteristics of a natural forest indigenous to the region. At least conceptually, this is not a social construct but, instead, an ecological construct.

2. Adequacy conveying rationale for scores

I find no major fault with the review's application of the FSC scoring system. Aspects of the system itself are puzzling, but it appears the system was faithfully followed.

3. Appropriateness of scoring recommendations

- The evaluation makes a compelling case that WDNR's performance with respect to the criteria of the certification program is commendable and that the scoring recommendations are appropriate.
- The evaluation team raises a concern that this reviewer shares; given budgetary shortfalls, shrinking staff and growing administrative burden, compliance with FSC certification appears to represent a significant additional administrative burden on an already overtaxed system. As a former Forester/Ranger for the WDNR, I empathize with the field offices to whom FSC certification might appear to come as an "un-funded mandate". Based upon the recommendations in this evaluation, it appears that field offices will be inundated with volumes of paperwork over the coming year or so as WDNR seeks to comply. (Authors' response: it is certainly not our intention to inundate WDNR field offices with additional volumes of paperwork. We appreciate the words of concern and will endeavor to maintain a rule of reason with respect to documentation requirements, were the WDNR to elect to proceed with signing a certification contract.) This will do little to promote enthusiasm among WDNR field staff for certification. Meaningful, effective steps to relieve this burden should be aggressively taken by SCS and FSC.

Overall, I commend the SCS team for a comprehensive, well-written evaluation, and WDNR for a record of performance that is exemplary. I'd be happy to discuss the evaluation further at your convenience.

<End of Peer Review>

Peer Review #2:

**Review of the Certification Evaluation Report
Of the Wisconsin State Forests
Prepared by Scientific Certification Systems**

Reviewer: John Kotar, Department of Forest Ecology and Management, University of Wisconsin-Madison

I conducted this review by adhering to the guidelines provided by the SCS. The guidelines require the focus on the following elements:

- The clarity of the report in describing the evaluation that was conducted, the criteria that were employed, and the data that were collected.
- The adequacy of the report in clearly conveying the basis upon which the scoring decisions were reached.
- The appropriateness of the evaluation team's scoring recommendations in light of the information presented and the condition of the ownership's resource base, as described in the report and as known to the reviewer from other sources, including first-hand knowledge.

Based on my experience as a peer reviewer of several previous certification reports, by different certifying bodies, I find this report to be of the highest quality. Considering the large geographic area of the ownership, a diversity of forest condition and range of stakeholders, together with the complex nature of the structure and operation of a public agency that manages the Forest, this was not an easy task. The evaluation team's grasp of ecological and socio-economic conditions of Wisconsin's forest is immediately evident in their complete and succinct summary of the findings (sections 1.3, 1.4, 1.5 of the Report). The evaluation was based on a very large amount of data assembled by the team. The range and nature of the database is thoroughly documented in the Report.

Of great importance in any evaluation is the methodology used. Because the principles, criteria and indicators in the certification guidelines range in content and importance it is difficult to treat them objectively. Nevertheless, it is important for the evaluation team to devise a process to weigh and interpret the available information, not only to accurately assess the merit for certification, but also to establish a basis for explaining or justifying the team's decisions, principle by principle. Many evaluating bodies use a scale for "grading" the compliance with each criterion. However, criteria within a principle vary greatly in relative importance to each other and often from region to region and from ownership to ownership. The SCS team increased the objectivity of their process by assigning weights to each criterion. The most important feature of this approach is the adjustment of these weights according to region and nature of forest ownership. For example, proper disposal of unused chemicals and chemical containers is considered very important and the criterion dealing with this element would receive a high weight. However, if the use of chemicals by the forest ownership is limited or nonexistent, the weight of this criterion should be appropriately reduced. This approach results in assigning higher values (or weights) to other criteria within the principle that are regionally important.

By using a 100 point scale for judging each criterion, in combination with regionally adjusted weight for the criterion, the team was able to increase its confidence in judging the compliance with the principle.

