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

Saint John's Abbey, Order of Saint Benedict

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

CERTIFICATION REGISTRATION NUMBER
SCS-FM/COC-00100

Submitted to:

Saint John's Abbey, Order of Saint Benedict

Lead Author: Dr. Dennis Becker

Date of Field Audit: June 12, 2007

Date of Report: July 19, 2007
Updated:

Certified: Date of Certificate

By:

SCIENTIFIC CERTIFICATION SYSTEMS
2000 Powell St. Suite Number 1350
Emeryville, CA 94608, USA
www.scscertified.com

SCS Contact: Dave Wager dwager@scscertified.com
Saint John's Abbey Contact: Thomas Kroll, tkroll@csbsju.edu

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 A will be posted on the SCS website (www.scscertified.com) no less than 30 days after issue of the certificate. Section B contains more detailed results and information for the use of the Saint John's Abbey.

FOREWORD

Scientific Certification Systems, a certification body accredited by the Forest Stewardship Council (FSC), was retained by Saint John's Abbey (SJA) to conduct a certification evaluation of its forest estate. Under the FSC/SCS certification system, forest management operations meeting international standards of forest stewardship can be certified as "well managed", thereby enabling use of the FSC endorsement and logo in the marketplace.

On June 12th, 2007, an interdisciplinary team of natural resource specialists was empanelled by SCS to conduct the evaluation. The team collected and analyzed written materials, conducted interviews and completed a 1 day field and office audit of the subject property as part of the certification evaluation. Upon completion of the fact-finding phase of the evaluation, the team determined conformance to the 56 FSC Criteria in order to determine whether award of certification was warranted.

This report is issued in support of a recommendation to award FSC-endorsed certification to Saint John's Abbey, for the management of its 1,484 acre forest estate. 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).

SECTION A- PUBLIC SUMMARY AND BACKGROUND INFORMATION

1.0 GENERAL INFORMATION

1.1 FSC Data Request

Applicant entity	Saint John's Abbey, Order of Saint Benedict
Contact person	Thomas Kroll
Address	Saint John's Abbey and University, New Science Building 108, Collegeville, MN 56321-3000
Telephone	320-363-3126
Fax	320-363-3202
E-mail	tkroll@csbsju.edu
Certificate Number	
Certificate/Expiration Date	
Certificate Type	*(single FMU)*
SLIMF *if applicable*	*i) a small SLIMF certificate*
Group Members *if applicable*	*Not applicable*
Number of FMU's *if applicable*	*1*
Number of FMUs in scope that are	
less than 100 ha in area	0
100 - 1000 ha in area	1
1000 - 10 000 ha in area	0
more than 10 000 ha in area	0
Location of certified forest area	
Latitude	*W 94 degrees 23 minutes*
Longitude	*N 45 degrees 35 minutes*
Forest zone	*Temperate*
Total forest area in scope of certificate which is included in FMUs that:	
are less than 100 ha in area	
are between 100 ha and 1000 ha in area	*1,484 ac*
meet the eligibility criteria as *low intensity* SLIMF FMUs	
Total forest area in scope of certificate which is:	
privately managed[1]	*1,484 ac*
state managed	
community managed[2]	
Number of forest workers (including contractors) working in forest within scope of certificate	4 (2 full time; 2 part time) Also have a full time student during the summer and two to three work-study students during the winter.
Area of forest and non-forest land protected from commercial harvesting of timber and managed primarily for conservation objectives	*Upland grass/shrub 204 ac; Restored prairie 56 ac; Restored oak savannah 11 ac; Marsh 200 ac; Shrub marsh 15* *Total: 486 ac*
Area of forest protected from commercial harvesting of timber and managed primarily for the	*Sugarbush for maple syrup production, 29 ac*

[1] The category of 'private management' includes state owned forests that are leased to private companies for management, e.g. through a concession system.
[2] A community managed forest management unit is one in which the management and use of the forest and tree resources is controlled by local communities.

production of NTFPs or services	
Area of forest classified as 'high conservation value forest'	*1,484 ac*
List of high conservation values present[3]	*HCVF a, b, and d from P9:* • *Forest area containing globally, regionally, or nationally significant concentrations of biodiversity.* • *Forest areas that are in or contain rare, threatened or endangered ecosystems.* • *Forest areas fundamental to meeting the basic need of local communities and/or critical to local communities' traditional cultural identify.*
Chemical pesticides used	*Round-up, Stinger, Tordon RTU, Bitrex, Accord, Rodeo, Curtail, Escort, Plateau (Note: pesticides used primarily for invasive species control and in prairie management areas)*
Total area of production forest (i.e. forest from which timber may be harvested)	*1,484 ac*
Area of production forest classified as 'plantation' for the purpose of calculating the Annual Accreditation Fee (AAF)	*0 ac*
Area of production forest regenerated primarily by replanting[4]	*Approximately 10% of ownership*
Area of production forest regenerated primarily by natural regeneration	*At least 90% of ownership*
List of main commercial timber and non-timber species included in scope of certificate (botanical name and common trade name)	Red oak (Quercus borealis), white oak (Quercus alba), basswood (Tilia Americana), ash (Fraxinus pennsylvania), maple (Acer saccharum), aspen (Populus tremuloides and Populus grandidentata), birch (Betula papyrifera), white pine (Pinus strobus)
Approximate annual allowable cut (AAC) of commercial timber	*Oak: 26,130 cu ft* *Upland Hardwoods 15,884 cu ft* *Aspen 3,384 cu ft* *Lowland Hardwoods 2,040 cu ft* *Sugar Bush 1,102 cu ft* *Conifers 5,143* *Total: 53,683 cu ft*
Approximate annual commercial production of non-timber forest products included in the scope of the certificate, by product type	116 gallons of Maple Syrup (from 3,675 gallons of sap)
List of product categories included in scope of joint FM/COC certificate and therefore available for sale as FSC-certified products (include basic description of product - e.g. round wood, pulp wood, sawn timber, kiln-dried sawn timber, chips, resin, non-timber forest products, etc.)	Round wood, pulpwood, sawn timber, kiln-dried sawn timber, firewood, maple syrup

[3] High conservation values should be classified following the numbering system given in the ProForest High Conservation Value Forest Toolkit (2003) available at www.ProForest.net

[4] The area is the *total* area being regenerated primarily by planting, *not* the area which is replanted annually. NB this area may be different to the area defined as a 'plantation' for the purpose of calculating the Annual Accreditation Fee (AAF) or for other purposes.

Conversion Table English Units to Metric Units

Length Conversion Factors

To convert from	to	multiply by
mile (US Statute)	kilometer (km)	1.609347
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
acre (ac)	hectare (ha)	0.4047

Volume Conversion Factors

Volume

To convert from	to	multiply by
cubic foot (cu ft)	cubic meter (cu m)	0.02831685
gallon (gal)	liter	4.546

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 = 0.028317cubic 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.

1.2.1 Environmental Context

The Saint John's Abbey (SJA) is located in central Minnesota and the temperate deciduous forest region. The forest is dominated by red oak (53% of 1997 inventory) with white oak, maple, basswood, ash, and aspen as additional component species. Saint John's Abbey is privately owned and operated by the Order of Saint Benedict.

The Saint John's Abbey was first recognized with FSC certification in April 2002 and in 2003 SJA transitioned from having its own individual certificate to being a member of a certified pool of lands managed through an FSC group certificate. In 2007, SJA applied to re-establish its own individual certificate.

The total land base for SJA is 2,445 acres. The forested portion of this ownership is 1,484 acres. SJA qualifies for the Small Low-Intensity Managed Forest (SLIMF) classification because the forest ownership is less than 1,000 hectares.

Over half of SJA's land is forested. The remaining open areas include restored prairie and oak savannah, marsh, and upland grass and shrub lands. The property also includes eight (8) lakes and ponds. The campus of Saint John's University is included in the Abbey's ownership. The Abbey's forest lies within the Hardwood Hills ecological subsection of

Minnesota as defined by the Minnesota Department of Natural Resources Ecological Classification System. SJA provides a block of contiguous forest within a landscape that is dominated by private agricultural ownership. The Abbey represents one of the largest forested areas in Stearns County, Minnesota.

The Minnesota Natural Heritage Database lists the Red-shouldered hawk, Cerulean warbler, and American ginseng as special concern species on the property. The Ram's-head lady's slipper is included in the herbarium collection at SJA, but field searches for the species have not found it on the property. Records of unusual species on the property include the bullfrog and the Humped bladderwort (an aquatic plant). Both of these species are generally not found in the region of SJA. The Abbey has incorporated management considerations for these species into its planning and practices and coordinates with the Minnesota Department of Natural Resources (DNR) on reporting the discovery of any new occurrences.

1.2.2 Socioeconomic Context

The Saint John's Abbey, Order of Saint Benedict is a Benedictine monastery that was established in 1856. Since that time, the Abbey has utilized and managed the forest in the Benedictine tradition.

In addition to supporting the monastic community, SJA's forests also support the local and regional economy by providing employment and contracting opportunities for foresters, loggers, truckers, sawyers, and others. SJA also produces timber and non-timber products, including round wood, pulpwood, lumber, and maple syrup. SJA has a number of well-established relationships with local service providers as well as partnerships with other land managers and conservation groups. SJA offers its land for educational events for the public and natural resource professionals. There are forest trails available for public recreational use.

In 2005, the Abbey completed a review of the historic Native American land use of the property. The review included personal interviews and consultation with the Minnesota Historical Society. There are no known records of archaeological sites on the property. It is believed that Native Americans used the property for various purposes including as a place to collect maple syrup. The land was referred to as the "Indianbush" during the first years SJA was being established.

1.3 Forest Management Enterprise

1.3.1 Land Use

The Saint John's Abbey was established in 1856 and the land use includes forestlands as well as restored wetlands, oak savannah, prairie, and lakes. Over half of the land is forested. The campus of Saint John's University also lies within the Abbey's ownership. Some of the first forestry activities on the property included the planting of conifers, beginning in 1894. In 1933, SJA was classified as a state game refuge. SJA retains ownership of the lake

shorelines and has authority to restrict public use and to disallow motorized boats and motors of any kind on the lakes.

The first forest inventory and management plan for the property was done in 1949. The plan recommended an annual cut of 55,000 board feet and the use of individual tree selection. The 1976 plan recommended thinning of stands less than 70 years old and clearcutting or shelterwood cuts to regenerate older stands. In 1979, the *Land Use Task Force Committee Report* set forth principles for managing the land and policies for recreational use, reserve areas, agricultural uses and other activities. In 1985 a plan and inventory was completed to address the conifer planting on the property. The current *Land Management Plan for St. John's Abbey* was approved by the Abbot in 2003 and is updated annually with current harvesting and monitoring data.

Activities occurring on the property and addressed in the current management plan include timber harvesting, tree planting, maple syrup production, prescribed burning, prairie and oak savannah management, wildlife management, educational activities, non-motorized recreation, hunting and fishing.

1.3.2 Land Outside Scope of Certification

In addition to the 1,484 acres of forestland in Stearns County, SJA also owns residential parcels of 54 acres in Beltrami County and less than 1 acre in Crow Wing County, Minnesota. These properties are not included in the assessment as they are lakeshore lots used as residential retreats and are not part of SJA's current forest management activities and planning. SJA recently purchased a conservation easement on property adjacent to the University forest to prevent residential development from encroaching upon forestlands and to preserve the current land use on the property. The terms of the conservation easement do not convey any forest management rights or authority to SJA.

1.4 Management Plan

The current *Land Management Plan for St. John's Abbey* was approved by the Abbot in 2003 and is updated annually with current harvesting and monitoring data. The plan is available in its entirety at:
http://www.csbsju.edu/arboretum/land_steward/land_steward_plansprojectsandrecords.htm

1.4.1 Management Objectives

Since 1857, the management objectives for SJA have included managing for solitude, recreation, natural beauty, forest products, a beautiful setting for the monastic and education institutions, and as a teaching resource for environmental education. The current management plan includes 17 specific goals. The goals include providing a sustainable harvest of forest products, attaining green certification to validate Benedictine stewardship values, incorporating education objectives, regenerating oak stands, managing the deer herd and other wildlife, monitoring growth and other indicators, having a skilled land management crew, and being prepared to respond to natural disasters such as insect infestations, diseases,

fire and windstorms. The management plan also states that the Order of Saint Benedict "endorses the principles and criteria of the Forest Stewardship Council and intends to use these principles and criteria in conjunction with our goals to assure that the Order's lands continue to be well managed long into the future."

