

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

Irving Woodlands, LLC

J.D. Irving Northern Maine Woodlands Forestry Division

Maine, USA

SCS-FM/COC-00121N

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CERTIFIED	EXPIRATION
08 December 2019	07 December 2024

DATE OF FIELD EVALUATION
24-27 September 2019
DATE OF LAST UPDATE
6 December 2019

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Foreword

SCS Global Services (SCS) is a certification body accredited by the Forest Stewardship Council to conduct forest management and chain of custody evaluations. Under the FSC / SCS certification system, forest management enterprises (FMEs) meeting international standards of forest stewardship can be certified as “well managed,” thereby permitting the FME’s use of the FSC endorsement and logo in the marketplace subject to regular FSC / SCS oversight.

SCS deploys interdisciplinary teams of natural resource specialists and other experts in forested regions all over the world to conduct evaluations of forest management. SCS evaluation teams collect and analyze written materials, conduct interviews with FME staff and key stakeholders, and complete field and office audits of subject forest management units (FMUs) as part of certification evaluations. Upon completion of the fact-finding phase of all evaluations, SCS teams determine conformance to the FSC Principles and Criteria.

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 30 days after issue of the certificate. Section B contains more detailed results and information for the use of by the FME.

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SECTION A – PUBLIC SUMMARY

1. General Information

1.1 Certificate Registration Information

Name and Contact Information

Organization name	Irving Woodlands, LLC (IWLLC)		
Contact person	Scott MacDougall		
Address	PO Box 240	Telephone	506-632-7777
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		Website	www.jdirving.com

FSC Sales Information

FSC salesperson	(same as above)		
Address		Telephone	
		Fax	
		e-mail	
		Website	

Scope of Certificate

Certificate type	<input checked="" type="checkbox"/> Single FMU	<input type="checkbox"/> Multiple FMU
	<input type="checkbox"/> Group	
SLIMF if applicable	<input type="checkbox"/> Small SLIMF certificate	<input type="checkbox"/> Low intensity SLIMF certificate
	<input type="checkbox"/> Group SLIMF certificate	
# Group Members (if applicable)		
Number of FMU's in scope of certificate	1	
Geographic location of non-SLIMF FMU(s)	Latitude & Longitude: 47.221541°, -68.755697°	
Forest zone	<input type="checkbox"/> Boreal	<input checked="" type="checkbox"/> Temperate
	<input type="checkbox"/> Subtropical	<input type="checkbox"/> Tropical
Total forest area in scope of certificate which is: Units: <input checked="" type="checkbox"/> ha or <input type="checkbox"/> ac		
privately managed	519,000 ha	
state managed	0	
community managed	0	
Number of FMUs in scope that are:		
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

Total forest area in scope of certificate which is included in FMUs that:		Units: <input checked="" 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	
Division of FMUs into manageable units:		
The forestlands have also been grouped geographically into five economic zones that are used to guide transportation and potential silvicultural investments decisions; the zones include Allagash, Blackstone, Estcourt, Oakfield and Rocky Brook.		

Social Information

Number of forest workers (including contractors) working in forest within scope of certificate (differentiated by gender):		
male workers: # 438 woodlands and mills	female workers: 49	
Number of accidents in forest work since previous evaluation:	Serious: 0	Fatal: 0

Pesticide and Other Chemical Use

<input type="checkbox"/> FME does not use pesticides.				
Commercial name of pesticide / herbicide	Active ingredient	Quantity applied since previous evaluation (kg or lbs.)	Total area treated since previous evaluation (ha or ac)	Reason for use
Rodeo	Glyphosate	3692.3 gals	7221 ac	Release
Accord XRTII	Glyphosate	2110 gals	2577 ac	Site prep
Arsenal AC	Imazapyr	325.87 gals	9798 ac	Release/site prep
Oust XP	Sulfometuron methyl	650.68 lbs.	9221 ac	Release/site prep