Authors' Response: We appreciate receiving this expert feedback about the methodology employed to conduct certification audits under the SCS Forest Conservation Program.

Appropriateness of scoring recommendations

In terms of specifics my review is confined to Principles 6 and 9, the primary areas of my expertise. The evaluation team had a considerable body of information at its disposal for its assessment. In my judgement the weights assigned to criteria were generally well based. The descriptions of findings, together with the tabular presentation of strengths and weaknesses for each criterion provide a comprehensive analyses of issues. I paid particular attention to comments in the “weaknesses” column. It is readily apparent that many comments in this column relate to ecological issues and concepts not yet fully understood, or to those that only recently became recognized as management concerns. A good example of this may be the issue of High Conservation Value Forests (HCVFs). The concept provides for a wide range of conditions to be yet identified and defined regionally and locally. The evaluation team recognized this and did not “downgrade” the compliance level based on observations in this category. Nevertheless, the comments in the “weaknesses” column are extremely valuable. Since one of the objectives of forest certification is to promote continuous improvement of forest management practices the comments provide a valuable input for the development of future management plans.

Because there were no pre-conditions and only two conditions or Corrective Action Requests (CARs), I will not further comment on specific findings. Regarding the two CARs pertaining to principles 6 and 9, I offer the following comments.

CAR 2004.4: Explore opportunities for greater attention to road maintenance

I believe the CAR is well stated by “Explore Opportunities”. Road maintenance is a complex issue, tied to many factors such as level of use, differences in local needs, and the demands by stakeholders, available funding, and many others. In most cases road maintenance is strongly tied to current or anticipated field operations. Perhaps a continuous assessment of potential ecological degradation due to poor road maintenance can be developed in order to cost-effectively allocate limited financial resources.

Authors' Response: Comments noted. By incorporating the peer review into the certification report, it is expected that DNR will give consideration to the possibility of pursuing a continuing assessment of potential environmental impacts of poor road maintenance. The SCS auditors will raise this possibility during the first surveillance audit.

CAR 2004.9: Develop a written crosswalk between HCVF requirements found in P.9 and DNR's approach to identifying and managing Areas of High Conservation Value

In my view this is a constructive request. Wisconsin DNR has made great strides in identifying and defining many types of HCVPs. Much work has been done in collaboration with diverse units within DNR and external research organizations. What is needed is to assemble this information into a unified HCVP category and to proceed with the development of management and monitoring strategies.

Authors' Response: Comments noted. Conformance to P9 will be a key focus during surveillance audits.

<End of Peer Review>

5.3 Appendix 3: WEIGHTING MATRICES

For each pairwise comparison in the non-shaded portion of the matrix, rate the relative importance of the ROW criterion relative to the COLUMN criterion, using the following:

3 = the row criterion is *clearly* more important

2 = the row criterion is *slightly* more important

1 = the row criterion is *equal* in importance to column criterion;

OR:

0.333 = the row criterion is *somewhat less* important than the column criterion;

.5 = the row criterion is *slightly less* important than the column criterion;

1 = the row criterion is *equal* in importance to column criterion;

The shaded portions are simply the calculated inverse of the reciprocal comparison.

Weighting Matrix and Algorithm:

Compliance with Laws and FSC Principles

FSC Principle #1

	1.1	1.2	1.3	1.4	1.5	1.6	Calculated Weight
1.1	1	3	2	NA	3	1	0.324
1.2	0.33333	1	1	NA	0.5	0.5	0.114
1.3	0.5	1	1	NA	1	0.5	0.138
1.4	NA	NA	NA	NA	NA	NA	NA
1.5	0.33333	2	1	NA	1	0.5	0.149
1.6	1	2	2	NA	2	1	0.275
Column Sum:	3.16667	9	7		7.5	3.5	

Weighting Matrix and Algorithm

Tenure and Use Rights and Responsibilities

FSC Principle #2

	2.1	2.2	2.3	Calculated Weight
2.1	1	3	2	0.539
2.2	0.33333	1	0.5	0.164
2.3	0.5	2	1	0.297

