

# FOREST MANAGEMENT AND STUMP-TO-FOREST GATE CHAIN-OF-CUSTODY SURVEILLANCE EVALUATION REPORT

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*State of New York, Bureau of State Land Management*

## **SCS-FM/COC-00104N**

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CERTIFIED	EXPIRATION
29 January 2013	27 January 2018

DATE OF FIELD AUDIT
14-17 September 2015
DATE OF LAST UPDATE
30 Nov 2015

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## Foreword

Cycle in annual surveillance audits			
<input type="checkbox"/> 1 <sup>st</sup> annual audit	<input type="checkbox"/> 2 <sup>nd</sup> annual audit	<input checked="" type="checkbox"/> 3 <sup>rd</sup> annual audit	<input type="checkbox"/> 4 <sup>th</sup> annual audit
Name of Forest Management Enterprise (FME) and abbreviation used in this report:			
State of New York, Department of Environmental Conservation, Bureau of State Land Management (BSLM)			

All certificates issued by SCS under the aegis of the Forest Stewardship Council (FSC) require annual audits to ascertain ongoing conformance with the requirements and standards of certification. A public summary of the initial evaluation is available on the FSC Certificate Database <http://info.fsc.org/>.

Pursuant to FSC and SCS guidelines, annual / surveillance audits are not intended to comprehensively examine the full scope of the certified forest operations, as the cost of a full-scope audit would be prohibitive and it is not mandated by FSC audit protocols. Rather, annual audits are comprised of three main components:

- A focused assessment of the status of any outstanding conditions or Corrective Action Requests (CARs; see discussion in section 4.0 for those CARs and their disposition as a result of this annual audit);
- Follow-up inquiry into any issues that may have arisen since the award of certification or prior to this audit; and
- As necessary given the breadth of coverage associated with the first two components, an additional focus on selected topics or issues, the selection of which is not known to the certificate holder prior to the audit.

### 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 FSC Certificate Database (<http://info.fsc.org/>) no less than 90 days after completion of the on-site audit. Section B contains more detailed results and information for the use by the FME.

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## SECTION A – PUBLIC SUMMARY

### 1. General Information

#### 1.1 Annual Audit Team

<b>Auditor Name:</b>	David Capen	<b>Auditor role:</b>	Lead Auditor
<b>Qualifications:</b>	<p><b>Dr. David E. Capen</b> is a Professor Emeritus in the Rubenstein School of Environment and Natural Resources at the University of Vermont. He has a B.S.F. degree in Forestry from the University of Tennessee, an M.S. degree in Wildlife Management from the University of Maine, and a Ph.D. in Wildlife Science from Utah State University. He has been a faculty member at the University of Vermont since 1976, maintaining a part-time research appointment from 2002-2010. Dr. Capen is a Certified Wildlife Biologist and previously a Certified Forester. He has conducted numerous FSC audits in Massachusetts, Maine, Michigan, Minnesota, Indiana, Wisconsin, Connecticut, and Pennsylvania.</p>		
<b>Auditor Name:</b>	Keri Yankus	<b>Auditor role:</b>	Auditor
<b>Qualifications:</b>	<p>Keri Yankus has almost 20 years of experience in the forestry industry. She has a B.S. in Forest Management from the University of Maine. After graduation she went to work for West Virginia Division of Forestry as a full time District Forest Products Utilization Forester. She also has worked for National Park Service, Bureau of Land Management, NRCS, Weyerhaeuser Company, and USDA Wildlife Services. Keri holds Professional forestry licenses and or registrations in Michigan, West Virginia, and North Carolina, and is a Certified Forester. She has worked for NSF as an auditor since 2002. Keri’s primary role in the audit was as Lead Auditor for the SFI portion of a dual certification audit.</p>		

#### 1.2 Total Time Spent on Evaluation

A. Number of days spent on-site assessing the applicant:	3
B. Number of auditors participating in on-site evaluation:	2
C. Additional days spent on preparation, stakeholder consultation, and post-site follow-up:	1.5
<b>D. Total number of person days used in evaluation:</b>	<b>7.5</b>

#### 1.3 Standards Employed

##### 1.3.1. Applicable FSC-Accredited Standards

Title	Version	Date of Finalization
FSC-US Forest Management Standard	V1-0	July 8, 2010
<p>All standards employed are available on the websites of FSC International (<a href="http://www.fsc.org">www.fsc.org</a>), the FSC-US (<a href="http://www.fscus.org">www.fscus.org</a>) or the SCS Standards page (<a href="http://www.scsglobalservices.com/certification-standards-and-program-documents">www.scsglobalservices.com/certification-standards-and-program-documents</a>). Standards are also available, upon request, from SCS Global Services (<a href="http://www.SCSGlobalServices.com">www.SCSGlobalServices.com</a>).</p>		

## 2 Annual Audit Dates and Activities

### 2.1 Annual Audit Itinerary and Activities

<b>Date: Monday 14 September 13, 2015</b>	
<b>FMU / Location / sites visited</b>	<b>Activities / notes</b>
Meet BSLM staff in Port of Albany; drive 3.5 hours to Bath	Brief opening meeting: questions about staff changes, new policies, scope of evaluation, and selected indicators.
<b>Date: Tuesday 15 September 2015</b>	
<b>FMU / Location / sites visited</b>	<b>Activities / notes</b>
Bath Field Office, Region 8	
8:00-9:15	Opening meeting: introductions, scope of audit, audit techniques, open CARs and OBSs, discussion of field sites
9:15-4:30 Field visits	
Urbana State Forest	TX9553 "Ash4Sale": 62-acre hardwood site with extensive mortality from Emerald Ash Borer (EAB). Harvested in winter 2015; purchased by Wagner Hardwoods, subcontracted to Mark Rich for harvesting. All trees to be cut were marked; some ash was not cut because they showed decline but were not dead. Some oaks were also marked and cut in order to remove about 50% of overstory. Contractor has not yet finished closing the sale and still needs to do some grading of skid roads and installation of water bars. He also needs to finish cutting a section of dead ash trees, likely leaving them on the ground. Notes in the prescription about multiflora rose and possible need to control.
Birds Eye Hollow State Forest and County Park	A lowland site that is quite different than most other state forest lands in Region 8. The forest was acquired after being abandoned by a power company and proposed hydro project. The forest is a popular recreation area, with a joint project to develop a site for picnics and access to a small lake and wetland for fishing and hunting. We visited the site for lunch, supplemented by discussions of EAB mortality (quite visible), management of nuisance wildlife, and invasive aquatic plants. Paths and dock are accessible for wheelchairs.
Cinnamon Lake State Forest	Sale No. X009777
	Stand H-3: 15-acre removal of red pine plantation that lacks vigor; an active job that has just moved to this stand. Examined log landing where small patches of hydraulic oil were observed; discussed an instance of rutting and standards for unacceptable ruts; observed a new crossing of an intermittent stream and compliance with BMP standards; interviewed Steve Hubbard, logging subcontractor who has just begun work on the site (TLC certification maintained).
	Stand J-2: More red pine, with scattered Norway Spruce marked for harvest. All red pine will be removed, but some spruce to be retained; other species present on site, so retention will be ample.

	Stand H-1: A healthy plantation of large Norway Spruce that will be harvested in strips, taking 50% of the stand, as part of the same large sale involving the two stands above.
	Forks road, adjacent to Stand H-1: Observed successful control of an extensive roadside patch of Japanese Knotweed. Work was done with back-pack sprayers using "Thinvest" formulation of Glyphosate. Plants were sprayed early in growing season three years in a row.
<b>Date: Wednesday 16 September 13, 2015</b>	
<b>FMU / Location / sites visited</b>	<b>Activities / notes</b>
Cortland Field Office, Region 7	
8:00-9:00	Opening meeting: introductions, scope of audit, audit techniques, open CARs and OBSs, discussion of field sites
9:00-4:30 Field visits	
Danby State Forest	Sale No. X008700
	Stand B-50: Part of a sale to Wagner Millworks, harvest conducted by Tim Barthalemew, but final clean-up of the site was completed only a few days before the audit, by Bill Corsun. Most of this inspection focused on the job that was done to close the major skid trail, which was a long haul up a rather steep hill to the landing. We examined 24 waterbars and 3 crossings of intermittent streams. Stream crossings were temporary with logs across the haul road, which was laid out on an existing haul road from past harvest. Minor questions arose from some of the crossings, but overall the job was adequate. Auditors were given copies of stand diagnosis and prescriptions for single- or group selection with trees marked to cut and for special reserve, e.g., den trees. Special resources are noted on the form.  Stand Nos. A-6.1&6.2: Interview with Bill Corsun, Logging subcontractor at landing, where he was trimming logs with chain saw as they were loaded onto truck. Corsun uses chain saw and cable skidder. A bulldozer is available for his use. He was equipped with PPE, is certified as a Trained Logger, and cited insurance-related guidance on his logging practices. Spill kit in his service truck and a tarp in his skidder for any leaks in the forest.
Danby State Forest	Sale No. TX09858
	Red pine plantation where active harvest for patch cuts is underway. All red pine is being harvested from patches, leaving all hardwoods. This site is quite flat with operable soils. Harvesting is being conducted with cut-to-length processor and forwarder. The main topic of discussion was the
Danby State Forest	Sale No. X008969
	Red pine plantation that is being converted to natural stand conditions. Patch clearcuts are marked, and harvest has begun. Most of the inspection on this sale area concentrated on the Finger Lakes Hiking Trail that crosses the harvest area. Accommodations