1.4.2 Forest Composition

The forests at SJA were most recently inventoried in 1997. Previous inventories were completed in 1949 and 1987. The 1997 inventory found that red oak sawtimber constituted 53% of the volume, white oak 13%, maple 12%, aspen 7%, basswood 6%, ash 4%, and other species 4% of the volume. This inventory information indicates a decline in red oak volume from 58% of the total volume in 1987, declines in aspen and birch, stable white oak and basswood volumes, and an increase in ash. The Abbey's oak forest is mature with most stands 100-130 years old, and a successional transition to northern hardwoods is occurring. Oak management efforts and the promotion of oak regeneration are intended to manage the pace of this trend.

1.4.3 Silvicultural Systems

The Saint John's Abbey has been actively managing the forest since 1857. Beginning in 1949, the silvicultural system transitioned from the use of clear cutting methods to selective harvesting. Shelterwood systems are being used to regenerate oak and began in earnest in 1991. The prescription for this treatment is to retain 60 square feet of basal area per acre as a seed source. Group selection may also be used where appropriate. It is expected to take 5 to 20 years to establish a well-stocked oak stand using this method. Prescribed fire and other treatments are used as needed to reduce understory competition, and planting may be used to supplement natural regeneration. The management plan indicates a rotation age for oak of 100 years and the objective is to regenerate at least 10 acres of oak per year for the next 60 years to maintain the oak cover type. Sugar maple and basswood stands are managed through selection or group selection. Intermediate cuttings and timber stand improvements are also used in immature stands. A 100 year rotation is used for red oak-sugar maple-basswood stands. Aspen is managed through clear cutting, and stands are cut when they are mature at 40 to 60 years. Lowland hardwoods including black ash dominated stands are managed on an 80 year rotation for high quality sawtimber when site quality is sufficient. There are some conifer cover types including planted stands established from 1894 to 1980. These stands are managed for winter cover for deer and through thinning, pruning and release. Harvesting at Saint John's Abbey is conducted during the winter to protect soil resources and minimize oak wilt.

1.4.4 Management Systems

The forest is managed on a system of six compartments with three major vegetation classes and approximately 200 individual stands. There are two full time SJA employees including the Forest Manager and a Forestry Technician. Two part-time employees are added in the winter to assist with logging operations. Graduate and undergraduate students are employed throughout the year to conduct trail maintenance, sensitive species and forest monitoring, and

other related projects as needed. The Abbey also contracts with consulting foresters and other natural resource professionals for specific projects such as inventory work, resource evaluations, ecological studies, and planning.

1.4.5 Monitoring System

The monitoring system for the SJA includes records for timber growth, stocking, regeneration, overstory and understory composition, non-timber forest products, non-forested habitats and wetlands, soil characteristics, and pest conditions. Harvesting volumes, deer harvests and tree seed crops are monitored annually and the results are reported in the publicly available management plan posted on the web. Records are also kept of annual maple sap and syrup production.

1.4.6 Estimate of Maximum Sustainable Yield

The allowable harvest calculation is based upon the average site index of the respective cover type and the estimated expected annual growth. Publications referenced for these calculations include the *USFS General Technical Report NC-36, Manager's Handbook for Aspen*, and *Managing Hardwoods in the Northern Lake States Region* (Thomas Crow). Acreage subtractions are made for buffer areas.

1.4.7 Estimated, Current and Projected Production

The SJA forests are divided into three major vegetation classes with associated allowable annual harvest calculations based on site index and regional appropriate publications for estimating annual growth. Harvest volumes are tracked for these vegetation classes and can be compared to the allowable cut calculations for evaluation of harvesting levels.

Table 1. Annual Harvest Calculations

Vegetation Class	Description	Allowable annual harvest	Actual Annual Harvest (average 2001-2006)	% of allowable annual harvest (average (2001-2006)
Hardwoods with usual harvest restrictions	Usual restrictions include water quality and forest health considerations	40,311 cu ft	30,740 cu ft	76%
Hardwoods with special harvest restrictions	Special restrictions include scenic buffers, teaching areas, and restoration sites.	8,229 cu ft	0	0%
Conifers with usual harvest restrictions	(see above)	5,143 cu ft	1,003 cu ft	20%
Total Averages:		**53,683 cu ft**	**31,743 cu ft**	**60%**

From 2004 -2006, the annual harvest has stabilized between 18,000 and 20,000 cu ft and about 35% of the allowable annual harvest. This harvesting level is expect to remain relatively stable with the management plan providing guidance for short-term salvage for events such as wind storms or insect outbreaks. The management plan directs that if the allowable harvest is exceeded because of short term needs it would then be recalculated to a lower level to allow the growth the rebound.

1.4.8 Chemical Pesticide Use

The Abbey has a pesticide use policy that includes minimizing the use of herbicides and insecticides, favoring individual target stem applications, and integrated pest management. Pesticides must be used only under the direction of qualified applicators and according to label instructions with approved safety practices. The Land Management Committee is involved with approving pesticide usage. The following table includes a list of chemical pesticides used by SJA. None of the pesticides used by SJA are included on the FSC's list of "highly hazardous" pesticides.

Table 2. Pesticide Use

Name	Use	FSC Guidance
Round-up	Site-prep and invasive species control	None
Stinger	Invasive species and noxious weed control	None
Tordon RTU	Invasive species control	None
Bitrex	Deer browse control	None
Accord	Invasive species control	None
Rodeo	Prairie Management	None
Curtail	Prairie Management	None
Escort	Prairie Management	None
Plateau	Prairie Management	None

1.5 SLIMF Qualifications

The Forest Management Unit is less than 1,000 hectares in size and thereby meets the qualification as a small forest.

2.0 GUIDELINES/STANDARDS EMPLOYED

As the applicant forest property is located in central Minnesota, the certification evaluation that is the subject of this report was conducted against the duly-endorsed Lake States-Central Hardwoods Region Version 3 (Accredited August 5, 2002 and last modified February 10, 2005). The standard is available at the FSC-US web site (www.fscus.org) or is available, upon request, from Scientific Certification Systems (www.scscertified.com).

3.0 THE CERTIFICATION ASSESSMENT PROCESS

3.1 Assessment Dates

The assessment was completed June 11th – 13th, 2007 with the field assessment occurring on June 12th, 2007.

Preliminary Evaluation:
See Appendix 1 of the Full Report for the Preliminary Evaluation Audit Report

Main Evaluation:

3.2 Assessment Team

Dr. Dennis Becker, Team Leader: Dr. Becker is an Assistant Professor of Environment & Natural Resource Policy at the University of Minnesota in the Department of Forest Resources. He is a social scientist with training and professional experience in the field of social impacts of forestry in the rural U.S. Dr. Becker served as the FSC team social scientist on the evaluations of the Minnesota DNR (4.5 million acres), Washington State DNR (2.1 million acres), Potlatch Hybrid Poplar Plantation (17,000 acres), and White Mountain Apache Tribe Timberlands (1.8 million acres). Dr. Becker is a recognized expert at interpreting the socio-economic aspects of the FSC standard and applying it to rural U.S. communities. Dr. Becker received his Ph.D. in 2001 from the University of Idaho.

Kathryn Fernholz, Team Member: Kathryn Fernholz is Executive Director of Dovetail Partners, a non-profit organization based in Minneapolis that works on issues related to sustainable forestry and responsible trade. Kathryn is a forester with training and experience in silviculture, forest management in the Lake States region, and private lands forestry. Kathryn has worked with forest certification since 1999, including as a team member for assessments in Oregon and New York and as the project manager for a group certification program in Minnesota. Kathryn is an authority on forest certification for small, non-industrial properties. Kathryn has a B.S. in Forest Resources from the University of Minnesota, College of Natural Resources.

3.3 Assessment Process

3.3.1 Itinerary

June 11th – Pre-assessment team meeting
June 12th – Field assessment at Saint John's Abbey
June 13th – Complete stakeholder consultation and post-assessment team meeting

3.3.4 Sites Visited

See sections 3.3.1

3.3.5 Stakeholder Consultation

Pursuant to SCS and FSC protocols, consultation with a broad cross-section of stakeholders was an integral component of the evaluation process throughout the Full Evaluation process in June, 2007. Consultation took place prior to, concurrent with, and following the field evaluation. The following were distinct purposes of the consultations undertaken:

- To solicit input from affected parties as to the strengths and weaknesses of SJA's management of its forests relative to the FSC Lake States-Central Hardwoods Regional Standard, and the nature of the interactions between SJA forest managers and the surrounding communities.

- To solicit input on whether SJA has consulted with stakeholders regarding identifying any high conservation value forests.

Principal stakeholder groups of relevance to this evaluation were identified based upon results from previous assessments, lists of stakeholders provided by SJA forest managers, and additional stakeholder contacts from other sources (e.g., chair of the regional FSC working group). The following types of groups and individuals were determined to be principal stakeholders based on the private nature and small size of the forest lands:

- SJA employees engaged in forest management operations, including monks and temporary employees.
- Contractors
- Adjacent property owners
- Tribal representatives if applicable
- Members of the FSC Lake States Working Group who developed the standard
- Local and regionally-based environmental organizations and conservationists
- Forest industry groups and organizations
- Purchasers of SJA FSC-endorsed products
- Local jurisdictional bodies such as County Commissioners
- Local, State and Federal regulatory agency personnel
- Other relevant groups

The following stakeholder consultation activities were undertaken:

- Public notification of the FSC audit was sent to all members of the FSC Lake States Work Group. The public notice was sent May 16, 2007, that announced the timing of the field component of the full evaluation. The notice solicited comments and informed interested parties as to the availability of the FSC dispute resolution process. It also solicited comments on matters related to FSC Principle 9, High Conservation Value Forests.
- A second public notice was sent to a smaller designated group of individuals identified as particularly relevant stakeholders. The notice was sent on June 5, 2007 again announcing the timing of the field audit and asking for feedback directly to the

audit team.

- During the one day field component, the audit team conducted stakeholder consultations with available employees. The audit team also conducted phone interviews with additional stakeholders after completion of the field component.
- No written comments were received.

Name	**Affiliation**	**Consultation**
Danny Vogel	Neighbor; SJA Forest Technician	Interviewed
Gary Pflueger	Neighbor; Head person for SJA Grounds; part-time logging crew member	Not available, notification sent
Marcia Rapatz and Greg Nolan	Snowy Pines Reforestation contractor	Not available, notification sent
Rich Froehle	SJA Grounds Dept; fuel wood buyer	Interviewed
Peter Bundy	Consulting Forester; previous FSC certificate holder	Interviewed
Tom Haeg	Judge; volunteer chair of the Arboretum Advisory Council's Land Committee	Interviewed
Derek Larson	Chair, Saint John's University Environmental Studies Dept	Interviewed
Fr. Bruce Wollmering	Chair, SJA Forest and Lands Committee; Arboretum Advisory Council Member	Interviewed
Matt Norton	Minnesota Center for Environmental Advocacy	Interviewed
Gordon Bailey	Arboretum Advisory Council	Notification sent
Steve Saupe	Neighbor; Arboretum Advisory Council; Saint John's University botany professor	Notification sent
Tom Wicks	Neighbor; Arboretum Advisory Council; MN Deer Hunters Association	Notification sent
Greg Haeg and Megan McNair	Neighbors	Notification sent
Tim and Kelly Haeg	Neighbors	Notification sent

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

A summary of the comments on the standard (where applicable) and major perspectives and concerns expressed by the stakeholders that were consulted during the course of this evaluation includes:

Economic and Social Concerns

Comment/Concern	Response
• Arboretum uses too many volunteers when it can afford to pay in assisting with management of the University forest.	Comment noted.
• Concerned that the Arboretum could become too philanthropic and active in land development tied to building construction and conversion of forest to non-productive uses.	Comment noted.
• Abbeys have been very good neighbors with strong local connection to communities	Comment noted.
• Encourage increased efforts to purchase the "Well's" property between the Order of Saint Benedictine and Saint John's Abbey in order to retain critical landscape features.	Comment noted.
• Legal ownership of the Abbey forest lands is questioned to the degree that the original Homesteader claim made to the property in 1857 was accomplished by squatting on lands owned at the time by the State of Minnesota.	No documentation was provided to the audit team to confirm; MN became a state in 1858, after the Abbey was established. Abbey first moved to the current site in 1864. The 1856-1864 location on the Mississippi River in what is not St Cloud was given up due to clouded title.
• The forest is an outstanding resource for the University as a living classroom, for historical purposes, and personal use.	Comment noted.
• The forest is a "defining feature" of the University with numerous students educated through the curriculum, research, internships, etc.	Comment noted.
• Pursuit of FSC certification is demonstration of the SJA/OSB land ethic.	Comment noted.
• The SJA Forest and Lands Committee does a good job coordinating forest-related activities and keeping abreast of overall actions. The committee is comfortable delegating day-to-day operations to the forest manager.	Comment noted.
• Some neighbors are concerned about the aesthetics and siting of a wind power generation facility. In response, two public meetings have been conducted to solicit feedback and will play a large role in deciding whether and how to proceed with the project.	Comment noted.
• Past OSHA violations occurred regarding harvesting operations and equipment. Through inspections since the last audit, actions have been taken to mitigate problems	Comment noted.

and comply with all OSHA requirements. Current practices are satisfactory.	