Production Forests

Timber Forest Products		Units: <input checked="" type="checkbox"/> ha or <input type="checkbox"/> ac
Total area of production forest (i.e. forest from which timber may be harvested)	490,600	
Area of production forest classified as 'plantation'	0	
Area of production forest regenerated primarily by replanting or by a combination of replanting and coppicing of the planted stems	32,524 6.6%	
Area of production forest regenerated primarily by natural regeneration, or by a combination of natural regeneration and coppicing of the naturally regenerated stems	458,076 93.4%	
Silvicultural system(s)	Area under type of management	
Even-aged management	5-year averages –2014 – 2018)	

Clearcut (clearcut size range)	22%
Shelterwood	52%
Other:	5%
Uneven-aged management	
Individual tree selection	21%
Group selection	
Other:	
<input type="checkbox"/> Other (e.g. nursery, recreation area, windbreak, bamboo, silvo-pastoral system, agro-forestry system, etc.)	
Non-timber Forest Products (NTFPs)	
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	Unknown, but relatively minor (not being sold with any FSC claims)
Species in scope of joint FM/COC certificate: <i>Scientific/ Latin Name (Common/ Trade Name)</i>	
Red spruce, <i>Picea rubens</i> Black spruce, <i>Picea mariana</i> White spruce, <i>Picea glauca</i> Norway spruce, <i>Picea abies</i> Balsam fir, <i>Abies balsamea</i> Hemlock, <i>Tsuga canadensis</i> Northern white cedar, <i>Thuja occidentalis</i> Eastern white pine, <i>Pinus strobus</i> Red pine, <i>Pinus resinosa</i> White ash, <i>Fraxinus americana</i> Black ash, <i>Fraxinus nigra</i> American beech, <i>Fagus grandifolia</i> White birch, <i>Betula papyrifera</i> Yellow birch, <i>Betula alleghaniensis</i> Red maple, <i>Acer rubrum</i> Sugar maples, <i>Acer saccharum</i> Northern red oak, <i>Quercus rubra</i> Big leaf aspen, <i>Populus grandidentata</i> Trembling aspen, <i>Populus tremuloides</i>	

FSC Product Classification

Timber products		
Product Level 1	Product Level 2	Species
W1 Rough Wood	W1.1 Roundwood (logs)	All
W3 Wood in chips or particles	W3.1 Wood Chips	All
Non-Timber Forest Products		
Product Level 1	Product Level 2	Product Level 3 and Species

Conservation and High Conservation Value Areas

Conservation Area	Units: <input checked="" type="checkbox"/> ha or <input type="checkbox"/> ac
Total amount of land in certified area protected from commercial harvesting of timber and managed primarily for conservation objectives (includes both forested and non-forested lands).*	97,800 hc total Conservation Forest 7,841 hc Unique Area (this is an internal designation and is included in the total area reported)

**Note: Total conservation and HCV areas may differ since these may serve different functions in the FME's management system. Designation as HCV may allow for active management, including commercial harvest. Conservation areas are typically under passive management, but may undergo invasive species control, prescribed burns, non-commercial harvest, and other management activities intended to maintain or enhance their integrity. In all cases, figures are reported by the FME as it pertains local laws & regulations, management objectives, and FSC requirements.*

High Conservation Value Forest / Areas			Units: <input checked="" type="checkbox"/> ha or <input type="checkbox"/> ac
Code	HCV Type	Description & Location	Area
HCV1	Forests or areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).		
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.		
HCV3	Forests or areas that are in or contain rare, threatened or endangered ecosystems.	Yanketuladi St Francis Floodplain Orchard Bog Cross Lake Fen Dead Brook White Pine	62 283 216 250 22
HCV4	Forests or areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).	Long Lake Smelt Fishery Long Lake Slopes Chase Lakes	202 174 519
HCV5	Forests or areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).		
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).		
Total area of forest classified as 'High Conservation Value Forest / Area'			1729