	for the trail were discussed, and signage was examined. BSLM and hiking groups appear to work very well together to accommodate a variety of interests and uses of the state forest.
Danby State Forest	Stop to observe a small area where Giant Hogweed has been sprayed with herbicide. Mature stalks clearly were dead, but a few small seedlings were observed. The chemical control was conducted by a Forest Health crew from Albany who conducts control of this species throughout the region of occurrence.
Shindagin Hollow State Forest	Sale No. X009399
	A recently completed of an oak stand to reduce BA from 135 to 80. Harvesting was done by chain saw and bulldozer. A major point of discussion at this site concerned the use of trails by cyclist. This forest has a network of bike trails that is the most popular in NY. Proximity to Ithaca brings many young cyclists to the forest every day. The sale contracts specified the importance of working with the supervising forester to coordinate the logging activity with cyclists. In general, the cyclists and foresters work closely and well to accommodate mixed uses on this forest.
<b>Date: Thursday 17 September 13, 2015</b>	
Stamford Field Office, Region 4	
8:00-8:30	Opening meeting: introductions, scope of audit, audit techniques, discussion of field sites
8:30-1:00	Field visits
Burnt-Rossman Hills State Forest	Sale No. X008994. A completed sale with final clean-up and erosion control on the site. This was a 24-acre sale designed to salvage damaged trees left by Superstorm Sandy in 2013. Red pine, Norway and white spruce, and miscellaneous hardwoods were salvaged, but much of the material was not merchantable and was left on the site. Care was taken to protect numerous stone walls on the site, snowmobile trails, and some wet soils. Equipment specs were in the sales contract. The site has abundant regeneration, mostly hardwoods, which will dominate in the future. Result is pretty messy, with blowdowns and non-merchantable material, but biologically diverse with small to medium gaps in the canopy.
	Drive-by inspections of other recent harvests: plantation thinnings and clean-up after storm damage. Noted signs posted along public road explaining the nature of forest harvesting.
Mallet Pond State Forest	Sale No. X009623. An active sale involving 114 acres and a mix of harvest methods: storm salvage, small clearcuts in plantations, and overstory removal. It is a complex prescription involving several exemptions to SMZs, pre-harvest treatment of honeysuckle and multiflora rose, as well as restrictions on harvest equipment. The owner of the harvesting crew was interviewed by auditors. Several trucks were being loaded and logs were being forwarded to the landing during the audit. Safety equipment was being worn, and a spill kit was observed. Small areas of spilled fluids were noted on

	the landing. The forester overseeing the harvest indicated that such spills would need to be cleaned up.
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## 2.2 Evaluation of Management Systems

SCS deploys interdisciplinary teams with expertise in forestry, social sciences, natural resource economics, and other relevant fields to assess an FME’s conformance to FSC standards and policies. Evaluation methods include document and record review, implementing sampling strategies to visit a broad number of forest cover and harvest prescription types, observation of implementation of management plans and policies in the field, and stakeholder analysis. When there is more than one team member, team members may review parts of the standards based on their background and expertise. On the final day of an evaluation, team members convene to deliberate the findings of the assessment jointly. This involves an analysis of all relevant field observations, stakeholder comments, and reviewed documents and records. Where consensus between team members cannot be achieved due to lack of evidence, conflicting evidence or differences of interpretation of the standards, the team is instructed to report these in the certification decision section and/or in observations.

## 3. Changes in Management Practices

There have been no changes in management practices.

## 4. Results of the Evaluation

### 4.1 Existing Corrective Action Requests and Observations

<b>Finding Number: 2014.1</b>	
<b>Select one:</b> <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation	
<b>FMU CAR/OBS issued to</b> (when more than one FMU):	
<b>Deadline</b>	<input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify):
<b>FSC Indicator:</b>	FSC-US Forest Management Standard, V1-0, 4.2(b)
<b>Non-Conformity</b> (or Background/ Justification in the case of Observations): During on-site visits to Region 4 and Region 7, employees did not consistently wear seat belts during vehicle travel on public roads. During travel in Region 7, a vehicle door was not completely closed during travel. In each case, vehicle warning lights and sounds were ignored by staff.	
<b>Corrective Action Request</b> (or Observation): The forest owner or manager and their employees and contractors shall demonstrate a safe work environment.	

<b>FME response</b> <i>(including any evidence submitted)</i>	Wearing seat belts in a moving vehicle is a clear expectation for all BSLM forest workers. Deviations from this practice are not acceptable. All BSLM employees were sternly reminded of this expectation, both in writing and again at Bureau meeting in February.
<b>SCS review</b>	Seatbelts were used properly during all travel associated with the 2015 audit. Employees were quite aware of the careless incidences observed during 2014 and can be expected to comply with seatbelt use in the future.
<b>Status of CAR:</b>	<input checked="" type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> <i>Other decision (refer to description above)</i>

<b>Finding Number: 2014.2</b>	
<b>Select one:</b> <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation	
<b>FMU CAR/OBS issued to</b> (when more than one FMU):	
<b>Deadline</b>	<input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify):
<b>FSC Indicator:</b>	FSC-US Forest Management Standard, V1-0, 6.7(a)(b)
<b>Non-Conformity</b> <i>(or Background/ Justification in the case of Observations):</i> One timber harvest operator interviewed in Region 8 did not have equipment to respond to a hazardous spill. The operator was trained and understood this requirement. This operator started harvest operations during the same morning as the audit interview.	
<b>Corrective Action Request</b> <i>(or Observation):</i> The forest owner or manager, and employees and contractors, shall have the equipment to respond to hazardous spills.	
<b>FME response</b> <i>(including any evidence submitted)</i>	Although the observation that led to this finding was believed to be an isolated one, all foresters were reminded, through dissemination of audit findings and again at a Bureau meeting in February, to be certain that operators comply with contract requirements requiring spill kits on all harvesting jobs.
<b>SCS review</b>	Interviews with BSFM staff and harvest contractors confirmed compliance with the requirement to have spill kits on site whenever large equipment is present. The auditor felt that the 2014 finding resulted from an uncommon circumstance.
<b>Status of CAR:</b>	<input checked="" type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> <i>Other decision (refer to description above)</i>

## 4.2 New Corrective Action Requests and Observations

<b>Finding Number: 2015.1</b>	
<b>Select one:</b> <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation	
<b>FMU CAR/OBS issued to</b> (when more than one FMU):	
<b>Deadline</b>	<input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input type="checkbox"/> Next audit (surveillance or re-evaluation) <input checked="" type="checkbox"/> Other deadline (specify): June 30 <sup>th</sup> , 2016
<b>FSC Indicator:</b>	6.6.a
<b>Non-Conformity</b> (or Background/ Justification in the case of Observations): BSLM does not have a consistent program for compiling information on use of chemical pesticides and reporting pesticide use to SCS prior to annual audits. A recent list of pesticides used on the FMU includes several chemicals that are on the FSC list of hazardous chemicals.	
<b>Corrective Action Request</b> (or Observation): BSLM must establish a consistent protocol for assuring that pesticides used on the FMU are permitted by FSC (or by derogation) and reporting pesticide use to the certifying body. Use of all pesticides currently listed on the FSC Highly Hazardous Pesticide list must stop before June 30 <sup>th</sup> , 2016, with evidence submitted to SCS, or a derogation for their continued use must be submitted to SCS by the same deadline.	
<b>FME response</b> (including any evidence submitted)	
<b>SCS review</b>	
<b>Status of CAR:</b>	<input type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> Other decision (refer to description above)

<b>Finding Number: 2015.2</b>	
<b>Select one:</b> <input type="checkbox"/> Major CAR <input checked="" type="checkbox"/> Minor CAR <input type="checkbox"/> Observation	
<b>FMU CAR/OBS issued to</b> (when more than one FMU):	
<b>Deadline</b>	<input type="checkbox"/> Pre-condition to certification <input type="checkbox"/> 3 months from Issuance of Final Report <input checked="" type="checkbox"/> Next audit (surveillance or re-evaluation) <input type="checkbox"/> Other deadline (specify):
<b>FSC Indicator:</b>	9.4.a
<b>Non-Conformity</b> (or Background/ Justification in the case of Observations): BSLM did not provide sufficient information to document a program of annual monitoring of HCVFs.	
<b>Corrective Action Request</b> (or Observation): BSLM shall address the system of annual monitoring of HCVFs and devise, if necessary, a more formal protocol for monitoring and reporting.	

<b>FME response</b> <i>(including any evidence submitted)</i>	
<b>SCS review</b>	
<b>Status of CAR:</b>	<input type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> <i>Other decision (refer to description above)</i>

## 5. Stakeholder Comments

In accordance with SCS protocols, consultation with key stakeholders is an integral component of the evaluation process. Stakeholder consultation takes place prior to, concurrent with, and following field evaluations. Distinct purposes of such consultation include:

- To solicit input from affected parties as to the strengths and weaknesses of the FME’s management, relative to the standard, and the nature of the interaction between the company and the surrounding communities.
- To solicit input on whether the forest management operation has consulted with stakeholders regarding identifying any high conservation value forests (HCVFs).

Principal stakeholder groups are identified based upon results from past evaluations, lists of stakeholders from the FME under evaluation, 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 in this evaluation:

### 5.1 Stakeholder Groups Consulted

No stakeholder groups were consulted during the audit, and no relevant communications were received by SCS.	