Environmental Concerns

Comment/Concern	Response
• Concerned that forest reforestation efforts may conflict with a dense deer herd, including deer harvesting policies.	Comment noted.
• Would like to see retention of old growth stands in years past with recruitment now.	Comment noted.
• Would like to see the recent 100 acres donated to the SJA turned into an organic farm instead of conversion of all the acres back to natural forests.	Comment noted.
• There is a very deliberate effort to manage for the future and the forest manager continues a tradition of very careful management.	Comment noted.
• Management continuity has been especially strong with the current forest manager with intentional and clear objectives for future forests.	Comment noted.
• The annual deer harvest has been cancelled the past two years to appease local concerns, though only about 25 deer per year are harvested; neighbors perceive too many deer being killed contributing to declining hunting experiences outside the SJA forest.	SJA Deer Harvest Records indicate between 18 and 45 deer killed by hunters annually between 1997 and 2005, excepting the years of cancelled hunts in 2003 and 2006.
• Continuity of forest management has improved substantially since the previous audit. Forest management practices have become professionalized.	Comment noted.
• SJA is one of the only land managers with sites where they have done and are doing gypsy moth management.	Comment noted.
• Have observed good management practices over the years.	Comment noted.
• Forest management is very transparent and in line with the University ethic.	Comment noted.

3.4 Total Time Spent on audit

Approximately 2 total auditor days was expended in field work, 2 auditor days in document review prior to the field work, 1 auditor days in advanced stakeholder consultation, and 2 auditor days in writing the draft report. The total time spend on the audit was 7 auditor days.

3.5 Process of Determining Conformance

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 an 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 Preconditions (Major CARs), CARs and Recommendations

Preconditions/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).

CARs: 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.

Recommendations: These are suggestions that the audit team concludes would help the company move even further towards exemplary status. Action on the recommendations is voluntary and does not affect the maintenance of the certificate. Recommendations can be changed to CARs if performance with respect to the criterion triggering the recommendation falls into non-compliance.

4.0 RESULTS OF THE EVALUATION

Table 4.1 below, contains the evaluation team's findings as to the strengths and weaknesses of the subject forest management operation relative to the FSC Principles of forest stewardship. The table also presents the corrective action request (car) numbers related to each principle.

Table 4.1 Notable strengths and weaknesses of the forest management enterprise relative to the P&C

Principle/Subject Area	Strengths Relative to the Standard	Weaknesses Relative to the Standard	CAR/REC #s
P1: FSC Commitment and Legal Compliance	▪ SJA has been involved with FSC certification since their first forest management assessment in 2001. The forest manager has participated in the regional working group. Management planning and harvesting indicate compliance with the FSC standard. No evidence of legal non-compliance was found. SJA has been participating in FSC certification since 2001 and has demonstrated a commitment to the FSC's Principles and Criteria.	▪ SJA's continued participation in FSC certification has been debated due to concerns over costs and a lack of clearly demonstrated benefits. SJA has a unique opportunity to communicate the benefits of FSC certification through their extensive use of timber and non-timber forest products derived from their forest (e.g., furniture, construction, maple syrup, pottery).	**REC 2007.1** *To explore additional opportunities to enhance awareness, understanding and support of the FSC commitment at the Abbey and among stakeholders and interested parties. SJA could consider alternative forms of communication on campus, use of marketing materials, and gain clarification on permissible activities pertaining to the chain of custody process.*
P2: Tenure & Use Rights & Responsibilities	▪ SJA has open communications with the adjacent landowners and community stakeholders and no disputes currently exist.	▪ There exists no documentation of the informal dispute resolution process to prevent complications and provide guidance.	**REC 2007.2** *Adopt an informal dispute resolution process that could be documented in the management plan or related materials and be used in the event of community/neighbor disputes and in advance of more formal legal mechanisms of resolving disputes.*

P3: Indigenous Peoples' Rights	▪ The 140 year history of land use by Saint John's Abbey is an important part of the history of the forest. The forest manager has made efforts to gather the written records of this history and document it in the management plan.	▪ Additional benefit could be gained by mapping the known historic and/or cultural sites in the forest, tracking harvest operations relative to such sites, protecting sites of special concerns, and/or incorporation into existing educational programs.	**REC 2007.3** *Map known historic or cultural sites in the forest such as old roads, former building locations, or other special sites. This data could be included in the GIS and protected as sensitive information as necessary.*
P4: Community Relations & Workers' Rights	▪ SJA has demonstrated a commitment to supporting the local community through its contracting and hiring practices and the public benefits of providing recreational opportunities and the ecological services of wildlife habitat and water quality protections.	▪ The quantifiable economic benefits to the local community of the forest and associated products are not readily known.	**REC 2007.4** *Evaluate the economic impact of forest operations and associated product manufacturing to the region and community in terms of jobs created, wood products, recreational opportunities and/or other indicators. This information could be communicated to stakeholders and interested parties. The evaluation may also identify opportunities for SJA to further its engagement in the local economy.*

P5: Benefits from the Forest	▪ SJA has been cutting below the annual allowable cut in recent years and is working to regenerate oak stands to address the age class imbalance and to retain the oak cover type on the property. Since 1991, shelterwood cuts have been the silviculture system that has been used. SJA has also implemented a deer hunting season.	▪ The shelterwood cuts have resulted in high numbers of oak seedlings, but it has been challenging to retain the oak and to have it reach sufficient height. Research indicates that it may take 30 years for a shelterwood treatment to result in the establishment of the new stand, thus actions taken today are considered critical and must be clearly documented to identify relevant alternative or additional actions.	▪ **REC 2007.5** *Explore the use of shearing (or brush cutting) of the understory to promote vigorous resprouting of oak regeneration. Consider increased use of understory planting of oak, and deer exclosures using economical means (e.g., plastic fencing) as a way to reduce mortality. A strategic plan could be developed to prioritize sites and their treatments, and to identify opportunities to replicate treatments and set targets for results.* ▪ **REC 2007.6** *SJA may also consider documenting more clearly in management plans thresholds of acceptable regeneration along with contingency plans for lack of progress in meeting goals.*

P6: Environmental Impact	▪ SJA is a partner on the Avon Hills Initiative to conserve the working landscape of the region through conservation easements and land purchases. SJA has completed an ecological assessment and uses the Ecological Classification System developed by the DNR. The property has been periodically evaluated for RTE species and the management plan records information about red shouldered hawks and cerulean warblers. The plan and management activities address common and rare habitats, wetlands and water resources, and soil resources. There are two natural areas at SJA that are reserved from active management.	▪ None noted.	▪
P7: Management Plan	▪ The SJA management plan comprehensively addresses the requirements P7.	▪ None noted.	▪

P8: Monitoring & Assessment	▪ The management pan outlines monitoring and record keeping. Deer harvests, maple syrup production, oak regeneration, and seed crops are monitored annually.	▪ Monitoring of economic performance and budget planning is not formalized.	▪
P9: Maintenance of High Conservation Value Forest	▪ In 2006, SJA completed an assessment of HCVFs and the requirements of Principle 9. The assessment included consultation and the result is that the entire forest ownership constitutes an HCVF on the basis of being a regionally rare habitat that has been identified on the Natural Heritage Database, as a intact forest block within a predominantly agricultural landscape (refugia), and for the social values associated with the forest's connections to the monastic religious traditions.	▪ None noted.	

4.2 Preconditions

Preconditions are major corrective action requests that are placed on a forest management operation after the initial evaluation and before the operation is certified. Certification cannot be awarded if open preconditions exist.

No preconditions were placed on Saint John's Abbey during the initial evaluation.

5.0 CERTIFICATION DECISION

5.1 Certification Recommendation

As determined by the full and proper execution of the SCS *Forest Conservation Program* evaluation protocols, the evaluation team hereby recommends that Saint John's Abbey be awarded FSC certification as a "Well-Managed Forest". Saint John's Abbey has demonstrated that their system of management is capable of ensuring that all of the requirements of the FSC Lake States-Central Hardwood Regional Standard are met over the forest area covered by the scope of the evaluation. Saint John's Abbey has also demonstrated that the described system of management is being implemented consistently over the forest area covered by the scope of the certificate.

5.2 Initial Corrective Action Requests and Recommendations

Background/Justification: SJA has been participating in FSC certification since 2001 and has demonstrated a commitment to the FSC's Principles and Criteria. SJA has a unique opportunity to communicate the benefits of FSC certification through their extensive use of timber and non-timber forest products derived from their forest (e.g., furniture, construction, maple syrup, pottery). To further communicate the impacts and benefits and to secure this commitment, SJA could enhance the use of signs, posters, brochures, inclusion in the annual report or other methods of communicating about FSC to campus visitors, students, alumni, and others.	
REC 2007.1	*To explore additional opportunities to enhance awareness, understanding and support of the FSC commitment at the Abbey and among stakeholders and interested parties. SJA could consider alternative forms of communication on campus, use of marketing materials, and gain clarification on permissible activities pertaining to the chain of custody process.*
Reference	*FSC Criterion 1.6*

Background/Justification: SJA has open communications with the adjacent landowners and community stakeholders, and no disputes currently exist. There exists no documentation of the informal dispute resolution process to prevent complications and provide guidance.	
REC 2007.2	*Adopt an informal dispute resolution process that could be*

	documented in the management plan or related materials and be used in the event of community/neighbor disputes and in advance of more formal legal mechanisms of resolving disputes.
Reference	*FSC Criterion 2.3*

Background/Justification: The 140 year history of land use by Saint John's Abbey is an important part of the history of the forest. The forest manager has made efforts to gather the written records of this history and document it in the management plan. Additional benefit could be gained by mapping the known historic and/or cultural sites in the forest, tracking harvest operations relative to such sites, protecting sites of special concerns, and/or incorporation into existing educational programs.	
REC 2007.3	*Map known historic or cultural sites in the forest such as old roads, former building locations, or other special sites. This data could be included in the GIS and protected as sensitive information, as necessary.*
Reference	*FSC Criterion 3.3a*

Background/Justification: SJA has demonstrated a commitment to supporting the local community through its contracting and hiring practices and the public benefits of providing recreational opportunities and the ecological services of wildlife habitat and water quality protections. However, the quantifiable economic benefit to the local community of the forest and associated products is not readily known.	
REC 2007.4	*Evaluate the economic impact of forest operations and associated product manufacturing to the region and community in terms of jobs created, wood products, recreational opportunities and/or other indicators. This information could be communicated to stakeholders and interested parties. The evaluation may also identify opportunities for SJA to further its engagement in the local economy.*
Reference	*FSC Indicator 4.1.d*

Background/Justification: SJA has been cutting below the annual allowable cut in recent years and is working to regenerate oak stands to address the age class imbalance and to retain the oak cover type on the property. Since 1991, shelterwood cuts have been the silviculture system that has been used. SJA has also implemented a deer hunting season. The shelterwood cuts have resulted in high numbers of oak seedlings, but it has been challenging to retain the oak and to have it reach sufficient height. Research indicates that it may take 30 years for a shelterwood treatment to result in the establishment of the new stand, thus actions taken today are considered critical and must be clearly documented to identify relevant alternative or additional actions. To increase the opportunities for successful oak regeneration, SJA could consider additional understory treatments, establishing research or monitoring studies, and/or additional deer control methods.	
REC 2007.5	*Explore the use of shearing (or brush cutting) of the understory to*

	promote vigorous resprouting of oak regeneration. Consider increased use of understory planting of oak, and deer exclosures using economical means (e.g., plastic fencing) as a way to reduce mortality. A strategic plan could be developed to prioritize sites and their treatments, and to identify opportunities to replicate treatments and set targets for results.
REC 2007.6	*SJA may also consider documenting more clearly in management plans thresholds of acceptable regeneration along with contingency plans for lack of progress in meeting goals.*
Reference	*FSC Criterion 5.6a*

6.0 SURVEILLANCE EVALUATIONS

If certification is awarded, surveillance evaluations will take place at least annually to monitor the status of any open corrective action requests and review the continued conformance of Saint John's Abbey to the FSC Lake States-Central Hardwood Regional Standard. Public summaries of surveillance evaluations will be posted separately on the SCS website (www.scscertified.com).