**Weighting Matrix and Algorithm:
Indigenous Peoples' Rights**

FSC Principle #3

	3.1	3.2	3.3	3.4	Calculated Weight
3.1	1	2	1	3	0.345
3.2	0.5	1	0.5	3	0.210
3.3	1	2	1	3	0.345
3.4	0.333333	0.333333	0.333333	1	0.099
Column Sum:	2.833333	5.333333	2.833333	10	

**Weighting Matrix and Algorithm:
Community Relations and
Worker's Rights**

FSC Principle #4

	4.1	4.2	4.3	4.4	4.5	Calculated Weight
4.1	1	1	2	1	2	0.250
4.2	1	1	2	1	2	0.250
4.3	0.5	0.5	1	0.5	0.5	0.110
4.4	1	1	2	1	1	0.220
4.5	0.5	0.5	2	1	1	0.170
Column Sum:	4	4	9	4.5	6.5	

**Weighting Matrix and Algorithm:
Benefits from the Forest**

FSC Principle #5

	5.1	5.2	5.3	5.4	5.5	5.6	Calculated Weight
5.1	1	2	3	3	1	0.5	0.213
5.2	0.5	1	2	1	0.5	0.333	0.108
5.3	0.333333	0.5	1	0.5	0.333	0.333	0.068
5.4	0.333333	1	2	1	0.5	0.5	0.112
5.5	1	2	3.003003	2	1	0.5	0.196
5.6	2	3.003003	3.003003	2	2	1	0.303

Weighting Matrix and Algorithm:											
Environmental Impact											
FSC Principle #6	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	6.10	Calculated Weight
6.1	1	2	0.5	2	2	2	3	3	3	1	0.148
6.2	0.5	1	0.5	2	2	2	3	2	2	0.5	0.113
6.3	2	2	1	2	3	2	3	3	3	1	0.178
6.4	0.5	0.5	0.5	1	2	1	3	3	2	0.5	0.095
6.5	0.5	0.5	0.33333333	0.5	1	0.5	2	2	2	0.333	0.066
6.6	0.5	0.5	0.5	1	2	1	3	2	2	0.5	0.090
6.7	0.33333	0.3333333	0.33333333	0.33333	0.5	0.33333333	1	0.333	0.333	0.333	0.036
6.8	0.33333	0.5	0.33333333	0.33333	0.5	0.5	3.003003	1	0.5	0.333	0.050
6.9	0.33333	0.5	0.33333333	0.5	0.5	0.5	3.003003	2	1	0.333	0.059
6.10	1	2	1	2	3.003003	2	3.003003	3.003003	3.003003	1	0.164
Column Sum:	7	9.833333	5.33333333	11.6667	16.503003	11.8333333	27.009009	21.336003	18.836003	5.832	

Weighting Matrix and Algorithm:					
Management Plan					
FSC Principle #7	7.1	7.2	7.3	7.4	Calculated Weight
7.1	1	3	2	3	0.445
7.2	0.33333	1	0.5	2	0.165
7.3	0.5	2	1	3	0.283
7.4	0.33333	0.5	0.33333333	1	0.107
Column Sum:	2.16667	6.5	3.83333333	9	

Monitoring and Assessment

FSC Principle #8

						<i>Calculated Weight</i>
8.1	1	0.5	3	0.333	1	0.148
8.2	2	1	3	0.5	3	0.261
8.3	0.333333	0.333333	1	0.333	0.333	0.075
8.4	3.003	2	3.003003	1	3	0.376
8.5	1	0.333333	3.003003	0.333333	1	0.140
Column Sum:	7.33634	4.166667	13.006006	2.49933	8.333	

Weighting Matrix and Algorithm:

Maintenance of High Conservation Value Forests

FSC Principle #9

	9.1	9.2	9.3	9.4	<i>Calculated Weight</i>
9.1	1	3	1	2	0.351
9.2	0.333333	1	0.333	0.5	0.109
9.3	1	3.003003	1	2	0.351
9.4	0.5	2	0.5	1	0.189
Column Sum:	2.83333	9.003003	2.833	5.5	

5.4 APPENDIX 4: FSC PRINCIPLES OF CHAIN OF CUSTODY

Principle 1: Documented control system

1.1 The company must have a clearly documented control system which addresses all the Principles of chain of custody control as specified below.