Stakeholder consultation activities are organized to give participants the opportunity to provide comments according to general categories of interest based on the three FSC chambers, as well as the SCS Interim Standard, if one was used. The table below summarizes the major comments received from stakeholders and the assessment team’s response. Where a stakeholder comment has triggered a subsequent investigation during the evaluation, the corresponding follow-up action and conclusions from SCS are noted below.

## 5.2 Summary of Stakeholder Comments and Responses from the Team, Where Applicable

FME has not received any stakeholder comments from interested parties as a result of stakeholder outreach activities during this annual audit.

## 6. Certification Decision

The certificate holder has demonstrated continued overall conformance to the applicable Forest Stewardship Council standards. The SCS annual audit team recommends that the certificate be sustained, subject to subsequent annual audits and the FME’s response to any open CARs.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>Comments:</b> BSLM has made steady and excellent progress toward the expectations of the Forest Stewardship Council, and employees are understandingly proud of their accomplishments.	

## 7. Changes in Certification Scope

Any changes in the scope of the certification since the previous audit are highlighted in **yellow** in the tables below.

### Name and Contact Information

<b>Organization name</b>	State of New York, DEC		
<b>Contact person</b>	Justin Perry		
<b>Address</b>	625 Broadway Albany NY 12333-4233	<b>Telephone</b>	
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		<b>Website</b>	<a href="http://www.dec.ny.gov/about/27748.html">www.dec.ny.gov/about/27748.html</a>

### FSC Sales Information

<input checked="" type="checkbox"/> FSC Sales contact information same as above.			
<b>FSC salesperson</b>			
<b>Address</b>		<b>Telephone</b>	
		<b>Fax</b>	
		<b>e-mail</b>	
		<b>Website</b>	

### Scope of Certificate

<b>Certificate Type</b>	<input checked="" type="checkbox"/> Single FMU	<input type="checkbox"/> Multiple FMU
	<input type="checkbox"/> Group	
<b>SLIMF (if applicable)</b>	<input type="checkbox"/> Small SLIMF certificate	<input type="checkbox"/> Low intensity SLIMF certificate

	<input type="checkbox"/> Group SLIMF certificate		
<b># Group Members (if applicable)</b>			
<b>Number of FMU's in scope of certificate</b>			
<b>Geographic location of non-SLIMF FMU(s)</b>	Latitude & Longitude: 42.6529/-73.7491		
<b>Forest zone</b>	<input type="checkbox"/> Boreal	<input checked="" type="checkbox"/> Temperate	
	<input type="checkbox"/> Subtropical	<input type="checkbox"/> Tropical	
<b>Total forest area in scope of certificate which is:</b>		<b>Units:</b> <input type="checkbox"/> ha or <input checked="" type="checkbox"/> ac	
privately managed	n/a		
state managed	780,178		
community managed	n/a		
<b>Number of FMUs in scope that are:</b>			
less than 100 ha in area		100 - 1000 ha in area	
1000 - 10 000 ha in area		more than 10 000 ha in area	1
<b>Total forest area in scope of certificate which is included in FMUs that:</b>		<b>Units:</b> <input type="checkbox"/> ha or <input type="checkbox"/> ac	
are less than 100 ha in area		0	
are between 100 ha and 1000 ha in area		0	
meet the eligibility criteria as <i>low intensity</i> SLIMF FMUs		0	
<b>Division of FMUs into manageable units:</b>			
<p>This FME maintains 9 regional offices located throughout the state. Within each region, the Division of Operations supports the BSLM by providing technical services, facilities management, and maintenance of physical assets. The Bureau of Fish, Wildlife and Marine Resources assists with developing management decisions to protect species and habitat. The Division of Law Enforcement provides support through law enforcement, education and public outreach. Personnel from each Division are assigned to regional offices and collaborate to manage the State Forests, Unique Areas, and State Nature and Historic Preserves within the scope of this assessment.</p> <p>Land within each region is grouped into planning units. A Unit Management Plan is written for each unit and includes objectives and activities that are designed to accomplish specific management goals. This FME maintains 81 planning units.</p>			

**Non-SLIMF Group Members**

**Production Forests**

<b>Timber Forest Products</b>	<b>Units:</b> <input type="checkbox"/> ha or <input type="checkbox"/> ac
Total area of production forest (i.e. forest from which timber may be harvested)	~657,000
Area of production forest classified as 'plantation'	~30,000
Area of production forest regenerated primarily by replanting or by a combination of replanting and coppicing of the planted stems	~20,000

Area of production forest regenerated primarily by natural regeneration, or by a combination of natural regeneration and coppicing of the naturally regenerated stems	~753,000
<b>Silvicultural system(s)</b>	<b>Area under type of management</b>
Even-aged management	
Clearcut (clearcut size range )	517
Shelterwood	247
Other:	
Uneven-aged management	
Individual tree selection and group selection	1,599
Group selection	
Other: Thinning and Salvage	3,971
<input type="checkbox"/> Other (e.g. nursery, recreation area, windbreak, bamboo, silvo-pastoral system, agro-forestry system, etc.)	
The sustainable rate of harvest (usually Annual Allowable Harvest or AAH where available) of commercial timber (m3 of round wood)	115,019 Mbf/year
<b>Non-timber Forest Products (NTFPs)</b>	
Area of forest protected from commercial harvesting of timber and managed primarily for the production of NTFPs or services	0
Other areas managed for NTFPs or services	0
Approximate annual commercial production of non-timber forest products included in the scope of the certificate, by product type	0
<b>Explanation of the assumptions and reference to the data source upon which AAH and NTFP harvest rates estimates are based:</b>	
The Strategic Plan for State Forest Management (2010) and Estimating Periodic Annual Increment on State Forest Lands in New York (2013) state that calculations were based on documented growth rates for acreages of each forest type/age class and species distribution. Updates to the Estimating Periodic Annual Increment on State Forest Lands in New York have been completed in the fall 2015.	
<b>Species in scope of joint FM/COC certificate: (Scientific / Latin Name and Common / Trade Name)</b>	
<i>Acer rubrum</i> , Red Maple; <i>Acer Saccharum</i> , Sugar Maple; <i>Prunus serotina</i> , Black Cherry; <i>Quercus rubra</i> , Red Oak; <i>Quercus alba</i> , White Oak; <i>Fraxinus americana</i> , White Ash; <i>Tsuga canadensis</i> , Eastern Hemlock; <i>Abies balsamea</i> , Balsam Fir; <i>Larix laricina</i> , Eastern Larch; <i>Picea abies</i> Norway Spruce; <i>Pinus strobus</i> , White Pine; <i>Pinus resinosa</i> , Red Pine; <i>Picea rubens</i> , Red Spruce	

**FSC Product Classification**

<b>Timber products</b>		
<b>Product Level 1</b>	<b>Product Level 2</b>	<b>Species</b>
Logs W1	W1.1	Refers to species list above
Fuelwood W1	W1.2	Refers to species list above
<b>Non-Timber Forest Products</b>		
<b>Product Level 1</b>	<b>Product Level 2</b>	<b>Product Level 3 and Species</b>
Food N9	N9.6	N9.6.1 Sugar Maple ( <i>Acer Saccharum</i> )

**Conservation Areas**

Total area of forest and non-forest land protected from commercial harvesting of timber and managed primarily for conservation objectives		~ 68,400 ac (“Protection Stands” within the scope of this certificate)		
<b>High Conservation Value Forest/ Areas</b>				
<b>High Conservation Values present and respective areas:</b>				<b>Units:</b> <input type="checkbox"/> ha or <input checked="" type="checkbox"/> ac
	<b>Code</b>	<b>HCV Type</b>	<b>Description &amp; Location</b>	<b>Area</b>
<input checked="" type="checkbox"/>	HCV1	Forests or areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).	<b>Special Treatment:</b> New York Natural Heritage Element Occurrences (non-community type only) with survey dates between 1990-2013 with a state “rarity” rank of S1, S2, and S1S2. Clipped to State Forests	4,782
<input checked="" type="checkbox"/>	HCV2	Forests or areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.	Adirondack Forest Preserve and Catskill Forest Preserve.	2,864,549
<input checked="" type="checkbox"/>	HCV3	Forests or areas that are in or contain rare, threatened or endangered ecosystems.	<b>Rare Community:</b> New York Natural Heritage Element Occurrences (community type only) with survey dates between 1990-2013 with a state “rarity” rank of S1, S2, and S1S2. Clipped to State Forests	2,550
<input checked="" type="checkbox"/>	HCV4	Forests or areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).	<b>Watershed:</b> Portions of State Forests that overlay Sole and Primary Source Aquifers, have public water supply intakes downstream within the Hydrologic Unit Code (HUC) 12 watershed or are within the Department of Health Source Water Assessment Program Plan (DOH SWAPP) delineated buffers (zone of influence) around public ground water wells that are surface water influenced.	54,371

<input checked="" type="checkbox"/>	HCV5	Forests or areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).	<b>Cultural Heritage:</b> Currently over 725 point locations that are delineated on the ground by forestry/field staff representing any number of culturally significant/historic sites in our state land assets data set.	n/a
<input checked="" type="checkbox"/>	HCV6	Forests or areas critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).	<b>Cultural Heritage:</b> Currently over 725 point locations that are delineated on the ground by forestry/field staff representing any number of culturally significant/historic sites in our state land assets data set.	
<b>Total Area of forest classified as 'High Conservation Value Forest/ Area'</b>				2,926,252**