7.0 SUMMARY OF SCS COMPLAINT INVESTIGATION PROCEDURE

The following is a summary of the SCS Complaint and Appeal Investigation Procedures, the full versions of the procedures are available from SCS upon request. The SCS Complaint and Appeal Investigation Procedures are designed for and available to any individual or organization that perceives a stake in the affairs of the SCS Forest Conservation Program and that/who has reason to question either the actions of SCS itself or the actions of a SCS certificate holder.

A **complaint** is a written expression of dissatisfaction, other than **appeal**, by any person or organization, to a certification body, relating to the activities of staff of the SCS Forest Conservation Program and/or representatives of a company or entity holding either a forest management (FM) or chain-of-custody (CoC) certificate issued by SCS and duly endorsed by FSC, where a response is expected (ISO/IEC 17011:2004 (E)). The SCS Complaint Investigation Procedure functions as a first-stage mechanism for resolving complaints and avoiding the need to involve FSC.

An "**appeal"** is a request by a certificate holder or a certification applicant for formal reconsideration of any adverse decision made by the certification body related to its desired certification status. A certificate holder or applicant may formally lodge an appeal with SCS against any adverse certification decision taken by SCS, within thirty (30) days after notification of the decision.

The written Complaint or Appeal must:

- Identify and provide contact information for the complainant or appellant
- Clearly identify the basis of the aggrieved action (date, place, nature of action) and which parties or individuals are associated with the action
- Explain how the action is alleged to violate an SCS or FSC requirement, being as specific as possible with respect to the applicable SCS or FSC requirement
- In the case of complaints against the actions of a certificate holder, rather than SCS itself, the complainant must also describe efforts taken to resolve the matter directly with the certificate holder
- Propose what actions would, in the opinion of the complainant or appellant, rectify the matter.

Written complaints and appeals should be submitted to:

Dr. Robert J. Hrubes
Senior Vice-President
Scientific Certification Systems
2200 Powell Street, Suite 725
Emeryville, California, USA94608
Email: rhrubes@scscertified.com

As detailed in the *SCS-FCP Certification Manual,* investigation of the complaint or appeal will be confidentially conducted in a timely manner. As appropriate, corrective and preventive action and resolution of any deficiencies found in products or services shall be taken and documented.

SECTION B DETAILED RESULTS OF THE FULL EVALUATION

1.0 DETAILED EVALUATION OF CONFORMANCE

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, Criterion, and Indicator and the team's findings and judgments at the Criterion and Indicator level.

1.1 PRINCIPLE #1: COMPLIANCE WITH LAWS & FSC PRINCIPLES

Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.

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.

Standard	Score	Comments
C1.1 Forest management shall respect all national and local laws and administrative requirements.	95	
1.1.a. Forest management plans and operations comply with applicable Federal, state, county, tribal, and municipal laws, rules, and regulations.	SJA has completed the appropriate permitting processes as required for trail work and shoreline restoration activities as administered by the DNR and SWCD.	
1.1.b. Forest management plans and operations comply with state Best Management Practices (BMPs) (see Appendix for references) and other government forest management guidelines applicable to the forest, both voluntary and regulatory (see also Criterion 6.5)	SJA has adopted Minnesota's Voluntary Site Level Guidelines as formally noted in the management and evidenced in harvest planning documents. Field visits included evidence of BMP compliance with riparian buffers, tree retention, and minimized slash height.	
1.1.c. Forest management plans and operations meet or exceed all applicable laws and administrative requirements with respect to sharing public information, opening records to the public, and following procedures for public participation.	The entire forest management plan is publicly available at not cost from the SJA website. The public information includes annual harvest updates and monitoring data.	
C1.2. All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.	90	
1.2.a. Taxes on forest land and timber, as well as other fees related to forest management, are paid in a timely manner and in accordance with state and local laws.	As a religious institution and state game refuge the Abbey is exempt from property taxes.	
C1.3. In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.	90	
1.3.a. Forest management operations comply with all binding treaties or other agreements to which the U.S. is a party, including treaties with American Indian tribes.	There is no evidence of non-compliance with relevant treaties and agreements	
C1.4. 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	90	

certifiers and by the involved or affected parties.		
1.4.a. Where conflicts between laws and FSC Principles and Criteria occur, they are referred to the appropriate FSC body.	There are no known conflicts. The forest manager was a member of the FSC's regional working group for developing the Lake States standard and is participating in the FSC-US's current standards review and public consultation process.	
C1.5. Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.	85	
1.5.a. Forest owners or managers implement measures to prevent illegal and unauthorized activities in the forest.	SJA has gates to restrict access and signs to communicate boundaries and restricted uses. SJA experiences some incidences of illegal hunting, trespass, and littering.	
C1.6. Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.	90	
1.6.a. Forest owners or managers provide written statements of commitment to the FSC Principles and Criteria. The commitment is stated in the management plan [see 7.1], a document prepared for the certification process, or another official document.	Management plan includes statement committing to the FSC Principles and Criteria. FSC sign is posted at sugar shack.	
1.6.b Forest owners or managers document the reasons for seeking partial certification.	Not applicable. SJA is not seeking partial certification. The Abbey owns residential parcels in Beltrami County and Crow Wing County that are not part of their forest management activities and are excluded from the scope of this certificate.	
1.6.c Forest owners or managers document strategies and silvicultural treatments for several harvest entries that meet the FSC Principles and Criteria (see Principle 7).	Several harvest plans were reviewed and field sites were visited to confirm compliance with the FSC Principles and Criteria.	

Importance Weighted Aggregate Score for Principle 1: 90.87

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: ***Compliance with Laws and FSC Principles***	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
1.1	0.324110276	95	90.874018
1.2	0.113751044	90	
1.3	0.137610693	90	
1.4	NA	90	
1.5	0.1493066	85	
1.6	0.275221387	90	

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:

91

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

Corrective Action Requests and/or Recommendations:

Background/Justification: SJA has been participating in FSC certification since 2001 and has demonstrated a commitment to the FSC's Principles and Criteria. SJA has a unique opportunity to communicate the benefits of FSC certification through their extensive use of timber and non-timber forest products derived from their forest (e.g., furniture, construction, maple syrup, pottery). To further communicate the impacts and benefits and to secure this commitment, SJA could enhance the use of signs, posters, brochures, inclusion in the annual report or other methods of communicating about FSC to campus visitors, students, alumni, and others.	
REC 2007.1	*To explore additional opportunities to enhance awareness, understanding and support of the FSC commitment at the Abbey and among stakeholders and interested parties. SJA could consider alternative forms of communication on campus, use of marketing materials, and gain clarification on permissible activities pertaining to the chain of custody process and logo usage.*
Reference	*FSC Criterion 1.6*

1. 2 PRINCIPLE #2: TENURE AND USE RIGHTS/RESPONSIBILITIES

Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.

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.

Standard	Score	Comments
C2.1. Clear evidence of long-term forest use rights to the land (e.g., land title, customary rights, or lease agreements) shall be demonstrated.	90	
2.1.a. Forest owners or managers document the legal and customary rights associated with the forest. These rights include both those held by the party seeking certification and those held by other parties.	SJU has a 140 year history of owning and managing the forestlands. The management plan documents the history and current land uses.	

2.1.b. Affected land boundaries are clearly identified on the ground by the forest owner or manager prior to commencement of management activities.	Signs are posted to identify the property, and harvest boundaries are painted before commencement of management activities.	
C2.2. 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.	90	
2.2.a. The forest owner or manager allows legal and customary rights to the extent that they are consistent with the conservation of the forest resource and the objectives stated in the management plan.	SJA allows hunting and fishing and provides deer stands. Non-motorized recreation is allowed. Motors are not allowed on the lakes. Hiking and ski trails are maintained. Dogs are not allowed.	
2.2.b. On ownerships where customary use rights or traditional and cultural areas/sites exist, forest owners or managers consult with concerned groups in the planning and implementation of forest management activities.	The review conducted in collaboration with the Minnesota Historical Society did not identify any records of significant sites. Some Abbey buildings are registered as historic buildings. The Land Management Committee and Arboretum Advisory Council are consulted regularly in forest management decisions.	
C2.3. 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.	90	
2.3.a. The forest owner or manager maintains relations with community stakeholders to identify disputes while still in their early stages. If disputes arise, the forest owner or manager initially attempts to resolve them through open communication, negotiation, and/or mediation. If negotiation fails, existing local, state, Federal, and tribal laws are employed to resolve claims of land tenure (see Glossary).	SJA completed a legal boundary survey in the early 2000's at the expense of the Abbey. SJA maintains open communications with neighbors about boundaries and activities affecting adjacent landowners.	
2.3.b. The forest owner or manager provides information to the certification body regarding unresolved and/or ongoing disputes over tenure and use-rights.	There are no ongoing disputes over tenure and use-rights.	

Importance Weighted Aggregate Score for Principle 2: 90

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 ***Tenure and Use Rights and Responsibilities***	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
2.1	0.538961039	90	
2.2	0.163780664	90	
2.3	0.297258297	90	

	90

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.

Corrective Action Requests and/or Recommendations:

Background/Justification: SJA has open communications with the adjacent landowners and community stakeholders and no disputes currently exist. There exists no documentation of the informal dispute resolution process to prevent complications and provide guidance.	
REC 2007.2	*Adopt an informal dispute resolution process that could be documented in the management plan or related materials and be used in the event of community/neighbor disputes and in advance of more formal legal mechanisms of resolving disputes.*
Reference	*FSC Criterion 2.3*

1.3 PRINCIPLE #3: INDIGENOUS PEOPLES' RIGHTS

The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.

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.

Standard	Score	Comments
C3.1. Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.	n/a	
3.1.a. On tribal lands, forest management and planning includes a process for input by tribal members in accordance with their laws and customs.	n/a	
3.1.b. Forest management on tribal lands is delegated or implemented by an authorized tribal governing body.		
C3.2. Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.	85	
3.2.a. Forest owners or managers identify and contact American Indian groups that have customary use rights or other legal rights to the management area and invite their participation in the forest planning processes, appropriate to the scale and intensity of the operation. (see also Criterion	No local tribes with customary uses or legal rights were identified. The Abbey has had relationships with the White Earth and Red Lake Nations with monks located in and serving those communities. No evidence of threatened or diminished resources or tenure rights was	

4.4.)	observed.	
3.2.b. Steps are taken during the forest management planning process and implementation to protect tribal resources that may be directly affected by certified operations such as adjacent lands, bodies of water, critical habitats, and riparian corridors as well as other resource uses such as rights to hunt, fish, or gather.	In 2005, SJA collaborated with the Minnesota Historical Society to conduct a review of known sites. No sites were identified. Oral histories and general information about the historic land use has been collected and is reported in the management plan.	
C3.3. 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.	85	
3.3.a. Forest owners or managers make systematic efforts to identify areas of cultural, historical, and/or religious significance. They invite participation of tribal representatives (or other appropriate persons, where tribal entities are lacking) in the identification of current or traditionally significant sites within the forest proposed for certification.	In 2005, SJA collaborated with the Minnesota Historical Society to conduct a review of known sites. No sites were identified. The Abbey has occupied the site since 1857. This history of the Abbey's management and land use is reported in the management plan and sites such as old roads and barn locations are known to the forest manager.	
3.3.b. Forest owners and managers consult with tribal leaders (or other appropriate persons, where tribal entities are lacking) to develop mechanisms that ensure forest management operations protect from damage or interference those areas described in 3.3.a. and incorporate these special places into forest management and operational plans.	No local tribes with customary uses or legal rights. The Abbey has consulted with the Minnesota Historical Society. The Minnesota Voluntary Site Level Guidelines have been adopted by SJA and address the protection of historic and cultural resources. Guidelines for cultural resource protection are included in the management plan.	
3.3.c. Confidentiality of disclosures is maintained in keeping with applicable laws and the requirements of tribal representatives.	Not applicable. The forest manager has demonstrated sensitivity to data control in relation to RTE species.	
C3.4. 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.	n/a	
3.4.a. Forest owners or managers respect the confidentiality of tribal knowledge and assist in the protection of tribal intellectual property rights.	n/a	
3.4.b. A written agreement is reached with individual American Indians and/or tribes prior to commercialization of their indigenous intellectual property, traditional knowledge, and/or forest resources. The individuals and/or tribes are compensated when such commercialization takes place.	n/a	

Importance Weighted Aggregate Score for Principle 3: 85

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 ***Indigenous Peoples' Rights***	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
3.1			
3.2	0.5	85	
3.3	0.5	85	
3.4			
			85

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:

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.