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.		
Explanation for exclusion of FMUs and/or excision:	The parent company of Irving Woodlands LLC (IWLLC) is J.D. Irving Limited, corporately located in New Brunswick, Canada. J.D. Irving Limited owns 3.2 million acres of forestland in Canada and Maine. In total, these lands are divided into five operating districts, four of which are located in Canada. Only those lands under the control of the JD Irving Maine operating district within the State of Maine are within the scope of this certification evaluation; Canadian lands are outside the scope of this certificate. The rationale for partial certification is due largely to differing regional standards between the Maritime and Northeast regions. The company does not at this time believe that the Maritime standard, which encompasses the balance of its ownership, is an appropriate normative standard for industrial/commercial forest management. J.D. Irving has been actively engaged in the Maritime standards development process and remains committed to re-engaging FSC certification in Canada if the Maritime standard undergoes revision through a multi-stakeholder and transparent process. The balance of the ownership is Canadian lands which are managed under the same system as the Maine Woodlands. Because of this common management system, there are no concerns about the forest management of these non-certified lands in Canada.	
Control measures to prevent mixing of certified and non-certified product (C8.3):	The other areas that are not within the scope of this Certificate are located in Canada and are geographically separate from these areas located in Maine.	
Description of FMUs excluded from or forested area excised from the scope of certification:		
Name of FMU or Stand	Location (city, state, country)	Size (<input checked="" type="checkbox"/> ha or <input type="checkbox"/> ac)
JD Irving Canada	New Brunswick Canada	728,000
JD Irving Canada	Nova Scotia Canada	50,000

1.2 Standards Used

All standards employed are available on the websites of FSC International (www.fsc.org) or SCS Global Services (www.SCSglobalServices.com). All standards are available on request from SCS Global Services via the comment form on our website. When no national standard exists for the country/region, SCS Interim Standards are developed by modifying SCS' Generic Interim Standard to reflect forest management in the region and by incorporating relevant components of any Draft Regional/National Standard and comments from stakeholders. More than one month prior to the start of the field evaluation, SCS Draft Interim Standards are provided to stakeholders identified by FSC International, SCS, forest managers under evaluation, and the FSC National or Regional Office for comment. SCS' COC indicators for FMEs are based on the most current versions of the FSC Chain of Custody Standard, FSC Standard for Group Entities in Forest Management Groups (FSC-STD-30-005), and FSC Accreditation Requirements.

Standards applicable <i>NOTE: Please include the full standard name and Version number and check all that apply.</i>	<input checked="" type="checkbox"/> Forest Stewardship Standard(s), including version: FSC-US, V1-0.
	<input checked="" type="checkbox"/> SCS COC indicators for FMEs, V7-0
	<input checked="" type="checkbox"/> FSC Trademark Standard (FSC-STD-50-001 V2-0)
	<input type="checkbox"/> FSC standard for group entities in forest management groups (FSC-STD-30-005), V1-1
	<input type="checkbox"/> Other:

1.3 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 (m ²)	0.09290304
Acre (ac)	Hectare (ha)	0.4047
Volume Conversion Factors		
To convert from	To	multiply by
Cubic foot (cu ft.)	Cubic meter (m ³)	0.02831685
Gallon (gal)	Liter (l)	4.546
Quick reference		
1 acre	= 0.404686 ha	
1,000 acres	= 404.686 ha	
1 board foot	= 0.00348 cubic meters	
1,000 board feet	= 3.48 cubic meters	
1 cubic foot	= 0.028317 cubic meters	