**Areas Outside of the Scope of Certification (Partial Certification and Excision)**

<input type="checkbox"/> N/A – All forestland owned or managed by the applicant is included in the scope.		
<input checked="" type="checkbox"/> Applicant owns and/or manages other FMUs not under evaluation.		
<input type="checkbox"/> Applicant wishes to excise portions of the FMU(s) under evaluation from the scope of certification.		
<b>Explanation for exclusion of FMUs and/or excision:</b>	New York State owns and manages 2,700,000 acres of Forever Wild Forests within the Adirondack Forest Preserve and 300,000 acres within the Catskill Forest Preserve. These acreages are part of a preserve system where harvesting is not allowed and excluded from this certificate.  Additional acreages located on Long Island are not harvested and are not included within this certificate.	
<b>Control measures to prevent mixing of certified and non-certified product (C8.3):</b>	Harvesting does not take place in the excluded acreage.	
<b>Description of FMUs excluded from or forested area excised from the scope of certification:</b>		
<b>Name of FMU or Stand</b>	<b>Location (city, state, country)</b>	<b>Size (<input type="checkbox"/> ha or <input checked="" type="checkbox"/> ac)</b>
Adirondack Forest Preserve	NY, USA	~2,700,000
Catskill Forest Preserve	NY, USA	~300,000
NY DEC Region 1	Suffolk County, NY, USA	~ 16,060
NY DEC Region 2	Bonx, Richmond and Queens Counties (Long Island), NY, USA	~ 760

## 8. Annual Data Update

### 8.1 Social Information

Number of forest workers (including contractors) working in forest within scope of certificate (differentiated by gender):		
# of male workers: 55	# of female workers: 21	
Number of accidents in forest work since last audit:	Serious: 0	Fatal: 0

### 8.2 Annual Summary of Pesticide and Other Chemical Use

<input type="checkbox"/> FME does not use pesticides.				
Commercial name of pesticide / herbicide	Active ingredient	Quantity applied annually (kg or lbs)	Size of area treated during previous year	Reason for use
Rodeo	Glyphosate	1,349.626 lbs	45.75 ac	Beech, fern, knotweed control
AccordXRTii	Glyphosate	124.95 lbs	70.25 ac	Beech, fern knotweed, buckthorn control
Oust XP	Sulfometurom Methyl	30.625 lbs	129 ac	Fern control
Pathfinder II	Triclopyr	507.4 lbs	18.6 ac	Beech Control
Glyfos	Glyphosate	41.727 lbs	5 ac	Beech Control
Roundup Pro	Glyphosate	2,002.9 lbs	30 ac	Invasive species control
Garlon 4	Triclopyr	1.125 lbs	.5 ac	Swallow wart Control
Safari 20 SG	Dinotefuran	36 lbs	6 ac	Hemlock Woolly Adelgid Control
Am Tide 2F T&O	Imidacloprid	50.7 lbs	6 ac	Hemlock Woolly Adelgid Control
Callisto	Mesotrione	53.925 lbs	143.8 ac	Weed control
Outlook	Dimethenamid-p	107.85 lbs	143.8 ac	Weed control
Roundup Powermax	Glyphosate	46 lbs	46 ac	Weed control
Makaze	Glyphosate	201.75 lbs	134.5 ac	Weed control
Force 36	Tefluthrin	4 oz/1,000 ft	19 ac	Insecticide
Broclean	Bromoxynil	27 lbs	18 ac	Weed control
Devrinol 50 DF	Napropamide	4 lbs	4 ac	Weed control
Lannate LV	Methomyl	59.4 lbs	19.8 ac	Insecticide
Kocide 3000	Copper Hydroxide	13.5 lbs	9 ac	Fungicide

Wrangler	Imidacloprid	0.5 oz/1,000 ft	8 ac	Insecticide
Metribuzin 75	Metribuzin	6 lbs	8 ac	Weed Control
Polyram 80 DF	Metiram	24 lbs	8 ac	Fungicide
Royal MH-30	Maleic Hydrazide	66.76 lbs	8 ac	Sprout Inhibitor
Rely	Glufosinate-ammonium	24 lbs	8 ac	Harvest Aid
Strategy	Clomazone & Ethalfluralin	15 lbs	5 ac	Weed control
Rally 40 WSP	Myclobutanil	1.5625 lbs	5 ac	Fungicide

## SECTION B – APPENDICES (CONFIDENTIAL)

### Appendix 1 – List of FMUs Selected For Evaluation

FME consists of a single FMU

FME consists of multiple FMUs or is a Group

### Appendix 2 – List of Stakeholders Consulted

#### List of FME Staff Consulted

Name	Title	Contact Information	Consultation method
Robert Messenger	Albany: Chief – Bureau of State Land Management	518-402-9428	Meeting, email, phone
Justin Perry	Albany: Forest Certification Coordinator, Principal Forester	518-402-9428	Meeting, email, phone
Mark Gooding	Regional Forester	Region 8	Meeting, field visit
John Gibbs	Natural Resources Supervisor	Region 8	Meeting, field visit
Joel Fiske	Supervising Forester	Region 8	Meeting, field visit
Paul D’Amato	Regional Director	Region 8	Meeting, field visit
Gretchen Cicora	Forester	Region 8	Meeting, field visit
Tad Norton	Forester	Region 8	Meeting, field visit
Eric Egger	Forest Technician	Region 8	Meeting, field visit
Tom Williams	Forest Technician	Region 8	Meeting, field visit
David Sinclair	Regional Forester	Region 7	Meeting, field visit
Matt Swayze	Forester	Region 7	Meeting, field visit
Henry Dedrick	Forester	Region 7	Meeting, field visit
Dan Little	Forester Trainee	Region 7	Meeting, field visit
Michelle Volk	Forest Technician	Region 7	Meeting, field visit
Erin Jennings	Forester Trainee	Region 7	Meeting, field visit
Robert Off	Forester	Region 7	Meeting, field visit
Brian Burlew	Forest Technician	Region 7	Meeting, field visit
Nick Wilcox	Forest Technician	Region 7	Meeting, field visit
Greg Owens	Forester	Region 7	Meeting, field visit
Andy Goeller	Supervising Forester	Region 7	Meeting, field visit
Andy Blum	Forester	Region 7	Meeting, field visit
Bill Schondar	Regional Forester	Region 4	Meeting, field visit
Mike Callan	Supervising Forester	Region 4	Meeting, field visit
Peter Innes	Natural Resource Supervisor	Region 4	Meeting, field visit
Vicky Cross	Forester	Region 4	Meeting, field visit
Bob Cross	Forester	Region 4	Meeting, field visit
Jason Drobnak	Forester	Region 4	Meeting, field visit
Paul Wenner	Forester	Region 4	Meeting, field visit
Paul Farley	Forest Technician	Region 4	Meeting, field visit

Nate Funk	Forest Technician	Region 4	Meeting, field visit
Alexandra Ashby	Seasonal Technician	Region 4	Meeting, field visit
Mike Mulligan	Forester	Region 4	Meeting, field visit
Pat Mc Gerry	Seasonal Technician	Region 4	Meeting, field visit
Josh Borst	Forester	Albany	Meeting, field visit
Christine Elliot	Seasonal Technician	Region 4	Meeting, field visit
Louise Potter	Seasonal Technician	Region 4	Meeting, field visit

**List of other Stakeholders Consulted**

Name	Organization	Contact Information	Consultation method	Requests Cert. Notf.
Steve Hubbard	Homer Logging		Interview	No
Bill Corsun	Wagner Millworks		Interview	No
Adam Ricci	NE Timberland Investments		Interview	No

**Appendix 3 – Additional Audit Techniques Employed**

No additional audit techniques were employed.

**Appendix 4 – Pesticide Derogations**

<input checked="" type="checkbox"/> There are no active pesticide derogations for this FME.		
Name of pesticide / herbicide (active ingredient)		Date derogation approved
Condition	Conformance (C / NC)	Evidence of progress

**Appendix 5 – Detailed Observations**

Evaluation Year	FSC P&C Reviewed
2012	All – (Re)certification Evaluation
2013	1.5, 2.3, P3 (all), 4.1, 4.2, 4.4, 5.6, 6.2, 6.3, 6.5, 6.7, 6.9, 7.2, 7.3, 8.2, 8.3, 8.5, 9.4
2014	1.5, 2.3, 3.2, 4.2, 4.3, 4.4, 4.5, 5.6, 6.1, 6.2, 6.3, 6.6, 6.7, 6.8, 6.9, 7.4, 8.2, 9.4
2015	1.5, 2.3, 3.2, 4.2, 4.3, 4.4, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 6.2, 6.3, 6.7, 6.8, 6.9, 6.10, 8.1, 8.2, 8.4, 9.4
2016	

C= Conformance with Criterion or Indicator  
 NC= Nonconformance with Criterion or Indicator  
 NA = Not Applicable