Corrective Action Requests and/or Recommendations:

Background/Justification: The 140 year history of land use by Saint John's Abbey is an important part of the history of the forest. The forest manager has made efforts to gather the written records of this history and document it in the management plan. Additional benefit could be gained by mapping the known historic and/or cultural sites in the forest, tracking harvest operations relative to such sites, protecting sites of special concerns, and/or incorporation into existing educational programs.	
REC 2007.3	*Map known historic or cultural sites in the forest such as old roads, former building locations, or other special sites. This data could be included in the GIS and protected for sensitive information as necessary.*
Reference	*FSC Criterion 3.3a*

1.4 PRINCIPLE #4: COMMUNITY RELATIONS & WORKERS' RIGHTS

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

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.

Standard	Score	Comments

C4.1. The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.	95	
4.1.a. Opportunities for employment, contracting, procurement, processing, and training are as good for non-local service providers as they are for local service providers doing similar work.	SJA works with local Amish sawmills, conservation organizations, public agencies, and private consultants. SJA employees its own logging crew and hires temporary student workers from the University.	
4.1.b. Forest work is packaged and offered in ways that create quality work opportunities for employees, contractors, and their workers.	SJA has well-established and stable relationships with employees and contractors, in excess of 10 years. Summer and winter tasks are mixed in job descriptions to offer year-round employment.	
4.1.c. Forest owners or managers contribute to public education about forestry practices.	SJA offers tours for students, field days and events for the public, and hosts conferences and workshops for woodland owners and natural resource professionals. More than 600 students toured the sugar bush in 2007.	
4.1.d. Forest owners or managers participate and invest in the local economy and civic activities.	SJA is a partner in the Avon Hills Initiative, which is an effort to retain the working landscape surrounding SJA through the establishment of conservation easements and related tools. SJA maintains trails, information kiosks, deer stands, and boat docks for use by Arboretum members and the public.	
4.1.e. Employee compensation and hiring practices meet or exceed the prevailing local norms for work within the forest industry that requires equivalent education, skills, and experience.	SJA uses a "market basket" approach - which relies on comparing prices for a common set of items in a given region (i.e, labor costs) - to determine regionally appropriate compensation. The Human Resources Department manages personnel matters.	
4.1.f. Forest owners or managers assure that contractors, subcontractors, intermediaries, and persons hired by them are covered and protected by all state and Federal labor laws regarding discrimination, wages, benefits, and other conditions of employment.	The Human Resources Department at Saint John's University manages all labor laws and legal compliance concerns pursuant to applicable state, local, and national laws.	
C4.2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.	85	
4.2.a. The forest owner or manager and their contractors develop and implement safety programs and procedures.	SJA has its own logging crew and owns and maintains its own logging equipment. An OSHA review was conducted in 2003 following employee concerns. Treaded steps were installed on the skidder. SJA has worked with Amish sawyers to have them wear earplugs. SJA conducts tailgate sessions on a weekly basis and utilizes an industry publication that includes safety information. The Human Resources Department maintains records of training such as First Aid. There is a First Aid Training Officer at Saint John's University.	
4.3 The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labour Organization (ILO).	85	
4.3.a. Forest workers are free to associate with other workers for the purpose of advocating for their own employment interests.	No evidence that forest workers are restricted in their associations.	
4.3.b. Forest owners or managers and their contractors develop effective and culturally sensitive mechanisms to resolve disputes between workers and management.	OSHA complaint in 2002 was handled through Human Resources and resolved to the satisfaction of the concerned parties. A follow up OSHA review was completed in 2003. SJA has been sensitive to the cultural concerns of the Amish sawyers and their reluctance to adopt external operation requirements.	
4.4. Management planning and operations shall incorporate the results of evaluations of social impact.	90	

Consultations shall be maintained with people and groups directly affected by management operations.		
4.4.a. On lands with multiple owners, a process is provided that assures the opportunity for fair and reasonable input from the landowners and/or shareholders.	SJA is a single owner. The Forest and Lands Committee of the Abbey and Arboretum Advisory Council provide input to the management.	
4.4.b. Input is sought in identifying significant sites of archeological, cultural, historical, or community importance, that are to be designated as special management zones or otherwise protected during operations.	The Minnesota Historical Society was consulted and a report completed in 2005. No sites were identified.	
4.4.c. Viewpoints and feedback are solicited from people and groups directly affected by forest management operations and its associated environmental and aesthetic effects (e.g., logging, burning, spraying, and traffic). Significant concerns are addressed in management policies and plans.	The Forest and Lands Committee of the Abbey and Arboretum Advisory Council are consulted. The management plan is available to the public.	
4.4.d. Forest owners or managers of large and mid-sized (see Glossary) forests provide opportunities for people directly affected by management operations to provide input into management planning.	Not applicable. SJA is a SLIMF.	
4.4.e. For public forests, consultation will include the following components:	Not applicable. SJA is a private forest.	
1. Legislative and historical mandates are included in the plan, and provisions are made for their accomplishment.	n/a	
2. Clearly defined and accessible methods for public participation are provided in both the strategic (long-range) and tactical (short-range) planning processes, including initial adoption and subsequent amendments.	n/a	
3. Public notification is sufficient to allow interested citizens of the affected jurisdiction and/or other people and groups directly affected by management operations the chance to learn of upcoming opportunities for public review and/or comment on the proposed management.	n/a	
4. The final planning decisions are based on legal mandate, public input, credible scientific analysis, and the productive capacity of the land and are made by professional employees, hired by the public, or other legally authorized parties.	n/a	
5. An accessible and affordable appeals process to planning decisions is available.	n/a	
C4.5. 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.	90	
4.5.a. The forest owner or manager attempts to resolve grievances and mitigate damage resulting from forest management activities through open communication and negotiation prior to legal action.	SJA invites adjacent landowners to an annual supper and maintains open communications through frequent contacts and information sharing. Examples of helping neighbors with management plans, prescribed burns, tree trimming, and other activities.	
4.5.b. Forest owners or managers and their contractors have adequate liability insurance.	SJA is self-insured.	

Importance Weighted Aggregate Score for Principle 4: 89.45

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 ***Community Relations and Worker's Rights***	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
4.1	0.25042735	95	89.4508547
4.2	0.25042735	85	
4.3	0.10982906	85	
4.4	0.21965812	90	
4.5	0.16965812	90	

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:

89

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

Corrective Action Requests and/or Recommendations:

Background/Justification: SJA has demonstrated a commitment to supporting the local community through its contracting and hiring practices and the public benefits of providing recreational opportunities and the ecological services of wildlife habitat and water quality protections. However, the quantifiable economic benefits to the local community of the forest and associated products are not readily known.	
REC 2007.4	*Evaluate the economic impact of forest operations and associated product manufacturing to the region and community in terms of jobs created, wood products, recreational opportunities and/or other indicators. This information could be communicated to stakeholders and interested parties. The evaluation may also identify opportunities for SJA to further its engagement in the local economy.*
Reference	*FSC Indicator 4.1.d*

1.5 PRINCIPLE #5: BENEFITS FROM THE FOREST

Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

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.

Standard	Score	Comments
C5.1. Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.	90	
5.1.a. The forest owner or manager is willing and able to support long-term forest management (i.e., decades rather than quarter-years or years), such as planning, inventory, resource protection, and post-harvest management activities.	SJA has a 140 year record of forest management and there have been significant annual investments in management activities including planning, inventory, resource protection and post-harvest activities such as planting and prescribed burns.	
5.1.b. Responses (such as increases in harvests or debt load) to short-term financial factors (such as market fluctuations and sawmill supply requirements) are limited to levels that enable fulfillment of the management plan.	SJA has calculated an annual allowable cut and has cut an average of 60% of this level since 2001. The management plan includes guidance for temporary increases in the allowable cut due to windstorms or insects and requires that the allowable cut be recalculated if this occurs.	
5.1.c. Investment and/or reinvestment in forest management are sufficient to fulfill management objectives and maintain and/or restore forest health and productivity.	SJA is supported by donations, endowments, and timber revenues. Investments have been made on an annual basis for many years.	
C5.2. Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.	95	
5.2.a. Opportunities are given to local, financially competitive, value-added processing and manufacturing facilities.	SJA works with local custom sawyers and sells diverse products on the open market. The Abbey Woodshop also buys wood from SJA for use in University construction and manufacturing of furniture.	
5.2.b. When non-timber products are harvested, the management and use of those products is incorporated into the management plan.	Management of the sugarbush is included in the plan and active management is occurring to support maple syrup production. Sap and syrup production records are kept and updated annually. Firewood cutting is also monitored.	
5.2.c. New markets are explored for products from common but underutilized forest species.	SJA does not have concerns about underutilized species. Currently selling a full range of products and species.	
C5.3. Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.	90	
5.3.a. Adequate quantities and a diversity of size classes of woody debris (considered a reinvestment of biological capital under this criterion—not an economic waste) are left on the forest floor to maintain ecosystem functions, wildlife habitats, and future forest productivity.	Woody debris is abundant in the forest. It is removed in areas where prescribed burns are planned to avoid damage to the trees.	
5.3.b. The loss and/or waste of merchantable forest products is minimized.	SJA is currently marketing a range of species and products and also allows firewood cutting.	
5.3.c. Harvest practices minimize residual stand damage.	Harvests are conducted in the winter, directional felling techniques are used and observed residual damage was minimal.	

C5.4. Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.	90	
5.4.a. Forest management diversifies forest uses and products, while maintaining forest composition, structures, and functions.	Diverse silviculture and species diversity is maintained. Wood products and non-timber forest products are being managed. Recreational uses are also supported. Vernal pools, wetlands, and lakes are addressed in management.	
C5.5. Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.	90	
C5.6. The rate of harvest of forest products shall not exceed levels that can be permanently sustained.	90	
5.6.a. The sustainability of harvest levels is based on growth and regeneration data, site index models, soil classification, and/or desired future conditions. The required level of documentation is determined by the scale and intensity of the operation.	The allowable cut is based on site index, regionally appropriate data, growth data, and soils information. Regeneration is monitored annually. The harvest levels are recorded annually and updated in the management plan that is publicly available. The oak age class distribution is a concern that was noted by previous auditors. SJA is actively working to regenerate oak.	
5.6.b. After the species composition and the age-class (see Glossary) distribution commensurate with long-term sustainability have been achieved, harvest and growth records demonstrate that the volume harvested during any 10-year span is less than the net growth accumulated over that same period. Exceptions to this constraint may be granted to forest owners or managers whose periodic cycle of re-entry is longer than 10 years. In such cases, allowable harvest is determined by examining the volume of re-growth and removal since the previous harvest and the forest owner or manager's commitment to allow an equivalent amount of re-growth before additional harvests.	SJA currently has consistent harvest records for 6 years (since 2001). Since that time, SJA has averaged 60% of its annual allowable harvest. SJA has developed detailed records for individual stands. SJA uses a volume-based harvesting system.	
5.6.c. If rates of harvest are temporarily accelerated to compensate for or prevent unacceptable mortality, or in cases of salvage operations (see Indicator 6.3.c.4), the rate of future harvest is recalculated accordingly to meet desired future conditions, and the adjusted rate of harvest is implemented within three years of the temporary acceleration.	The SJA management plan provides guidance that the allowable cut must be recalculated in the event of a temporary acceleration of harvest.	