2. Description of Forest Management

2.1 Management Context

2.1.1 Regulatory Context

<p>Pertinent regulations at the national level</p>	<p>Endangered Species Act Clean Water Act (Section 404 wetland protection) Occupational Safety and Health Act National Historic Preservation Act Archaeological and Historic Preservation Act Americans with Disabilities Act U.S. ratified treaties, including CITES Lacey Act Forest Resources Conservation and Shortage Relief Act National Resource Protection Act National Environmental Protection Act National Wild and Scenic River Act Native American Grave Protection and Repatriation Act Rehabilitation Act Architectural Barriers Act</p>
<p>Pertinent regulations at the state/local level</p>	<p>Maine Revised Statute Annotated (M.R.S.A.), Title 12 Maine Forest Practices Act Maine Forest Service Rules, Chapters 20, 21 Maine Endangered Species Act Maine Natural Resources Protection Act Outcome Based Forestry Statute Shoreland Zoning Act Erosion and Sedimentation Control Act Protection and Improvement of Water Act Fish and Wildlife Management Laws Great Ponds Act The Land Use Regulation Act DEP, Resource Conservation and Recovery Act Maine Human Rights Act</p>
<p>Regulatory context description</p>	<p>County and local regulations, especially those related to road use and scenic view sheds, are part of the regulatory landscape and are relevant, but do not typically play a prominent role as compared to state and federal regulations. A portion of the Irving’s forestlands are subject to regulation of the Maine Land Use Planning Commission (LUPC). This Commission was established by the State legislature in 1971 to serve as the planning and zoning authority for the state’s townships, plantations and unorganized areas. The Commission has land use regulatory jurisdiction over these areas because they have no form of local government to administer land use controls, or they have chosen not to administer land use controls at the local level. LURC rules and standards cover a number of areas relevant to the management of the defined land holdings including policies for timber harvest operations, deer yard management, erosion control, roads and water</p>

	<p>crossings. LUPC permits are required for certain activities within designated protection zones (i.e., wetlands, fish/wildlife zones and aquifer protection areas). Other policies/regulations are found in LUPC’s Lake Management Program (1990) and Rivers with Special Protection Plan.</p> <p>And finally, listings under the federal Endangered Species Act include anadromous Atlantic salmon. Under both the state Forest Practices Regulations and the federal Endangered Species Act, there is a focus placed on long-term management planning. Outcome Based Forestry (OBF) is a voluntary program that requires that operations be implemented in a manner that is ecologically sustainable, economically viable and socially responsible. This OBF agreement obligates landowners to maintain independent third-party certifications and relaxes some provisions of the Maine Forest Practices Act.</p>
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2.1.2 Environmental Context

Environmental safeguards:
<p>The forest management plan aligns with the criteria and objectives outlined within the Maine Forest Service’s (MFS) Outcome Based Forestry (OBF) law, an agreement that the FME entered into with the MFS in May of 2012. At a broad level this agreement requires that operations be implemented in a manner that is ecologically sustainable, economically viable and socially responsible. The OBF agreement requires the FME to maintain independent third-party certifications for its woodlands and relaxes some provisions of the Maine Forest Practices Act. Listings under the federal Endangered Species Act include anadromous Atlantic salmon. Under both the State Forest Practices Regulations and Federal Endangered Species Act, there is emphasis on long-term management planning. The State of Maine has established Best Management Practices (BMPs) for Forestry. Harvest operations meet or exceed BMPs.</p>
Management strategy for the identification and protection of rare, threatened and endangered (RTE) species and their habitats:
<p>The FME regularly updates their RTE GIS layers using information provided by the Maine Natural Areas Program. Interviews confirm that foresters check this GIS layer during the planning stage and prior to commencing management activities. RTE locations are clearly identified on harvest plan maps. Surveys are conducted by both MNAP biologists and JD Irving foresters. Rare communities are identified and mapped in the GIS database and protected in the same manner as rare species.</p> <p>The FME has identified Type 2 old growth and implemented special management guidelines. The Strategic Plan specifically describes inactive management for Type 1 old growth. Type 1 and 2 old growth found to date occurs on 206 acres on FMU.</p> <p>The FME works in collaboration with the regional state wildlife biologist, rangers and other enforcement officials. The state agency regulates hunting and other activities. Gates and signs are used effectively to control access where needed.</p> <p>The FME documents areas identified by the U.S. Fish and Wildlife Service as critical habitat for the Canada Lynx. During management activities, the FME follows Canada Lynx management guidelines developed by the USFWS. These habitat zones regularly change and the FME routinely updates this information through USFWS and DIFW.</p>

2.1.3 Socioeconomic Context

Copied or adapted from the FME's 2017-2042 FMP and the 2014 SCS recertification report:

The forests of Maine are a vital source of raw materials for the forest products industry while supporting a wide variety of recreational activities and generate 18 percent of the gross state product, approximately \$6 billion. In addition to their economic significance, Maine's forests host a wide array of plant and animal species and play a critical role in maintaining water quality and aquatic habitat. Maine's coastal towns, including the City of Portland, have experienced substantial economic growth since the 1980s. These regions are currently experiencing renewed growth in response to national economic patterns. The population of Maine is just over 1.3 million people. Ninety-seven percent of the population identifies as white or caucasian; American Indians comprise 0.6 percent of the population.