1.2 For each Principle the documented control system must:

1.2.1 specify the personnel responsible for control;

1.2.2 provide examples of any associated forms, records or documents;

1.2.3 specify the correct requirements for completing any associated forms, records or documents;

Principle 2: Confirmation of inputs

2.1 The company must operate a system for assuring that inputs are themselves certified, if specified.

2.2 The system must include the following requirements:

2.2.1 when the company orders FSC endorsed products from its suppliers, it specifies its requirement that such products be covered by an FSC endorsed chain of custody certificate;

2.2.2 when the company receives FSC endorsed products from its suppliers, it checks the invoices or accompanying documents to ensure that the chain of custody certificate registration code is quoted;

2.2.3 if the company is in doubt about the validity of the chain of custody certificate registration code, the company checks its validity with the issuing certification body or with FSC.

Principle 3: Separation and/or demarcation of certified and non-certified inputs

The company must operate a system for ensuring that when certified inputs are received they be clearly marked or otherwise identified as certified.

3.2 Certified inputs must remain easily identifiable as certified throughout processing or manufacturing. This may be achieved by:

3.2.1 physical separation of certified and non-certified production lines;

3.2.2 temporal separation of certified and non-certified production runs;

3.3 If certified and non-certified inputs are mixed, reliable data must be recorded which allow an independent assessor to confirm the volumes and/or weights of certified and non-certified inputs, over a specified production period.

3.4 The outputs of processing or manufacturing of certified forest products must be clearly marked or otherwise be identifiable as certified.

Principle 4: Secure product labelling

- 4.1 The company must operate a secure system for the production and application of product labels.
- 4.2 The company must accept legal responsibility for ensuring that the FSC Logo Pack issued to the company is not used by any unauthorised users, or for unauthorised uses.
- 4.3 The company must operate a system which ensures that only its own certified products may be labelled with the FSC name, initials or Logo.

Principle 5: Identification of certified outputs

- 5.1 Certified products must be labelled or otherwise be identifiable in a manner that labels do not become detached during storage, handling or transport.
- 5.2 The company must operate a system that allows any product sold by the company as certified to be linked to the specific sales invoice issued by the company.
- 5.3 The company must operate a system to ensure that all sales invoices issued for certified products:
 - 5.2.1 include a description of the product(s);
 - 5.2.2 record the volume/quantity of the product(s);
 - 5.2.3 quote the company's correct chain of custody certificate registration code.

Principle 6: Record keeping

- 6.1 The company maintains appropriate records of all inputs, processing and outputs of certified products.
- 6.2 The records are sufficient to allow an independent assessor to trace back from any given certified output to the certified inputs.
- 6.3 The records are sufficient to allow an independent assessor to determine the conversion rates for the manufacture of certified outputs from given certified inputs.
- 6.4 Records are maintained for a minimum of five years.

5.5 APPENDIX 5: SUMMARY OF LEGAL USES ON WISCONSIN STATE LANDS

(Prepared by DNR personnel)

NR 1.61 Public use of department land. Except as prohibited or regulated by rule or statute, all department land shall be open for:

(1) Traditional outdoor recreational uses, including hunting, fishing, trapping, walking, nature study and berry picking; and

(2) Other types of recreational uses, including camping, bicycling, equestrian uses, field trials, and snowmobiling or other motorized activities, as authorized on a property by the property master plan.

History: Cr. Register, August, 1996, No. 488, eff. 9–1–96.

NR 1.60 Master planning for department land.