Importance Weighted Aggregate Score for Principle 5: 91

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	0.21323853	90	
5.2	0.108166504	95	
5.3	0.06813034	90	

5.4	0.111581485	90	90.54083252
5.5	0.195730405	90	
5.6	0.303152737	90	

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:

91

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

Corrective Action Requests and/or Recommendations:

Background/Justification: SJA has been cutting below the annual allowable cut in recent years and is working to regenerate oak stands to address the age class imbalance and to retain the oak cover type on the property. Since 1991, shelterwood cuts have been the silviculture system that has been used. SJA has also implemented a deer hunting season. The shelterwood cuts have resulted in high numbers of oak seedlings, but it has been challenging to retain the oak and to have it reach sufficient height. Research indicates that it may take 30 years for a shelterwood treatment to result in the establishment of the new stand, thus actions taken today are considered critical and must be clearly documented to identify relevant alternative or additional actions. To increase the opportunities for successful oak regeneration, SJA could consider additional understory treatments, establishing research or monitoring studies, and/or additional deer control methods.	
REC 2007.5	*Explore the use of shearing (or brush cutting) of the understory to promote vigorous resprouting of oak regeneration. Consider increased use of understory planting of oak, and deer exclosures using economical means (e.g., plastic fencing) as a way to reduce mortality. A strategic plan could be developed to prioritize sites and their treatments, and to identify opportunities to replicate treatments and set targets for results.*
REC 2007.6	*SJA may also consider documenting more clearly in management plans thresholds of acceptable regeneration along with contingency plans for lack of progress in meeting goals.*
Reference	*FSC Criterion 5.6a*

1.6 PRINCIPLE #6: ENVIRONMENTAL IMPACT

Forest Management shall conserve biological diversity and its associated values, water resources, souls, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest

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.

Standard	Score	Comments
C6.1. Assessments 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.	90	
6.1.a. Using credible scientific analyses and local expertise, an assessment of current conditions is completed to include: • Disturbance regimes and successional pathways; • Unique, vulnerable, rare, and threatened communities; • Common plants, animals, and their habitats; • Sensitive, threatened, and endangered species and their habitats; • Water resources; and • Soil resources (see also Indicators 7.1.a and b).	SJA is a partner on the Avon Hills Initiative to conserve the working landscape of the region through conservation easements and land purchases. SJA has collaborated with The Nature Conservancy to complete an ecological assessment at SJA. SJA uses the Ecological Classification System developed by the DNR. The property has been periodically evaluated for RTE species and the management plan records information about red shouldered hawks and cerulean warblers. The plan and management activities address common and rare habitats, wetlands and water resources, and soil resources.	
6.1.b. Using available science and local expertise, the current ecological conditions are compared to both the historical conditions and desired future conditions within the landscape context. This comparison is done by employing the baseline factors identified in 6.1.a.	SJA collaborates with The Nature Conservancy and the DNR and uses the ECS.	
6.1.c. Prior to the commencement of management activities, potential short-term environmental impacts and their cumulative effects are evaluated.	The harvest planning process includes site visits to evaluate the site, mark the trees and other features, and evaluate BMP requirements. The harvest planning documents include detailed guidance for BMP compliance, snag retention and other environmental protections.	
6.1.d. Using assessments derived from the above information, management options are developed and implemented to achieve the long-term desired future conditions and ecological functions of the forest (see also Criterion 7.1).	SJA has long and short term objectives documented in the management plan. SJA has developed detailed stand level information. Harvest records and monitoring information is added to the management plan annually.	
C 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.	90	
6.2.a. Although species that are state and/or Federally listed as threatened, endangered, of special concern, or sensitive, and their habitats are identified, their specific locations remain confidential.	SJA protects the Natural Heritage Database information and reports new findings to the DNR.	
6.2.b. If scientific data indicate the likely presence of state and/or Federally listed as threatened, endangered, of special concern, or sensitive populations, either new surveys are carried out before field-management activities begin or the	Surveys for rare species have been conducted several times at SJA, and known species and habitats are noted in the management plan and locations are known to the land manager and used to inform forest management activities.	

forest owner or manager assumes their presence and makes appropriate modifications in forest management.		
6.2.c. For management planning purposes, forest owners or managers of publicly owned and large privately owned forests use, participate in, or carry out on-the-ground assessments for the occurrence of state and/or Federally listed as threatened, endangered, of special concern, or sensitive species.	Not applicable. SJA is a SLIMF. However, SJA has completed an on-the-ground assessment.	
6.2.d. Where they have been identified, state and/or Federally listed as threatened, endangered, of special concern, or sensitive species and their habitats are maintained and/or restored. Multiple-use management activities are acceptable, where the law allows, in these species' habitat areas to the extent that they are compatible with maintenance and restoration of the species.	RTE information is included in the management plan.	
6.2.e. If a state and/or Federally listed as threatened, endangered, of special concern, or sensitive species is determined to be present, its location is reported to the manager of the species' database.	SJA reports any new findings to the DNR.	
C6.3. 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.	85	
C6.3.a. Forest regeneration and succession	85	
6.3.a.1. Forest owners or managers make management decisions using credible scientific information (e.g., site classification) and information on landscape patterns (e.g., land use/land cover, non-forest uses, habitat types); ecological characteristics of adjacent forested stands (e.g., age, productivity, health); species' requirements; and frequency, distribution, and intensity of natural disturbances.	SJA uses the ECS developed by the MN DNR. The management plan includes information addressing these functions and values.	
6.3.a.2. Silvicultural practices encourage regeneration that moves the forest toward a desired future condition, consistent with information gathered in 6.3.a.1.	SJA is actively addressing oak regeneration needs and conducts annual regeneration surveys.	
6.3.a.3. Measures are taken to ensure the retention of endemic and difficult-to-regenerate species.	SJA is actively addressing oak regeneration needs.	
6.3.a.4. Across the forest, or the landscape in which it is located, management actions lead to a distribution of successional stages, age classes, and community types appropriate to the scale and intensity of the operation and desired future conditions.	SJA is maintaining diverse cover types and age classes. SJA represents a large contiguous forest in a dominantly agricultural landscape.	
6.3.a.5. When even-aged management (see Glossary) is employed, live trees and native vegetation are retained within the harvest unit in a proportion and configuration that is consistent with the characteristic natural disturbance regime in each community type (see Glossary). Exceptions may be allowed when retention at a lower level is necessary for purposes of forest restoration and/or rehabilitation or to maintain community types that exist on the site (e.g., oak-hickory, jack pine). The level of retention increases proportionally to the size of the harvest unit.	SJA follows Minnesota's Voluntary Site Level Guidelines for retention. The harvest units are generally about 5 to 13 acres in size.	
C6.3.b. Genetic, species, and ecosystem diversity	85	
6.3.b.1. Forest management conserves native plant and animal communities and species.	SJA protects snags during harvesting. Harvesting is conducted in the winter. Large woody debris is present and distributed in the forest. Understory species are noted in the management plan. Acorns collected from SJA are grown at the DNR nursery and SJA receives its own oak seedlings for planting.	
6.3.b.2. The forest owner or manager cooperates with local, state, and Federal agencies to protect and manage native plant	SJA cooperates with public and private organizations as well as neighbors on forest management.	

and animal communities and species.		
6.3.b.3. There is a consistent scientific method for selecting trees to plant, harvest and retain in order to preserve and/or enhance broad genetic and species diversity.	Well researched, regionally appropriate, and documented silvicultural systems are utilized.	
6.3.b.4. Forest owners or managers maximize habitat connectivity to the extent possible at the landscape level (e.g., through an ecological classification system, at the subsection or land-type association level).	SJA uses the ECS developed by the DNR. SJA has worked with neighbors to encourage them to have stewardship plans developed and to implement management activities such as prescribed burns.	
C6.3.c. Natural cycles that affect the productivity of the forest ecosystem	85	
6.3.c.1. Biological legacies of the forest community are retained at the forest and stand levels, consistent with the objectives of the management plan, including but not limited to: large live and declining trees, coarse dead wood, logs, snags, den trees, and soil organic matter.	An appropriate amount of snags are protected during harvest, coarse wood debris is present in the forest, and harvests are conducted in the winter to protect soils and reduce oak wilt.	
6.3.c.2. Forest management practices maintain soil fertility and organic matter, especially in the A horizon, while minimizing soil erosion and compaction. If degradation of soil quality occurs, as indicated by declining fertility or forest health, forest owners or managers modify soil management techniques.	Harvests are conducted in the winter and roads are maintained to avoid erosion and water quality impacts.	
6.3.c.3. Forest management practices maintain or restore aquatic ecosystems, wetlands (including peatlands, bogs, and vernal pools), and forested riparian areas (see also Criterion 6.5).	Wetlands and water bodies are addressed in the management plan. Buffers are established at harvest sites. Vernal pools are protected during harvesting.	
6.3.c.4. Responses (such as salvage) to catastrophic events (such as wildfire, blowdown, and epidemics) are limited by ecological constraints.	Salvage has been minimal, and within the boundaries of the management plan and management objectives.	
C6.4. 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.	95	
6.4.a. Forest owners and managers protect and reserve ecologically viable representative areas that are appropriate to the scale and intensity of the operation.	There are two natural areas at SJA. One is 149 acres northeast of campus that is dominated by mixed hardwood forest, oak forest, some lowland hardwood forest, and shrub wetlands. The area has been little disturbed for many years and is representative of the tree and plant species on the property. The area is accessible for study and hiking. The second area is more remote at the south end of Lake Sagatagan. It is 143 acres with low marsh and wetlands as well as some mixed upland and oak forest, It was grazed in the past and its remoteness makes it difficult for timber management. It should be good habitat for red shouldered hawk.	
6.4.b. Where existing protected areas within the landscape are not of adequate size and configuration to serve as representative samples of commonly occurring forest types as defined above, owners or managers of mid-sized and large forests, whose properties are conducive to the establishment of such areas, designates ecologically viable areas to serve these purposes.	Not applicable. SJA is a SLIMF.	
6.4.c. The size and arrangement and time scale of on-site representative sample areas are designated and justified using assessment methods and sources of up-to-date information described in 6.1.	Not applicable. SJA is a SLIMF.	
6.4.d. Unless exceptional circumstances can be documented, known areas of intact old-growth forests are designated as representative sample areas under purpose 3. (See Applicability Note under 6.4 above) and are reviewed for designation as High Conservation Value Forests (HCVF- see	Not applicable. SJA is a SLIMF.	

also Applicability note under 6.3). Known areas of unentered stands of old-growth are carefully reviewed, screened for uniqueness, and considered as potential representative sample areas prior to undertaking any active management within them (see Applicability Note under 6.4). Old growth stands not designated as either a HCVF or a representative sample area are, at a minimum, managed to maintain their old-growth structure, composition, and ecological functions under purpose 3.	
6.4.e. The size and extent of representative samples on public lands being considered for certification is determined through a transparent planning process that not only utilizes scientifically credible analyses and expertise but is also accessible and responsive to the public.	Not applicable. SJA is a SLIMF.
6.4.f. The process and rationale used to determine the size and extent of representative samples are explicitly described in the public summary.	Not applicable. SJA is a SLIMF.
6.4.g. Managers of large, contiguous public forests (>50,000 acres) create and maintain representative protected areas within the forest area, sufficient in size to encompass the scale and pattern of expected natural disturbances while maintaining the full range of forest types and successional stages resulting from the natural disturbance regime.	Not applicable. SJA is a SLIMF.
C6.5. Written guidelines shall be prepared and implemented to control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and to protect water resources.	95
6.5.a. A set of forestry best management practices (BMPs), approved by the state forestry agency or otherwise appropriate jurisdiction (e.g., BIA), that address water quality and soil erosion is adhered to (see also 1.1.b). These guidelines may include provisions on riparian management zones (RMZs), skidding, access roads, site preparation, log landings, stream crossings, disturbance of sensitive sites, and wetlands.	SJA has adopted Minnesota's Voluntary Site Level Guidelines
6.5.b. At a minimum, implementation of BMPs and other resource protection measures will result in the following:	SJA has adopted Minnesota's Voluntary Site Level Guidelines
<u>Logging and Site Preparation</u> Logging operations and construction of roads and skid trails are conducted only during periods of weather when soil is least susceptible to compaction, surface erosion, or sediment transport into streams and other bodies of water.	SJA conducts harvests in the winter to protect soils and prevent oak wilt.
Logging damage to regeneration and residual trees is minimized during harvest operations.	Regeneration surveys are conducted annually; harvest plans include guidance for protecting regeneration and residual trees. Directional felling is used.
Silvicultural techniques and logging equipment vary with slope, erosion hazard rating, and/or soil instability with the goal of minimizing soil disturbance. Areas that exhibit an extreme risk of landslide are excluded from management activities that may precipitate landslides.	SJA owns its own logging equipment (skidder). Tree marking and harvest design consider site conditions. Bumper trees are marked.
Plans for site preparation specify the following mitigations to minimize impacts to the forest resources: 1) Slash is concentrated only as much as necessary to achieve the goals of site preparation and the reduction of fuels to moderate or low levels of fire hazard. 2) Top soil disturbance and scarification of soils is limited to the minimum necessary to achieve successful regeneration of desired species.	Slash heights are limited and guidance is included in the harvest plan. Slash is removed through firewood cutting or raking in areas where prescribed burns are planned.
<u>Transportation System (including permanent and temporary haul roads, skid trails, and landings)</u> The transportation system is designed, constructed,	A Forest Service employee has been consulted in the road design and maintenance. The SJA road system is well established and new roads are not being actively developed.