NE = Not Evaluated

REQUIREMENT	C/NC	COMMENT/CAR
<b>Principle #2: Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.</b>		
<b>2.3. Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation from being certified.</b>	C	
<b>2.3.a</b> If <i>disputes</i> arise regarding tenure claims or use rights then the forest owner or manager initially attempts to resolve them through open communication, negotiation, and/or mediation. If these good-faith efforts fail, then federal, state, and/or local laws are employed to resolve such disputes.	C	Most tenure claims relate to property boundaries, but significant boundaries have all been surveyed and marked, so disputes usually are settled within the regions where the properties occur. If necessary, DEC has adequate legal staff to address more serious disputes.
<b>2.3.b</b> The forest owner or manager documents any significant disputes over tenure and use rights.	C	Files that document past disputes are available in regional offices visited during the audit. An appropriate file folder was examined in Region 8.
<b>Principle #3: The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.</b>		
<b>3.2. Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.</b>	C	
<b>3.2.a</b> During management planning, the forest owner or manager consults with American Indian groups that have legal rights or other binding agreements to the FMU to avoid harming their resources or rights.	C	In Region 8, American Indians are invited to participate in Unit Management Planning and were recently invited to meet on an annual basis to discuss important cultural sites and to address any concerns about proposed management. The region has a dedicated liaison to interact with Indians. In Region 7, American Indians are routinely

		invited to participate in the UMP process, but they provide little or no input.
<b>3.2.b</b> Demonstrable actions are taken so that forest management does not adversely affect tribal resources. When applicable, evidence of, and measures for, protecting tribal resources are incorporated in the management plan.	C	In Region 8, regular communications with representatives of two tribes has avoided conflict over tribal resources.
<b>Principle #4: Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.</b>		
<b>4.2. Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.</b>	C	
<b>4.2.a</b> The forest owner or manager meets or exceeds all applicable laws and/or regulations covering health and safety of employees and their families (also see Criterion 1.1).	C	NY State has a well-developed bureaucracy that establishes appropriate laws and regulations for safety, and there is abundant evidence of compliance among BSLM employees. Division of Lands and Forests Health and Safety Manual – March 2014
<b>4.2.b</b> The forest owner or manager and their employees and contractors demonstrate a safe work environment. Contracts or other written agreements include safety requirements.	C	Safety expectations and requirements are specified in all contracts; auditors found compliance by all contractors interviewed.
<b>4.2.c</b> The forest owner or manager hires well-qualified service providers to safely implement the management plan.	C	Logging contractors are the most common service providers. They are selected through well-established bidding processes with detailed contract provisions. New York Logger Training – Trained Logger Certification requirement in Timber Sale Contracts. (sample <i>Notice of Sale of Forest Products</i> Article XIII)
<b>4.4. Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups (both men and women) directly affected by management operations.</b>	C	

<p><b>4.4.a</b> The forest owner or manager understands the likely social impacts of management activities, and incorporates this understanding into management planning and operations. Social impacts include effects on:</p> <ul style="list-style-type: none"> <li>• Archeological sites and sites of cultural, historical and community significance (on and off the FMU;</li> <li>• Public resources, including air, water and food (hunting, fishing, collecting);</li> <li>• Aesthetics;</li> <li>• Community goals for forest and natural resource use and protection such as employment, subsistence, recreation and health;</li> <li>• Community economic opportunities;</li> <li>• Other people who may be affected by management operations.</li> </ul> <p>A summary is available to the CB.</p>	<p>C</p>	<p>As a public agency, BSLM is closely tied to the public and to management of public resources. The state has contracted for a social impact assessment of state land management, and social impacts are addressed in the Strategic Plan.</p>
<p><b>4.4.b</b> The forest owner or manager seeks and considers input in management planning from people who would likely be affected by management activities.</p>	<p>C</p>	<p>BSLM seeks input from the public at all levels of planning, especially in development of Unit Management Plans (public process discussed during audit in Regions 7 and 8).</p>
<p><b>4.4.c</b> People who are subject to direct adverse effects of management operations are apprised of relevant activities in advance of the action so that they may express concern.</p>	<p>C</p>	<p>Foresters interviewed on site visits indicated that they use judgement in determining the level of contact with nearby landowners prior to any harvesting activities. Most commonly, landowners observe activities of foresters during sale layout and take the initiative to inquire about planned management.</p>
<p><b>4.4.d</b> For <i>public forests</i>, consultation shall include the following components:</p> <ol style="list-style-type: none"> <li>1. Clearly defined and accessible methods for public participation are provided in both long and short-term planning processes, including harvest plans and operational plans;</li> </ol>	<p>C</p>	<p>See 4.4a-c: BSLM staff are aware of the importance of consulting with the public. The DEC has clearly defined processes for appeals from the public.</p>

<p>2. Public notification is sufficient to allow interested stakeholders the chance to learn of upcoming opportunities for public review and/or comment on the proposed management;</p> <p>3. An accessible and affordable appeals process to planning decisions is available.</p> <p>Planning decisions incorporate the results of public consultation. All draft and final planning documents, and their supporting data, are made readily available to the public.</p>		
<p><b>Principle #5: 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.</b></p>		
<p><b>5.1. Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.</b></p>	<p>C</p>	
<p><b>5.1.a</b> The forest owner or manager is financially able to implement core management activities, including all those environmental, social and operating costs, required to meet this Standard, and investment and reinvestment in forest management.</p>	<p>C</p>	<p>New York State is solvent and capable of implementing core management activities. There have been numerous retirements in recent years, but those positions are now being filled.</p>
<p><b>5.1.b</b> Responses to short-term financial factors are limited to levels that are consistent with fulfillment of this Standard.</p>	<p>C</p>	<p>Even though BSLM was short-handed for several years during the recent financial crisis, existing personnel were still able to carry on operations consistent with the Standard.</p>
<p><b>5.2. Forest management and marketing operations should encourage the optimal use and local processing of the forest’s diversity of products.</b></p>	<p>C</p>	
<p><b>5.2.a</b> Where forest products are harvested or sold, opportunities for forest product</p>	<p>C</p>	<p>All products sold from certified lands are offered on a bid basis after public</p>

<p>sales and services are given to local harvesters, value-added processing and manufacturing facilities, guiding services, and other operations that are able to offer services at competitive rates and levels of service.</p>		<p>advertisement and bidder notification. The only “products” sold from certified state lands include standing timber and leased rights to maple sap.</p>
<p><b>5.2.b</b> The forest owner or manager takes measures to optimize the use of harvested forest products and explores product diversification where appropriate and consistent with management objectives.</p>	<p>C</p>	<p>Because BSLM, by law, sells timber on the stump by bid, the agency has little say about the disposition of products. However, the variety of timber advertised for bid ensures a diversity of products.</p>
<p><b>5.2.c</b> On public lands where forest products are harvested and sold, some sales of forest products or contracts are scaled or structured to allow small business to bid competitively.</p>	<p>C</p>	<p>Sales less than \$10,000 are offered as “local sales”, as opposed to “revenue sales.” Operators of individually owned businesses were interviewed during the audit.</p>
<p><b>5.3. Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.</b></p>	<p>C</p>	
<p><b>5.3.a</b> Management practices are employed to minimize the loss and/or waste of harvested forest products.</p>	<p>C</p>	<p>BSLM’s <i>Notice of Sale</i> specifies proper use of products, confirmed by field visits where efficient use was noted.</p>
<p><b>5.3.b</b> Harvest practices are managed to protect residual trees and other forest resources, including:</p> <ul style="list-style-type: none"> <li>• soil compaction, <b>rutting</b> and erosion are minimized;</li> <li>• residual trees are not significantly damaged to the extent that health, growth, or values are noticeably affected;</li> <li>• damage to NTFPs is minimized during management activities; and</li> <li>• techniques and equipment that minimize impacts to vegetation, soil, and water are used whenever feasible.</li> </ul>	<p>C</p>	<p>BSLM’s <i>Notice of Sale</i> includes language to restrict rutting of soil, damage to residual trees, stone walls, recreational trails, etc. The field audit confirmed compliance with such conditions.</p>
<p><b>5.4. Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.</b></p>	<p>C</p>	

<p><b>5.4.a</b> The forest owner or manager demonstrates knowledge of their operation’s effect on the local economy as it relates to existing and potential markets for a wide variety of timber and non-timber forest products and services.</p>	<p>C</p>	<p>Interviews with staff in regional offices confirmed close connections with local stakeholders and concern for the local economy.</p>
<p><b>5.4.b</b> The forest owner or manager strives to diversify the economic use of the forest according to Indicator 5.4.a.</p>	<p>C</p>	<p>The <i>Strategic Plan</i> (pages 245-248) addresses the topic of supporting local communities through a variety of uses of public land. An entire chapter (Chap. 5) addresses public uses. Individual <i>Unit Management Plans</i> (UMPs) provide more specific information.</p>
<p><b>5.5. Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.</b></p>	<p>C</p>	
<p><b>5.5.a</b> In developing and implementing activities on the FMU, the forest owner or manager identifies, defines and implements appropriate measures for maintaining and/or enhancing forest services and resources that serve public values, including municipal watersheds, fisheries, carbon storage and sequestration, recreation and tourism.</p>	<p>C</p>	<p>All of the items in this indicator are addressed in the <i>Strategic Plan</i>, as would be expected for a public agency. Interviews with regional staff confirm an awareness of the many services to be provided by the lands they manage.</p>
<p><b>5.5.b</b> The forest owner or manager uses the information from Indicator 5.5.a to implement appropriate measures for maintaining and/or enhancing these services and resources.</p>	<p>C</p>	<p>Field visits confirmed management for diverse services and values.</p>
<p><b>5.6. The rate of harvest of forest products shall not exceed levels which can be permanently sustained.</b></p>	<p>C</p>	
<p><b>5.6.a</b> In FMUs where products are being harvested, the landowner or manager calculates the sustained yield harvest level for each sustained yield planning unit, and provides clear rationale for determining the size and layout of the planning unit. The</p>	<p>C</p>	<p>Original Periodical Annual Increment was computed in 2010. The analysis was updated this summer through contract with SUNY ESF. Finding was that DEC is cutting considerably less than what is being grown. Current estimate is about 25% of</p>