Maine is home to four federally recognized Native American or First Nation peoples. These are the Penobscot, Passamaquoddy, Maliseet, and Micmac. In 1980, the Maine Indian Claims Settlement Act was signed into law. At the time, the Act was the largest Native American settlement of its kind in the U.S. and was the first to include provisions for the reacquisition of tribal lands. Under the terms of the Settlement, the Penobscots and Passamaquoddies gave up future claims to their aboriginal lands in exchange for over \$80 million in Federal trust fund and land acquisition monies. The Settlement also provided a smaller amount of land acquisition funds and Federal recognition for the Houlton Band of Maliseets. The Aroostook Band of Micmacs and those Maliseets who were not members of the Houlton Band also claimed title to parts of present-day Maine. Under the terms of the Act, however, these groups received no land or money, and their claims were extinguished. In 1991, the Aroostook Band of Micmacs received Federal recognition as an official tribe.

Maine's generally poor soil, short growing season, and remoteness from industrial and commercial centers have long delayed robust development and population growth, leaving the landscape of the state, and its economy, dominated by agriculture and forestry. Maine's agricultural outputs include poultry, eggs, dairy products, cattle, wild blueberries, apples, potatoes, and maple sugar. Commercial fishing, once a mainstay of the state's economy, still maintains an important presence. Aquifers and springs in Western Maine are a major source of bottled water, a growing and controversial industry. Maine's industrial outputs consist chiefly of paper, lumber and wood products, electronic equipment, leather products, food products, textiles, and biotechnology. Naval shipbuilding and construction remain key as well. Manufacturing is still the largest sector in the state's economy. Maine is a leading producer of paper and wood products in eastern Canada and Northeast U.S., which are the most valuable of all manufactured commodities in the Maine.

Recently, due to a decline in Maine's pulp and paper industry, Maine has been supporting a restructuring of its forest products industry to emphasize biomaterials and biochemicals derived from wood fiber (e.g., [Long-term Vision & Roadmap for Maine's Forest Sector](#)).

Tourism and outdoor recreation play a major and increasingly important role in Maine's economy, probably supporting more jobs in the state than any other industry. Picturesque coastal and island

resorts and the promise of tranquil outdoor life hold a strong appeal for tourists, recreational and seasonal visitors, and, increasingly, retirees. The state is a popular destination for inland sport hunting (particularly deer, moose and bear), sport fishing, snowmobiling, skiing, boating, camping and hiking, among other activities.

2.1.4 Land use, Ownership, and Land Tenure

Copied or adapted from the FME’s 2017-2042 FMP and the 2014 SCS recertification report:

Relative to pre-settlement conditions, the forests of Maine, including the FME’s lands, have experienced a systematic reduction of white pine, red spruce, and yellow birch. The entire region was harvested during the 19th century with exploitation focused first on white pine, followed by red spruce and then sawlog quality hardwoods. In contrast to the drier, harsher forest sites of the western U.S., the forests of Maine have remained well stocked despite this extensive harvesting. The species composition, however, has been substantially simplified, and many stands are comprised of pole-sized trees.

The FME first established itself in Maine in 1947 with the acquisition of 225,000 acres in the area west of Allagash. These new lands were held in common and undivided ownership primarily with the Dunn heirs, and Dauteuil Lumber. However, in the late 1970s, the FME took an active role in the management of these lands. In pursuit of its objectives, the FME initiated a campaign to consolidate its ownership out of common undivided interest and in 1977 the company assumed direct management responsibility for its lands with its own dedicated staff.