maintained, and/or reconstructed to minimize the extent of the road network and its potential cumulative adverse effects.	
Access to temporary and permanent roads is controlled to minimize significant adverse impacts to soil and biota while allowing legitimate access, as addressed by Principles 3 and 4 and identified in the management plan.	Gates control access to the road system.
Failed drainage structures or other areas of active erosion caused by roads and skid trails are identified, and measures are taken to correct the drainage problems and stabilize erosion.	Roads are monitored and problems are addressed as needed.
Stream and Water Quality Protection Stream crossings are located and constructed in a way that minimizes fragmentation of aquatic habitat (see Glossary) and protects water quality.	Observed stream crossings were well constructed.
Visual and Aesthetic Considerations Forest owners or managers limit and/or reduce negative impacts on visual quality caused by forest management operations.	Aesthetic considerations are emphasized in the management plan and forest management activities.
C6.6. Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.	85
6.6.a. Forest owners and managers demonstrate compliance with FSC Policy paper: "Chemical Pesticides in Certified Forests, Interpretation of the FSC Principles and Criteria, July 2002" (available at http://www.fsc.org/en/whats_new/documents/Docs_cent/2) and comply with prohibitions and/or restrictions on World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement.	None of the pesticides used by SJA are included in the FSC's list of "highly hazardous" pesticides. SJA currently uses: Round-up, Stinger, Tordon RTU, Bitrex, Accord, Rodeo, Curtail, Escort, Plateau. These pesticides are used primarily for invasive species control and in prairie management areas.
6.6.b. Forest owners or managers employ silvicultural systems, integrated pest management, and strategies for controlling vegetation that minimize negative environmental effects. Non-chemical techniques are preferred in the implementation of these strategies.	SJA has a pesticide policy that emphasizes integrated pest management and minimized use of pesticides. SJA uses prescribed fire for understory treatments.
6.6.c. Forest owners or managers develop written strategies for the control of pests as a component of the management plan (see Criterion 7.1).	SJA has written strategies to address gypsy moth and has implemented harvests designed to plan for future gypsy moth impacts.
6.6.d. If chemicals are applied, the most environmentally safe and efficacious chemicals are used. Chemicals are narrowly targeted, and minimize effects on non-target species.	SJA's pesticide policy emphasizes targeted tree/stem applications. Pesticides are used primarily in association with prairie restoration or invasive species control. Pesticides are selected based on control recommendations published by the MN DNR.
6.6.e. Chemicals are used only where they pose no threat to supplies of domestic water, aquatic habitats, or Rare species or plant community types.	SJA's pesticide policy requires that pesticides be used under the direction of a qualified applicator and following all label instructions.
6.6.f. If chemicals are used, a written prescription is prepared that describes the risks and benefits of their use and the precautions that workers will employ.	Pesticides are used following label instructions and recommendations published by the MN DNR.
6.6.g. If chemicals are used, the effects are monitored and the	Effectiveness is evaluated by observations of habitat

results are used for adaptive management. Records are kept of pest occurrences, control measures, and incidences of worker exposure to chemicals.	restoration and/or the reduction of invasive species populations.	
C6.7. 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.	85	
6.7.a. In the event of a spill of hazardous material, forest owners or managers immediately contain the material, report the spill as required by applicable regulations, and engage qualified personnel to perform the appropriate removal and remediation.	SJA follows the OSB corporate policies established by the OSB Environmental Health and Safety Office.	
6.7.b. Waste lubricants, anti-freeze, containers, and related trash are stored in a leakproof container until they are transported to an approved off-site disposal site.	Materials are stored in the corporate garage facility. Used oil is recycled.	
6.7.c. Broken or leaking equipment and parts are repaired or removed from the forest.	The skid loader is always fixed in the garage. Broken or leaking equipment on the skidder is repaired as quickly as possible on site as the skidder will not fit into the garage.	
6.7.d. Equipment is parked away from riparian management zones, sinkholes, or supplies of ground water.	The skidder was observed to be parked in an upland area.	
C6.8. Use of biological control agents shall be documented, minimized, monitored, and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.	95	
6.8.a. Exotic (i.e., non-indigenous), non-invasive predators or biological control agents are used only as part of a pest management strategy for the control of exotic species of plants, pathogens (see Glossary), insects, or other animals when other pest control methods are, or can reasonably be expected to prove, ineffective. Such use is contingent upon peer-reviewed scientific evidence that the agents in question are non-invasive and are safe for indigenous species because, for example, exotic species can host pathogens that might diminish biodiversity in the forest.	Not applicable. SJA does not use biological control agents.	
C6.9. The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.	95	
6.9.a. Except on plantation sites (see also Criterion 10.4), the use of exotic tree species is permitted only in the first successional stages or other short-term stages for the purposes of restoring degraded ecosystems.	Not applicable. SJA does not use exotic species. Scots pine have been planted at the site, but these are primarily cultural significant and historic plantings starting in the late 1800s.	
6.9.b. The use of exotic species (see Glossary) is contingent on peer-reviewed scientific evidence that the species in question is non-invasive and will not diminish biodiversity. If non-invasive exotic species are used, the provenance and location of use are documented, and their ecological effects are actively monitored.	Not applicable. Scots pine is non-invasive.	
6.9.c. Written documentation is maintained for the use of exotic species.	Records of the conifer plantings are included in the management plan.	
6.9.d. Forest owners or managers develop and implement control measures for invasive exotic species.	SJA is actively controlling invasive species in both forest and prairies habitats. SJA follows published DNR guidance for identification and control of invasive species.	
6.10. Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion: **a) Entails a very limited portion of the forest management unit; and** **b) Does not occur on High Conservation Value Forest areas; and** **c) Will enable clear, substantial, additional, secure, long-term conservation**	90	

benefits across the forest management unit.	
6.10.a. Over the life of the ownership, forest to non-forest conversions are limited to the threshold of 1% of the forest area or 100 acres, whichever is smaller, except that a parcel up to two acres in size may be converted for residential use by the forest owner or manager.	No forest conversion is occurring. The boundaries of the campus are well established and not expanding.
6.10.b. When private forest lands are sold, a portion of the proceeds of the sale is reinvested in additional forest lands and/or forest stewardship.	No land sales in at least 25 years.

Importance Weighted Aggregate Score for Principle 6: 90

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 ***Environmental Impact***	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
6.1	0.148404837	90	
6.2	0.112523205	90	
6.3	0.178125055	85	
6.4	0.09510324	95	
6.5	0.066154777	95	
6.6	0.090416326	85	
6.7	0.035846509	85	
6.8	0.050378702	95	
6.9	0.059148677	95	
6.10	0.163898673	90	
			89.83198753

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.

1.7 PRINCIPLE #7: MANAGEMENT PLAN

A management plan-appropriate to the scale and intensity of the operations-shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.

This Principle is elaborated through 4 Criteria, which collectively call for a very high level of commitment to management planning.

Standard	Score	Comments
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.**	95	
7.1.a. Management objectives		
7.1.a.1. A written management plan is prepared that includes the landowner's short-term and long-term goals and objectives (ecological, social, and economic). The objectives are specific, achievable, and measurable.	The management plan includes 17 goals as well as a vision statement for the overall land management. Forest management objectives are also included. Ecological goals include a healthy and diverse forest; social goals included study, education and validating Benedictine stewardship values; and economic goals include providing a sustainable harvest of forest products for Abbey use and sale.	
7.1.a.2. The management plan describes desired future conditions that will meet the long-term goals and objectives and that determine the silvicultural system(s) and management activities to be used.	Forest management objectives include recommendations and specific silvicultural systems to be used. Stand level details and desired future conditions are in development.	
7.1.b. Description of forest resources to be managed, environmental limitations, land use and ownership status, socioeconomic conditions, and profile of adjacent lands	95	
7.1.b.1. The management plan describes the timber, fish and wildlife, harvested non-timber forest products, soils, and non-economic forest resources.	The timber, wildlife, soils, non-timber, recreational and education resources are all addressed in the management plan and objectives.	
7.1.b.2. The management plan includes descriptions of special management areas; sensitive, rare, threatened, and endangered species and their habitats; and other ecologically sensitive features in the forest.	RTE species and habitats are included in the management plan. Natural areas, wetlands, and water resources are also addressed.	
7.1.b.3. The management plan includes a description of past land uses and incorporates this information into the vision, goals, and objectives.	Historic land use including since Abbey ownership in 1864 as well as pre-settlement information is included in the management plan.	
7.1.b.4. The management plan identifies the legal status of the	The history of the Abbey's ownership and management	

forest and its resources (e.g., ownership, usufruct rights (see Glossary), treaty rights, easements, deed restrictions, and leasing arrangements).	activities is included in the plan.	
7.1.b.5. The management plan identifies relevant cultural and socioeconomic issues (e.g., traditional and customary rights of use, access, recreational uses, and employment), conditions (e.g., composition of the workforce, stability of employment, and changes in forest ownership and tenure), and areas of special significance (e.g., ceremonial and archeological sites).	The plan documents the evaluations that have been conducted to identify special sites, records the historic use of the property, and describes the cultural significance of the land management as an expression of Benedictine stewardship values.	
7.1.b.6. The management plan incorporates landscape-level considerations within the ownership and among adjacent and nearby lands, including major bodies of water, critical habitats, and riparian corridors shared with adjacent ownerships.	Adjacent lands and landscape level considerations are described in the plan. The ecological subsection information is also included.	
7.1.c. Description of silvicultural and/or other management system	95	
7.1.c.1. Silvicultural system(s) and prescriptions are based on the integration of ecological and economic characteristics (e.g., successional processes, soil characteristics, existing species composition and structures, desired future conditions, and market conditions). (see also sub-Criterion 6.3.a)	Diverse silvicultural systems are used and the management plan describes these systems and the situations where they are appropriate. Data about existing conditions, soils mapping, and management objectives are also included.	
7.1.c.2. Prescriptions are prepared prior to harvesting, site preparation, pest control, burning, and planting and are available to people who implement the prescriptions.	Harvest plans include written prescriptions, maps are prepared using the GIS, and trees are marked. The information is provided to the operators. Planting records are included in the plan.	
7.1.d. Rationale for the rate of annual harvest and species selection	95	
7.1.d.1. Calculations for the harvests of both timber and non-timber products are detailed or referenced in the management plan and are based on net growth, yield, stocking, and regeneration data. (see also 5.6.b)	The annual allowable harvest calculations are included in detail in the management plan and are based on site index, regionally appropriate research and publications, and estimated growth. Harvest records and regeneration monitoring results are incorporated in the management plan annually.	
7.1.d.2. Species selection meets the social and economic goals and objectives of the forest owner or manager and leads to the desired future conditions while maintaining or improving the ecological composition, structures, and functions of the forest.	SJA's management is overseen by the Advisory Council and Lands and Management Committee. The Woodshop gets much of its wood from the SJA lands. SJA is actively working to regenerate oak and uses diverse silvicultural systems to manage a diverse forest.	
7.1.d.3. The management plan addresses potentially disruptive effects of pests, storms, droughts, and fires as they relate to allowable cut.	The management plan address gypsy moth and provides guidance for recalculating the allowable cut in instances of salvage operations.	
7.1.e. Provisions for monitoring forest growth and dynamics (see also Principle 8)	95	
7.1.e.1. The management plan includes a description of procedures to monitor the forest.	Monitoring record keeping is included in the management plan. Annual regeneration monitoring is occurring, seed crops and deer harvests are also tracked.	
7.1.f. Environmental safeguards based on environmental assessments (see also Criterion 6.1.)	95	
7.1.g. Plans for the identification and protection of rare, threatened, and endangered species. (see also Criterion 6.3.)	95	
7.1.h. Maps describing the forest resource base including protected areas, planned management activities, and land ownership.	95	
7.1.h.1. The management plan includes maps of such forest characteristics as: relevant landscape-level factors; property boundaries; roads; areas of timber production; forest types by age class; topography; soils; riparian zones; springs and wetlands; archaeological sites; areas of cultural and customary use; locations of sensitive, rare, threatened, and/or endangered species and their habitats; and designated High Conservation	Maps in the plan include a soils map, a map of the property and major land planning divisions, and a map of the 6 compartments used for management and record keeping. Appendix A includes the 1880 Plat Map showing OSB land ownership. Appendix K includes the stand maps for each compartments as developed during the 1997 inventory.	