<p>sustained yield harvest level calculation is documented in the Management Plan.</p> <p>The sustained yield harvest level calculation for each planning unit is based on:</p> <ul style="list-style-type: none"> <li>• documented growth rates for particular sites, and/or acreage of forest types, age-classes and species distributions;</li> <li>• mortality and decay and other factors that affect net growth;</li> <li>• areas reserved from harvest or subject to harvest restrictions to meet other management goals;</li> <li>• silvicultural practices that will be employed on the FMU;</li> <li>• management objectives and desired future conditions.</li> </ul> <p>The calculation is made by considering the effects of repeated prescribed harvests on the product/species and its ecosystem, as well as planned management treatments and projections of subsequent regrowth beyond single rotation and multiple re-entries.</p>		<p>growth. The report was provided to auditors.</p>
<p><b>5.6.b</b> Average annual harvest levels, over rolling periods of no more than 10 years, do not exceed the calculated sustained yield harvest level.</p>	<p>C</p>	<p>Auditors were presented with a recently completed contractual report, <i>Updating of periodic annual increment on State Forest Land in New York</i>. The last such report was prepared in 2010. Both reports conclude with calculations indicating that growth exceeds harvest by a considerable amount. Although auditors were not presented with actual harvest data for the 10-year period in question, it is clear that harvesting has been conservative with regard to a sustained yield harvest level.</p>
<p><b>5.6.c</b> Rates and methods of timber harvest lead to achieving desired conditions, and improve or maintain health and quality across the FMU. Overstocked stands and stands that have been depleted or rendered</p>	<p>C</p>	<p>Field visits during the audit provided numerous examples where overstocked stands are being managed to achieve more productive stocking levels. Other sites visited illustrated management designed to</p>

<p>to be below productive potential due to natural events, past management, or lack of management, are returned to desired stocking levels and composition at the earliest practicable time as justified in management objectives.</p>		<p>salvage stands damaged by wind events and return these stands to desirable stocking.</p>
<p><b>5.6.d</b> For NTFPs, calculation of quantitative sustained yield harvest levels is required only in cases where products are harvested in significant commercial operations or where traditional or customary use rights may be impacted by such harvests. In other situations, the forest owner or manager utilizes available information, and new information that can be reasonably gathered, to set harvesting levels that will not result in a depletion of the non-timber growing stocks or other adverse effects to the forest ecosystem.</p>	<p>C</p>	<p>There is no significant harvest of NTFPs, although there are some leases for the tapping of maple trees for syrup production. Harvest levels are set by specifying the numbers of taps based on conservative regional guidelines.</p>
<p><b>Principle #6: Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.</b></p>		
<p><b>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.</b></p>	<p>C</p>	
<p><b>6.2.a</b> If there is a likely presence of RTE species as identified in Indicator 6.1.a then either a field survey to verify the species' presence or absence is conducted prior to site-disturbing management activities, or management occurs with the assumption that potential RTE species are present.</p>	<p>C</p>	<p>Natural Heritage Surveys have been completed in all regions. It is routine for foresters to consult the GIS database of RTE species when planning a harvest. A second database, Predicted Richness Overlay (PRO) has been developed to predict sites that may include rare species and communities. Evidence that both sources of information are being used was found on several <i>Stand</i></p>

<p>Surveys are conducted by biologists with the appropriate expertise in the species of interest and with appropriate qualifications to conduct the surveys. If a species is determined to be present, its location should be reported to the manager of the appropriate database.</p>		<p><i>Diagnosis and Prescription</i> forms examined during the audit, e.g., Stand A-20 in Danby State Forest.</p>
<p><b>6.2.b</b> When RTE species are present or assumed to be present, modifications in management are made in order to maintain, restore or enhance the extent, quality and viability of the species and their habitats. <b>Conservation zones</b> and/or <b>protected areas</b> are established for RTE species, including those S3 species that are considered rare, where they are necessary to maintain or improve the short and long-term viability of the species. Conservation measures are based on relevant science, guidelines and/or consultation with relevant, independent experts as necessary to achieve the conservation goal of the Indicator.</p>	<p>C</p>	<p>In Region 8, several examples were presented and discussed where measures were taken in planning and implementation of harvest to protect timber rattlesnakes, an endangered species. In other instances during field visits, stand prescription forms delineated areas reserved because of predicted rare plant species.</p>
<p><b>6.2.c</b> For medium and large public forests (e.g. state forests), forest management plans and operations are designed to meet species' recovery goals, as well as landscape level biodiversity conservation goals.</p>	<p>C</p>	<p>The <i>Strategic Management Plan for State Forests</i> (2010) contains landscape-level biodiversity plans. Some of these feature the recovery of rare species. Efforts to protect habitat for timber rattlesnakes in Region 8 was such an example during the audit. BSLM and Bureau of Wildlife work closely on many fronts, so it should be expected that recovery efforts would be coordinated.</p>
<p><b>6.2.d</b> Within the capacity of the forest owner or manager, hunting, fishing, trapping, collecting and other activities are controlled to avoid the risk of impacts to vulnerable species and communities (See Criterion 1.5).</p>	<p>C</p>	<p>DEC's Conservation Officers are well equipped to enforce the many state and federal regulations pertinent to this indicator. Gated roads are maintained to restrict vehicle access in many places.</p>
<p><b>6.3. Ecological functions and values shall be maintained intact, enhanced, or restored, including: a) Forest regeneration and</b></p>	<p>C</p>	

<p><b>succession. b) Genetic, species, and ecosystem diversity. c) Natural cycles that affect the productivity of the forest ecosystem.</b></p>		
<p><b>6.3.a.</b> Landscape-scale indicators</p>		
<p><b>6.3.a.1</b> The forest owner or manager maintains, enhances, and/or restores under-represented <b>successional</b> stages in the FMU that would naturally occur on the types of sites found on the FMU. Where old growth of different community types that would naturally occur on the forest are under-represented in the landscape relative to natural conditions, a portion of the forest is managed to enhance and/or restore old growth characteristics.</p>	<p>C</p>	<p>Ecoregional Landscape Assessments, in the <i>Strategic Plan</i>, present summaries of landscape assessments for seven ecoregions in the state. Land cover and age-class distributions were examined. UMPs build on the <i>Strategic Plan</i> and provide details of current and planned distributions of forest types and age classes. The Six Nations UMP confirms this.</p>
<p><b>6.3.a.2</b> When a <b>rare ecological community</b> is present, modifications are made in both the management plan and its implementation in order to maintain, restore or enhance the viability of the community. Based on the vulnerability of the existing community, <b>conservation zones</b> and/or <b>protected areas</b> are established where warranted.</p>	<p>C</p>	<p>Rare communities are part of the Natural Heritage database and are treated in the same manner as rare species during harvest planning and management.</p>
<p><b>6.3.a.3</b> When they are present, management maintains the area, structure, composition, and processes of all <b>Type 1</b> and <b>Type 2 old growth</b>. Type 1 and 2 old growth are also protected and buffered as necessary with conservation zones, unless an alternative plan is developed that provides greater overall protection of old growth values.</p> <p>Type 1 Old Growth is protected from harvesting and road construction. Type 1 old growth is also protected from other timber management activities, except as needed to maintain the ecological values associated with the stand, including old</p>	<p>C</p>	<p>Old-growth stands are found almost exclusively within the Forest Preserve system which owned and managed by this FME but is not part of this FME’s certified land base. As part of the Forest Preserve system, these old growth stands are protected from harvesting and other timber management activities. Where other old-growth stands are found, they are classified as HCVF and protected from harvest.</p>

<p>growth attributes (e.g., remove exotic species, conduct controlled burning, and thinning from below in dry forest types when and where restoration is appropriate).</p> <p>Type 2 Old Growth is protected from harvesting to the extent necessary to maintain the area, structures, and functions of the stand. Timber harvest in Type 2 old growth must maintain old growth structures, functions, and components including individual trees that function as refugia (see Indicator 6.3.g).</p> <p>On public lands, old growth is protected from harvesting, as well as from other timber management activities, except if needed to maintain the values associated with the stand (e.g., remove exotic species, conduct controlled burning, and thinning from below in forest types when and where restoration is appropriate).</p> <p>On American Indian lands, timber harvest may be permitted in Type 1 and Type 2 old growth in recognition of their sovereignty and unique ownership. Timber harvest is permitted in situations where:</p> <ol style="list-style-type: none"> <li>1. Old growth forests comprise a significant portion of the tribal ownership.</li> <li>2. A history of forest stewardship by the tribe exists.</li> <li>3. High Conservation Value Forest attributes are maintained.</li> <li>4. Old-growth structures are maintained.</li> <li>5. Conservation zones representative of old growth stands are established.</li> <li>6. Landscape level considerations are addressed.</li> <li>7. Rare species are protected.</li> </ol>		
<p><b>6.3.b</b> To the extent feasible within the size of the ownership, particularly on larger</p>	<p>C</p>	<p>Habitat for wildlife is a major objective for BSLM, as confirmed by examining both the</p>