(1) **MASTER PLAN DEVELOPMENT.** In addition to the requirements of ss. 23.091 and 28.04, Stats., the natural resources board shall determine whether a master plan will be developed for any department managed property or group of properties. If developed, the plan shall establish management, development and public use.

(2) **LOCAL AND REGIONAL PERSPECTIVES.** Management decisions shall be based on local and regional perspectives.

(3) **PROPERTY DESIGNATION.** Management of a department property and the master plan applicable to it shall be consistent with and further the purposes and benefits of the property's designation by statute, rule or the natural resources board.

Note: For example, state forests shall be managed in accordance with s. 28.04, Stats., state recreation areas in accordance with s. 23.091, Stats., and state parks in accordance with s. 27.01, Stats.

(4) **COMPATIBLE ACTIVITIES.** (a) Management activities shall be compatible with the land's ability to support and sustain the intended management, development or recreational use.

(b) In planning efforts, the effects of management activities on adjacent management areas are to be considered and, where adverse, are to be avoided whenever practicable.

(5) **TRIBAL TREATY RIGHTS.** Management of a department property within the ceded territory as defined in s. NR 13.02 (1), and the master plan applicable to it, shall recognize the opportunity for tribes with off-reservation hunting, fishing and gathering rights to continue to exercise those rights.

History: Cr. Register, August, 1996, No. 488, eff. 9–1–96.

NR 1.24 Management of state and county forests.

(1) The natural resources board's objective for the management of state forests and other department properties where timber cutting is carried out and county forests is to grow forest crops by using silvicultural methods that will perpetuate the forest and maintain diversified plant and animal communities, protect soil, watersheds, streams, lakes, shorelines and wetlands, in a true multiple-use concept. In the management of the forests, it shall be the goal of the board to insure stability in incomes and jobs for wood producers in the communities in which the state and county forest lands are located, and to increase employment opportunities for wood producers in future years. Whenever possible, large sale contracts shall be for 4 years which will assist wood producers in dealing with uneven demand and prices for their products.

(2) To achieve this objective, sale areas or cutting blocks and timber harvest operations will be planned through an intra-departmental inter-disciplinary review process when 10-year plans are developed in cooperation with the affected county to optimize management practices; to recognize the long-term values of preserving the integrity of the soil; to assure the maintenance of water quality; and to achieve multiple objectives of forest land management. Although multiple use shall be the guiding principle on state and county forests, the board recognizes that optimization of each use will not be possible on every acre. Desirable practices include: (a) Fully utilizing available topographic maps, aerial photographs and soil surveys and combining these with local knowledge or field reconnaissance to ascertain on-the-ground conditions.

(b) Wherever practical, use perennial streams as harvest-cutting boundaries with provision for a streamside management zone to protect stream bank integrity and water quality, and with skidding planned away from these streams and the adjacent streamside management zones.

(c) An appropriate silvicultural system and cutting design should be planned to optimize economic skidding distances, to minimize road densities and unnecessary road construction and for efficient establishment and management of subsequent forest crops.

(d) Cutting boundaries should utilize topographic terrain, ridges, roads and forest type changes where ownership patterns permit and should provide a harvest area size consistent with economical skidding, available logging equipment, silvicultural requirements and other management objectives.

(e) Plan cutting layouts to avoid leaving narrow unmanageable strips of timber susceptible to storm damage and windthrow.

(3) Department properties and county forests shall be zoned and managed primarily for aesthetic values in selected areas as identified in the master plan to recognize the importance of scenic values to the economy of the state. When clearcutting can be used to develop specialized habitat conditions within the forest, i.e., savanna type openings for sharp tail grouse management or is the appropriate silvicultural system, due consideration shall be given to the attainment of biological diversity of the future forest, the development of edge for wildlife, a variety of age classes in future growth and aesthetic quality of the area. Clearcutting is a silvicultural system usually applicable to intolerant species and is defined for purposes of this policy as a timber removal practice that results in a residual stand of less than 30 feet of basal area per acre upon completion of a timber sale. Furthermore, as the existing acreage of overmature even-aged stands change, the long-range goal of the board shall be to increase the intensities of professional management on the state and county forests.