Value Forests.		
7.1.i. Description and justification of harvesting techniques and equipment to be used. (see also Criterion 6.5)	95	
7.1.i.1. Harvesting machinery and techniques are discussed in the management or harvest plan and are specifically matched to forest conditions in order to minimize damage.	SJA owns its own logging equipment. Chainsaw directional felling is used and planned for in the tree marking and design of harvest units and operations.	
7.1.i.2. Conditions for each timber sale are established by a timber sale contract or written harvest prescription and accompanying timber sale map.	A written harvest prescription is developed with a timber sale map. SJA employs its own logging crew.	
C7.2. The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.	95	
7.2.a. Operational components of the management plan are reviewed and revised as necessary or at least every 5 years. Components of the long-term (strategic) management plan are revised and updated at the end of the planning period or when other changes in the management require it. (see also Criterion 8.4)	Harvest and regeneration information in the plan is updated annually. Stand data is updated as needed. Detailed stand level information is in development.	
C7.3. Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plans.	95	
7.3.a. The forest owner or manager assures that workers are qualified to implement the management plan (see also Criterion 4.2).	Workers are provided training and guidance to ensure proper implementation.	
7.3.b. The management plan is understandable, comprehensive, and readily available to field personnel.	The management plan is well written, articulate and complete. It is available to employees as well as online to the public.	
C7.4. 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.	100	
7.4.a. A management plan summary that outlines management objectives (from sub-Criterion 7.1.a.), whether on private lands or the land pool under a resource manager, is available to the public at a reasonable fee. Additional elements of the plan may be excluded, to protect the security of environmentally sensitive and/or proprietary information.	The entire management plan is available on-line to the public.	
7.4.b. Managers of public forests make forestry-related information easily accessible (e.g., available on websites) for public review, including that required by Criterion 7.1.	Not applicable. SJA is a private forest.	

Importance Weighted Aggregate Score for Principle 7: 96

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	0.444537347	95	

7.2	0.165087328	95	95.53604608
7.3	0.283166109	95	
7.4	0.107209216	100	

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:

96

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

1.8 PRINCIPLE #8: MONITORING AND ASSESSMENT

Monitoring shall be conducted-appropriate to the scale and intensity of forest management-to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.

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.

Standard	Score	Comments
C8.1. 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.	85	
8.1.a. The frequency of monitoring activities follows the schedule outlined in the management plan.	The management pan outlines monitoring and record keeping. Deer harvests, maple syrup production, oak regeneration, and seed crops are monitored annually.	
8.1.b. Monitoring is carried out to assess: • The degree to which management goals and objectives have been achieved; • Deviations from the management plan; • Unexpected effects of management activities; • Social (see Criterion 4.4) and environmental (see Criterion 6.1) effects of management activities.	Oak regeneration is monitored to inform oak management decisions.	
8.1.c. Public and large, private land owners or managers take the lead in identifying, initiating, and supporting research efforts to address pertinent ecological questions. Small and medium private land owners or managers use information that has been developed by researchers and other managers.	SJA makes extensive use of research information and the experiences of other forest managers. SJA maintains extensive reference materials and has consulted with TNC, DNR, and private forest managers for input. The management plan includes a list of reviewers.	
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.	90	

c) Composition and observed changes in the flora and fauna. **d) Environmental and social impacts of harvesting and other operations** **e) Cost, productivity, and efficiency of forest management**		
8.2.a. Yield of all forest products harvested	90	
8.2.a.1. The forest owner or manager maintains records of standing inventories of timber and harvest volumes of timber and non-timber species (quality and quantity).	The inventory was completed in 1997 and the volume data is included in the management plan. Maple syrup records are also kept.	
8.2.b. Growth rates, regeneration, and condition of the forest	90	
8.2.b.1. An inventory system is established and records are maintained for: 1) Timber growth and mortality (for volume control systems); 2) Stocking, and regeneration; 3) Stand-level and forest-level composition and structure (e.g., by use of tools, such as ecological classification systems); 4) Abundance, regeneration, and habitat conditions of non-timber forest products; 5) Terrestrial and aquatic features; 6) Soil characteristics (e.g., texture, drainage, existing erosion); 7) Pest conditions.	The inventory and management plan evaluates and reports on these forest conditions and data.	
8.2.c. Composition and observed changes in the flora and fauna	90	
8.2.c.1. Forest owners or managers periodically monitor the forest for changes in major habitat elements and in the occurrence of sensitive, rare, threatened, or endangered species or communities.	Several site reviews have been conducted to evaluate RTE species, including another one in 2007.	
8.2.d. Environmental and social impacts of harvesting and other operations	90	
8.2.d.1. The environmental effects of site-disturbing activities are assessed (e.g., road construction and repair, harvesting, and site preparation).	Site Level Guidelines are followed and road systems are used frequently and maintenance needs are identified through casual observation.	
8.2.d.2. Creation or maintenance of local jobs and public responses to management activities are monitored.	Jobs at SJA have been stable and public responses are received through the Advisory Council, Land and Forests Management Committee, and public events.	
8.2.d.3. Sites of special significance to American Indians are monitored in consultation with tribal representatives (see also Principle 3).	No sites were identified in the review conducted by the Minnesota Historical Society.	
8.2.e. Cost, productivity, and efficiency of forest management	90	
8.2.e.1. Forest owners or managers monitor the cost and revenues of management in order to assess productivity and efficiency.	A cost and revenue report is available and annual budget planning occurs. The objective is to have the forest management operations break-even. The budget process is informal and there isn't a clear process for planning larger requests or long-term needs.	
C8.3. 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."	95	
C8.4. The results of monitoring shall be incorporated into the implementation and revision of the management plan.	90	
8.4.a. Discrepancies between the results of management activities or natural events (i.e. yields, growth, ecological changes) and expectations (i.e. plans, forecasts, anticipated impacts) are appraised and taken into account in the subsequent management plan.	Feedback from the regeneration surveys is being used to inform oak management planning.	
C8.5. While respecting the confidentiality of information, forest managers shall make publicly available a summary	95	

of the results of monitoring indicators, including those listed in Criterion 8.2.		
8.5.a. A summary outlining the results of monitoring is available to the public at a reasonable fee, whether on private lands or a land pool under a resource manager or group certification.	The results of the monitoring activities are included in the management plan that is publicly available.	
8.5.b. Managers of public forests make information related to monitoring easily accessible (e.g., available on websites) for public review.	Not applicable. SJA is a private forest.	

FSC Principle #8 ***Monitoring and Assessment***	Normalized Relative Importance Weights	Performance Scores	Weighted Average Score
8.1	0.148042162	85	90.33588488
8.2	0.26066921	90	
8.3	0.075104124	95	
8.4	0.376069488	90	
8.5	0.140115015	95	

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:

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.

1.9 PRINCIPLE #9: MAINTENANCE OF HIGH CONSERVATION VALUE FORESTS

Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.

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 HCVF management strategies.

Standard	Score	Comments
C9.1. 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.	95	
9.1.a. Attributes and locations of High Conservation Value Forests are determined by:	In 2006, SJA completed an assessment of HCVFs and the requirements of Principle 9. The assessment concluded	

1) Globally rare, threatened, or endangered features, habitats, or ecosystems that may be present in the forest (suggested sources of information are: The Nature Conservancy, World Wildlife Fund, Conservation International, World Resources Institute); 2) Regionally and locally rare, threatened, or endangered features, habitats, or ecosystems that may be present in the forest; culturally and tribally significant areas; or municipal watersheds that may be present in the landscape and/or certified forest (suggested sources of information include natural and cultural heritage agencies); 3) Appropriate consultations with local and regional scientists and other stakeholders; 4) Public review of proposed HCVF attributes and areas on large-scale and public ownerships (see also 7.4, 4.4.e., 4.4.f.); 5) Integration of information from consultations and public review into proposed HCVF delineation; 6) Delineation by maps and habitat descriptions	that the entire forest ownership constitutes an HCVF on the basis of being a regionally rare habitat that has been identified on the Natural Heritage Database, as a intact forest block within a predominantly agricultural landscape, and for the social values associated with the forest's connections to the monastic religious traditions.	
C9.2. The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.	95	
C9.3. 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.	90	
9.3.a. Forest management plans and activities are appropriate for maintaining, enhancing and/or restoring attributes that make the area an HCVF.	The management plan outlines how the HCVFs will be maintained.	
9.3.b. Active management in HCVFs is allowed only when it maintains or enhances high conservation values.	The active oak regeneration work is important to maintaining the high conservation values of the oak forest identified by the MN DNR Natural Heritage Database.	
9.3.c. The management-plan summary includes information about HCVF management without compromising either the confidentiality of the forest owner or manager or environmentally and culturally sensitive features (see also sub-Criterion 7.1.f).	The HCVF information is included in the management plan.	
9.3.d. Forest owners or managers of HCVFs (forests and/or stands) coordinate conservation efforts with forest owners or managers of other HCVFs in the landscape.	SJA coordinates with the DNR with the state ranked forest habitats. SJA coordinates with The Nature Conservancy and other partners on the regional Avon Hills Initiatives. SJA collaborates with on-campus partners to maintain the social values of the forest.	
C9.4. Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.	95	
9.4.a. Forest owners or managers of small forests may satisfy this requirement with informal observations (see 8.1 and 8.2.). When observations detect changes, the changes are documented.	The management plan describes the monitoring that will be conducted to evaluate continued HCVFs	
9.4.b. Forest owners or managers of mid-sized and large forests monitor activities within and adjacent to HCVFs that may affect HCVF attributes (see Criteria 7.2, 8.1 and 8.2). Monitoring is adequate to track changes in HCV attributes, and may include informal observations. When monitoring detects changes to HCV attributes, the changes are documented.	Not applicable. SJA is a SLIMF.	

Importance Weighted Aggregate Score for Principle 9: 93.25

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	0.350695598	95	93.24610507
9.2	0.10929336	95	
9.3	0.350778987	90	
9.4	0.189232055	95	

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:

93

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

Principle #10 was deemed not to apply to this forest assessment because Saint John's Abbey consists of Natural Forest and natural forest management.

1.11 Controversial Issues

No issues were identified that were difficult to assess because of contradictory evidence or difficulty in interpreting the standard in the field.

2.0 TRACKING, TRACING AND IDENTIFICATION OF FOREST PRODUCTS

This section of the report addresses the procedures employed by the forest managers to track the flow of wood products from the point of harvest through to the point where custody is assumed by another entity (i.e., the wood products purchaser). The fundamental requirement that must be demonstrated by the forest management operation is that product from the certified forest area not be mixed with product from non-certified sources. This requirement is attained by

compliance with the FSC Criteria for chain of custody. It is against these Criteria that SCS evaluated Saint John's Abbey for potential award of chain of custody certification.

Saint John's Abbey has supplied to the SCS evaluation team a written description of its log handling and tracking procedures. Based upon a review of that information, interviews with Saint John's Abbey personnel and field inspections, we conclude the following.

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

Uncontrolled timber could enter the certified chain of custody when the logs leave the site for custom sawing. However, Saint John's Abbey has implemented multiple controls to eliminate this risk. These controls include the use of load tickets, painted and hammer stamped logs, separate storage and batch processing, and inclusion of certification information on all invoices and records.

2.2 Description of the Log Control System

To assure that the Abbey can track its lumber and logs, certified logs that are to be custom sawn are hammer-branded with an "SJ" before going to the sawmill. Both ends of the logs are also painted with green end-coat paint. This prevents checking and allows visual verification of the log piles, the logs or lumber in transit, the lumber as it sits at the mill, and the lumber as it is being stickered.

2.3 End Point of Chain of Custody

For lumber going to the Abbey Woodshop, the lands unit retains ownership through the harvesting, log transporting, sawmilling, grading, lumber transporting, and stickering back at Saint John's. Certified lumber is stored in a fenced locked area.

2.4 Visual Identification at End Point of Chain of Custody

The sawn lumber is graded by a qualified lumber grader and sorted by species, size, and grade. As it is being graded, each lumber pack (up to 500 bd ft of a single species, grade, and size) is given a unique code at the mill and the lumber is kept in that pack, stickered as that pack, and sold as a pack. An aluminum tag attached to each pack allows easy identification. Green end paint and hammer stamps are also visible on the sawn lumber.