<p>ownerships (generally tens of thousands or more acres), management maintains, enhances, or restores habitat conditions suitable for well-distributed populations of animal species that are characteristic of forest ecosystems within the landscape.</p>		<p><i>Strategic Plan</i> and various UMPs. Wildlife biologists from Bureau of Wildlife are often housed with BSLM personnel and participate in UMP development. Most recently, the “young forest initiative” of the Wildlife Bureau has increased such cooperation.</p>
<p><b>6.3.c</b> Management maintains, enhances and/or restores the plant and wildlife habitat of <b>Riparian Management Zones (RMZs)</b> to provide:</p> <ul style="list-style-type: none"> <li>a) habitat for aquatic species that breed in surrounding uplands;</li> <li>b) habitat for predominantly terrestrial species that breed in adjacent <b>aquatic habitats</b>;</li> <li>c) habitat for species that use riparian areas for feeding, cover, and travel;</li> <li>d) habitat for plant species associated with riparian areas; and,</li> <li>e) stream shading and inputs of wood and leaf litter into the adjacent aquatic ecosystem.</li> </ul>	<p>C</p>	<p>RMZs are addressed in DEC’s <i>Guidelines for Special Management Zones</i>. Guidelines are clear, but there is an often-used exemption for intrusions into buffer zones in cases where existing or former trails or roads still exist. Approval of such exemptions is required at both regional and state levels. Several such examples were observed and discussed during the field audit, e.g., Danby State Forest, Contract No. X008700.</p>
<p><b>Stand-scale Indicators</b>  <b>6.3.d</b> Management practices maintain or enhance plant species composition, distribution and frequency of occurrence similar to those that would naturally occur on the site.</p>	<p>C</p>	<p>UMPs and BSLMs <i>Strategic Plan</i> emphasize the importance of using an analysis of site conditions to determine management goals and objectives for forest types. Site visits confirmed efforts to promote natural regeneration on most sites. Many plantations are being converted to species that are better adapted for site conditions, e.g., patch cuts on Danby State Forest, Contract No. TX09858.</p>
<p><b>6.3.e</b> When planting is required, a local source of known provenance is used when available and when the local source is equivalent in terms of quality, price and productivity. The use of non-local sources shall be justified, such as in situations where other management objectives (e.g. disease resistance or adapting to climate change)</p>	<p>C</p>	<p>Most regeneration is natural, but some planting is still done, using local stock from state nurseries (confirmed by interview with Supervising Forester, Region 4).</p>

<p>are best served by non-local sources. <b>Native species</b> suited to the site are normally selected for regeneration.</p>		
<p><b>6.3.f</b> Management maintains, enhances, or restores habitat components and associated stand structures, in abundance and distribution that could be expected from naturally occurring processes. These components include:</p> <ul style="list-style-type: none"> <li>a) large live trees, live trees with decay or declining health, <b>snags</b>, and well-distributed coarse down and dead woody material. <b>Legacy trees</b> where present are not harvested; and</li> <li>b) vertical and horizontal complexity.</li> </ul> <p>Trees selected for <b>retention</b> are generally representative of the dominant species found on the site.</p>	<p>C</p>	<p>Importance of these habitat elements has been clearly stated in both <i>Strategic Plan</i> and in most recent UMPs. Field foresters interviewed during the audit are aware of these habitat elements and take pride in demonstrating trees marked for retention to protect such habitat components. Examples were evident in most field sites visited.</p>
<p><b>6.3.g.1</b> In the Southeast, Appalachia, Ozark-Ouachita, Mississippi Alluvial Valley, and Pacific Coast Regions, when <b>even-aged systems</b> are employed, and during salvage harvests, live trees and other native vegetation are retained within the harvest unit as described in Appendix C for the applicable region.</p> <p>In the Lake States Northeast, Rocky Mountain and Southwest Regions, when even-aged silvicultural systems are employed, and during salvage harvests, live trees and other native vegetation are retained within the harvest unit in a proportion and configuration that is consistent with the characteristic natural disturbance regime unless retention at a lower level is necessary for the purposes of restoration or rehabilitation. See Appendix C for additional regional requirements and guidance.</p>	<p>C</p>	<p>Where even-aged silviculture was observed during the audit, either small patch cuts were used or prescriptions directed loggers to retain all hardwood trees, all white pine trees, etc. Thus, all sites showed ample retention. Examples were X008969 on Danby State Forest and X008994 on Burnt-Rossman Hills State Forest.</p>

<p><b>6.3.g.2</b> Under very limited situations, the landowner or manager has the option to develop a qualified plan to allow minor departure from the opening size limits described in Indicator 6.3.g.1. A qualified plan:</p> <ol style="list-style-type: none"> <li>1. Is developed by qualified experts in ecological and/or related fields (wildlife biology, hydrology, landscape ecology, forestry/silviculture).</li> <li>2. Is based on the totality of the <b>best available information</b> including peer-reviewed science regarding natural disturbance regimes for the FMU.</li> <li>3. Is spatially and temporally explicit and includes maps of proposed openings or areas.</li> <li>4. Demonstrates that the variations will result in equal or greater benefit to wildlife, water quality, and other values compared to the normal opening size limits, including for sensitive and rare species.</li> <li>5. Is reviewed by independent experts in wildlife biology, hydrology, and landscape ecology, to confirm the preceding findings.</li> </ol>	<p>NA</p>	<p>Departures from opening sizes have not been requested in recent years. There is a process for such a request, however.</p>
<p><b>6.3.h</b> The forest owner or manager assesses the risk of, prioritizes, and, as warranted, develops and implements a strategy to prevent or control <b>invasive species</b>, including:</p> <ol style="list-style-type: none"> <li>1. a method to determine the extent of invasive species and the degree of threat to native species and ecosystems;</li> <li>2. implementation of management practices that minimize the risk of invasive establishment, growth, and spread;</li> <li>3. eradication or control of established invasive populations when feasible: and,</li> </ol>	<p>C</p>	<p>Risks of invasive species are articulated in both the <i>Strategic Plan</i> and in recently-prepared UMPs. The extent of invasive species in state forests varies among regions, but all regions have programs to identify, treat, and monitor key species.</p>

<p>4. monitoring of control measures and management practices to assess their effectiveness in preventing or controlling invasive species.</p>		
<p><b>6.3.i</b> In applicable situations, the forest owner or manager identifies and applies site-specific fuels management practices, based on: (1) natural fire regimes, (2) risk of wildfire, (3) potential economic losses, (4) public safety, and (5) applicable laws and regulations.</p>	<p>C</p>	<p>Prescribed burning is used occasionally on State Forests, most often to maintain openings for wildlife. A burn permit is required. Wildfires are not common, but when they do occur BSLM is equipped to participate in suppression.</p>
<p><b>6.6. Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.</b></p>		
<p><b>6.6.a No products on the FSC list of Highly Hazardous Pesticides are used (see FSC-POL-30-001 EN FSC Pesticides policy 2005 and associated documents).</b></p>	<p>NC</p>	<p>Prior to the audit, BSLM did not submit a full listing of chemicals used on the FMU since the last audit. When a complete list was submitted to SCS, several pesticides on the list appear of the FSC list of Highly Hazardous Pesticides. <b>See Finding 2015.1</b></p>
<p><b>6.7. Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations.</b></p>	<p>C</p>	
<p><b>6.7.a</b> The forest owner or manager, and employees and contractors, have the</p>	<p>C</p>	<p>Timber sales contracts (<i>Notice of Sale</i> Section XIV) specify that contractors will be responsible for control and collection of</p>

equipment and training necessary to respond to hazardous spills		any fluids leaking from equipment on site. Spill kits are required of all operators and must be on site. CPL training includes procedures for preventing and containing spills.
<b>6.7.b</b> In the event of a hazardous material spill, the forest owner or manager immediately contains the material and engages qualified personnel to perform the appropriate removal and remediation, as required by applicable law and regulations.	C	Required by contract for timber sales. Spill kits were observed on all active harvest sites during the field audit. Several small (several inches diameter) spill stains were observed on two different sites. Foresters indicated that they would be cleaned up by the operator and disposed of properly.
6.7.c. Hazardous materials and fuels are stored in leak-proof containers in designated storage areas, that are outside of riparian management zones and away from other ecological sensitive features, until they are used or transported to an approved off-site location for disposal. There is no evidence of persistent fluid leaks from equipment or of recent groundwater or surface water contamination.	C	Sites visited during the audit were not close to any sensitive sites; hazardous materials were stored in a supply trailer on one site and in the operator’s truck on another site.
<b>C6.9. The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.</b>	C	
6.9.a. The use of <i>exotic species</i> is contingent on the availability of credible scientific data indicating that any such species is non-invasive and its application does not pose a risk to native biodiversity.	C	Norway spruce is planted in limited quantities. Managers have determined through experience and document review that this species is considered non-invasive in this landscape.
6.9.b. If exotic species are used, their provenance and the location of their use are documented, and their ecological effects are actively monitored.	C	Planting stock is acquired from the state nursery, including provenance. Success of planting and any evidence of invasion are monitored during the inventory process.
6.9.c. The forest owner or manager shall take timely action to curtail or significantly reduce any adverse impacts resulting from their use of exotic species	C	BSLM’s Plantation Policy ( <i>Strategic Plan</i> ) is to move away from planting for regeneration, but Norway spruce has been successful on some sites where natural regeneration is not adequate for successful restocking.
<b>6.10.a</b> Forest <i>conversion</i> to non-forest land uses does not occur, except in circumstances	C	There is no conversion of natural forest to plantations. In fact, an estimated 60% of