(4) Special management practices shall apply to eagle and osprey nesting sites, deer yards, to lake and stream shoreline zones, to sensitive soil types, to springs and important watersheds, to selected aesthetically managed roadsides and to land use zones identified in the master plan as managed more restrictive.

(5) Block type plantings of a single species that create a monotype culture within an area shall be discouraged. Plantations shall be established to achieve a more aesthetically pleasing appearance and to provide for added diversity of type. Planting will be accomplished by varying the direction of the rows or contouring to create a more natural appearance, planting on the contour, using shallow furrows or eliminating furrows where practical. In planting adjacent to a major roadway, the first rows should be parallel to the roadway to meet aesthetic concern and provide game cover. Existing and new plantations will be thinned at the earliest opportunity and periodically thereafter to develop an understory for wildlife habitat and a more natural environment.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

See also Chapter NR 44, Wis. Admin. Code re: Master Planning for Department Properties; and Chapter NR 45, Wis. Admin. Code re: Use of State Properties

5.6 APPENDIX 6: CONVERSION ENGLISH UNITS TO METRIC UNITS TABLE

Length Conversion Factors

To convert from	to	multiply by
mile (US Statute)	kilometer (km)	1.609347
inch (in)	millimeter (mm)	25.4 *
inch (in)	centimeter (cm)	2.54 *
inch (in)	meter (m)	0.0254 *
foot (ft)	meter (m)	0.3048 *
yard (yd)	meter (m)	0.9144 *

Area Conversion Factors

To convert from	to	multiply by
square foot (sq ft)	square meter (sq m)	0.09290304 E
square inch (sq in)	square meter (sq m)	0.00064516 E
square yard (sq yd)	square meter (sq m)	0.83612736 E
acre (ac)	hectare (ha)	0.4047

Volume Conversion Factors

Volume

To convert from	to	multiply by
cubic inch (cu in)	cubic meter (cu m)	0.00001639
cubic foot (cu ft)	cubic meter (cu m)	0.02831685
cubic yard (cu yd)	cubic meter (cu m)	0.7645549
gallon (gal)	liter	4.546
Canada liquid gallon (gal)	cubic meter (cu m)	0.004546
Canada liquid gallon (gal)	liter	3.7854118
U.S. liquid** gallon (gal)	cubic meter (cu m)	0.00378541
U.S. liquid fluid ounce (fl oz)	milliliters (ml)	29.57353
fluid ounce (fl oz)	cubic meter (cu m)	0.00002957

Mass Conversion Factors

pound (lb)	kilogram (kg)	0.4535924
avoirdupois		
ton, 2000 lb	kilogram (kg)	907.1848
grain	kilogram (kg)	0.0000648

Temperature Conversion Factors

degree Fahrenheit (F)	degree Celsius (C)	$t_c = (t_F - 32) / 1.8$
degree Fahrenheit (F)	kelvin (K)	$t_k = (t_F + 459.7) / 1.8$
kelvin (K)	degree Celsius (C)	$t_c = t_k - 273.15$

Velocity

mile per hour (mph)	kilometer per hour (km/hr)	1.60934
mile per hour (mph)	meter per second (m/s)	0.44704

1 acre	= 0.404686 hectares
1,000 acres	= 404.686 hectares
1 board foot	= 0.00348 cubic meters
1,000 board feet	= 3.48 cubic meters
1 cubic foot	= 0.028317 cubic meters
1,000 cubic feet	= 28.317 cubic meters

Breast height = 1.4 meters, or 4 1/2 feet, above ground level

Although 1,000 board feet is theoretically equivalent to 2.36 cubic meters, this is true only when a board foot is actually a piece of wood with a volume 1/12 of cubic foot. The conversion given here, 3.48 cubic meters, is based on the cubic volume of a log 16 feet long and 15 inches in diameter inside bark at the small end.