<p>where conversion entails a very limited portion of the forest management unit (note that Indicators 6.10.a, b, and c are related and all need to be conformed with for conversion to be allowed).</p>		<p>plantation harvests are being converted to natural forest.</p>
<p><b>6.10.b</b> Forest <i>conversion</i> to non-forest land uses does not occur on high conservation value forest areas (note that Indicators 6.10.a, b, and c are related and all need to be conformed with for conversion to be allowed).</p>	<p>C</p>	<p>No conversion has occurred on HCVF.</p>
<p><b>6.10.c</b> Forest <i>conversion</i> to non-forest land uses does not occur, except in circumstances where conversion will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit (note that Indicators 6.10.a, b, and c are related and all need to be conformed with for conversion to be allowed).</p>	<p>C</p>	<p>There has been no recent mineral development; very few new roads; and a few landings that have become openings.</p>
<p><b>6.10.d</b> Natural or semi-natural stands are not converted to plantations. Degraded, semi-natural stands may be converted to restoration plantations.</p>	<p>C</p>	<p>BSLM has a written policy (ONR-DLF-1) not to convert natural forest stands to plantations.</p>
<p><b>6.10.e</b> Justification for land-use and stand-type conversions is fully described in the long-term management plan, and meets the biodiversity conservation requirements of Criterion 6.3 (see also Criterion 7.1.l)</p>	<p>C</p>	<p>UMPs reviewed during this audit did not include any plans for land-use conversion. Stand-type conversions are done mostly to meet requirements of biodiversity and natural stand dynamics.</p>
<p><b>6.10.f</b> Areas converted to <i>non-forest use</i> for facilities associated with subsurface mineral and gas rights transferred by prior owners, or other conversion outside the control of the certificate holder, are identified on maps. The forest owner or manager consults with the CB to determine if removal of these areas from the scope of the certificate is warranted. To the extent allowed by these transferred rights, the forest owner or manager exercises control over the location of surface disturbances in a manner that</p>	<p>C</p>	<p>Mineral exploration and leases have not occurred on State Forest lands since FSC certification. This subject has been thoroughly addressed in recent years, however, and is clearly addressed in the Strategic Plan (pages 225-244).</p>

<p>minimizes adverse environmental and social impacts. If the certificate holder at one point held these rights, and then sold them, then subsequent conversion of forest to non-forest use would be subject to Indicator 6.10.a-d.</p>		
<p><b>Principle #8: 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.</b>  <i>Applicability Note: On small and medium-sized forests (see Glossary), an informal, qualitative assessment may be appropriate. Formal, quantitative monitoring is required on large forests and/or intensively managed forests.</i></p>		
<p><b>8.1 The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations, as well as, the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.</b></p>	<p>C</p>	
<p><b>8.1.a</b> Consistent with the scale and intensity of management, the forest owner or manager develops and consistently implements a regular, comprehensive, and replicable written monitoring protocol.</p>	<p>C</p>	<p>The <i>State Forest Inventory Database (SFID)</i> is based on a series of systematic, replicable protocols. A detailed handbook assures that inventory monitoring is conducted consistently across State Forests.</p>
<p><b>8.2. Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators: a) yield of all forest products harvested, b) growth rates, regeneration, and condition of the forest, c) composition and observed changes in the flora and fauna, d) environmental and social impacts of harvesting and other operations, and e) cost, productivity, and efficiency of forest management.</b></p>	<p>C</p>	
<p><b>8.2.a.1</b> For all commercially harvested products, an inventory system is maintained. The inventory system includes at a</p>	<p>C</p>	<p>Monitoring protocols were reviewed in Region 7 to confirm that all elements of this</p>

<p>minimum: a) species, b) volumes, c) stocking, d) regeneration, and e) stand and forest composition and structure; and f) timber quality.</p>		<p>indicator are included in the monitoring program.</p>
<p><b>8.2.a.2</b> Significant, unanticipated removal or loss or increased vulnerability of forest resources is monitored and recorded. Recorded information shall include date and location of occurrence, description of disturbance, extent and severity of loss, and may be both quantitative and qualitative.</p>	<p>C</p>	<p>Special monitoring has been undertaken in recent years to assess levels of damage from tropical storms, floods, and local in-line winds. Likewise, monitoring in being carried out for several exotic insect pests.</p>
<p><b>8.2.b</b> The forest owner or manager maintains records of harvested timber and NTFPs (volume and product and/or grade). Records must adequately ensure that the requirements under Criterion 5.6 are met.</p>	<p>C</p>	<p>BSFM maintains records of harvest volume, product, species and acreage. Summary reports are generated each quarter and were inspected during the audit.</p>
<p><b>8.2.c</b> The forest owner or manager periodically obtains data needed to monitor presence on the FMU of:</p> <ol style="list-style-type: none"> <li>1) Rare, threatened and endangered species and/or their <i>habitats</i>;</li> <li>2) Common and rare plant communities and/or habitat;</li> <li>3) Location, presence and abundance of invasive species;</li> <li>4) Condition of protected areas, set-asides and buffer zones;</li> <li>5) High Conservation Value Forests (see Criterion 9.4).</li> </ol>	<p>C</p>	<p>Data associated with RTEs is primarily gathered by Natural Heritage Program staff with assistance from foresters who have received training in recent workshops. The Bureau of Wildlife conducts assessments of vertebrate species, with emphasis on RTE and game species. Rare plant communities are monitored by NHP; forest types by BSFM.</p> <p>Invasive species are monitored, as needed, on a regional basis, mostly as a product of the extensive field work done by foresters. Special sites, including HCVF, are visited at regular intervals by various DEC staff to assess general conditions.</p>
<p><b>8.2.d.1</b> Monitoring is conducted to ensure that site specific plans and operations are properly implemented, environmental impacts of site disturbing operations are minimized, and that harvest prescriptions and guidelines are effective.</p>	<p>C</p>	<p>Foresters normally visit harvesting sites 1-2 times/week to monitor compliance with harvest plans and conditions of the <i>Notice of Sale</i>. Written records are kept of such visits; some regions create a digital database of visits (Region 7); other regions maintain hard copy files (Regions 8 and 4).</p>
<p><b>8.2.d.2</b> A monitoring program is in place to assess the condition and environmental</p>	<p>C</p>	<p>The Operations Division of DEC maintains most roads on State Forests and keeps</p>

<p>impacts of the forest-road system.</p>		<p>records in a GIS data layer. UMPs provide an accounting of roads, needs for improvements, and plans for additional roads. Many roads in State Forests are town or county roads.</p>
<p><b>8.2.d.3</b> The landowner or manager monitors relevant socio-economic issues (see Indicator 4.4.a), including the social impacts of harvesting, participation in local economic opportunities (see Indicator 4.1.g), the creation and/or maintenance of quality job opportunities (see Indicator 4.1.b), and local purchasing opportunities (see Indicator 4.1.e).</p>	<p>C</p>	<p>BSLM periodically contracts for studies of socio-economic impacts, such as the 2011 document, <i>New York State Industrial Timber Harvest Production and Consumption Report</i>. As a public agency, numerous branches of government can be expected to monitor some elements of this indicator.</p>
<p><b>8.2.d.4</b> Stakeholder responses to management activities are monitored and recorded as necessary.</p>	<p>C</p>	<p>BSLM conducts formal outreach to stakeholders as UMPs and <i>Strategic Plans</i> are prepared and advised. They also do so when new policies, e.g., extraction for natural gas, are developed and debated. Stakeholders also are invited to visit regional offices, phone, or send email messages. Each office maintains files of such contacts (reviewed in Region 8).</p>
<p><b>8.2.d.5</b> Where sites of cultural significance exist, the opportunity to jointly monitor sites of cultural significance is offered to tribal representatives (see Principle 3).</p>	<p>C</p>	<p>Sites of tribal significance are not known to occur on State Forests (verified in the three regions visited during the audit), although tribal representatives are regularly invited to comment on management plans and their revisions.</p>
<p><b>8.2.e</b> The forest owner or manager monitors the costs and revenues of management in order to assess productivity and efficiency.</p>	<p>C</p>	<p>As a public agency, costs and revenues are carefully monitored. Summary statistics are found on the DEC web pages.</p>
<p><b>9.4 Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.</b></p>	<p>C</p>	
<p><b>9.4.a</b> The forest owner or manager monitors, or participates in a program to annually monitor, the status of the specific HCV attributes, including the effectiveness of the measures employed for their</p>	<p>NC</p>	<p>Previous audits have found that BSLM monitors, at least annually, the status of HCV attributes. However, interviews with regional staff resulted in responses of uncertainty, and examination of UMPs for</p>

<p>maintenance or enhancement. The monitoring program is designed and implemented consistent with the requirements of Principle 8.</p>		<p>regions visited revealed no written plans for monitoring HCVEs. BSLM central staff did not provide information to support a finding of conformance. <b>See Finding 2015.2</b></p>
<p><b>9.4.b</b> When monitoring results indicate increasing risk to a specific HCV attribute, the forest owner/manager re-evaluates the measures taken to maintain or enhance that attribute, and adjusts the management measures in an effort to reverse the trend.</p>	<p>C</p>	<p>No applicable examples were revealed during site visits or interviews in Regions 8, 7, and 4. No examples were provided by central staff of BSLM. However, field evidence of responses to wind storms, floods, invasive species, etc. strongly suggests that appropriate adjustments to management would be taken when needed.</p>

**Appendix 6 – Chain of Custody Indicators for FMEs**

Chain of Custody indicators were not evaluated during this annual audit.