In 1983, there was an additional acquisition of 250,000 acres from International Paper Co. in Northern and Eastern Aroostook County. In 1985, the FME purchased land from Great Northern Paper in the northeastern part of Maine. In March of 1999, FME acquired 1,023,000 acres of lands in northern Maine from Bowater Incorporated (Great Northern Paper, Inc. Woodlands). In 2006, the company sold approximately 350,000 acres of its non-strategic Maine lands, bringing the present ownership to roughly 1,282,477 acres. The FME’s real estate division maintains ownership records for all tracts.

Aside from commercial timber harvesting within the general forest, the other principal land uses on the FMUE include: (1) outdoor recreation including, hunting, fishing, snowmobiling, ATViing, and camp leases; (2) Consideration for sensitive environments and important wildlife habitats such as deer wintering areas.

2.2 Forest Management Plan

Copied or adapted from the FME’s 2017-2042 FMP and the 2014 SCS recertification report:

<p>Management objectives:</p> <p>Excerpt from Forest Management Plan (2017-2042):</p> <p><i>Our key strategies and objectives are:</i></p> <ul style="list-style-type: none"> ➤ <i>Ensure our management is fully aligned with J.D. Irving Limited’s Company objectives, Best Management Practices, and Standard Operating Procedures.</i>
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➤ *Ensure our management is fully consistent, and is on track to meet the goals and objectives of our Outcome Based Forestry Agreement with the Maine Forest Service. These criteria are:*

✓ *Soil productivity*

- *Standard operating procedures have been established for all harvest and road construction operations to avoid significant reduction to site productivity.*
- *Standard operating procedures have been established to protect water quality and aquatic habitats during our harvest and road construction operations. These procedures meet or exceed current regulatory guidelines.*
- *Our timber supply objective is to maximize the long-term sustainable flow of quality timber products from the lands we manage.*

• *Our timber quality objective is focused on growing high quality, saw log and veneer products. This includes:*

✓ *Water quality, wetlands and riparian zones*

✓ *Timber supply and quality*

➤ *Spruce and Balsam Fir trees of sufficient soundness and stem size will be directed to the manufacturing of dimensional lumber.,*

➤ *Sugar Maple, Yellow Birch, White Birch, Ash, and Red Maple will be managed and merchandized to produce saw logs and veneer grade products.*

➤ *White Pine and Cedar will be merchandized to produce solid wood products.*

✓ *Biological diversity*

- *Maintain an appropriate balance of forest cover types and age class distribution.*
- *We have reviewed all of our lands for the occurrence of rare or outstanding features, representing important key habitats. These sites have been catalogued and best management strategies have been developed to protect their unique characteristics.*
- *Our harvesting operation sites are screened to identify special wildlife habitats, rare plants and other unique landscape features for retention during harvesting operations.*
- *All identified Deer Wintering Areas (DWA) are managed consistent with habitat objectives developed in consultation with Maine’s Inland Fisheries and Wildlife Department.*
- *All clear-cutting activities are conducted for sound silvicultural reasons, and will be ecologically appropriate for the site.*
- *A proportion of the land base must be maintained in “old forest” conditions meeting specific wildlife and habitat requirements.*
- *Our management activities will provide wood to our mills and other regional mills at costs allowing for competitive manufacturing.*
- *We have an established stakeholder committee made up of a wide spectrum of public interest groups.*
- *We will continue to provide historic and traditional recreational opportunities that do not conflict with our management objectives and values.*
- *Protecting the forest from fire, insects, and disease is a fundamental component of our management program.*
- *We are committed to investments in tree planting, pre-commercial thinning (PCT), and silvicultural stand improvement treatments to ensure the long-term health and sustainability of the lands we manage.*

- *Non-timber forest products are utilized when their use does not compromise other forest management objectives. Examples include; gravel, ash for basket making, burls, mushrooms, and fiddleheads.*
- *We will consider and incorporate aesthetics in our management activities where visual impacts may be of concern.*
- *We maintain independent third-party certification on the lands we manage.*
 - *Ensure we maintain independent forest certification for our lands.*
 - *Monitor carbon sequestration levels on our lands.*

Forest composition and rationale for species selection:

Excerpt from 2014 SCS report:

The FMU located in the transition zone between the northern hardwood region (dominated by beech, birch, and maple species) and the boreal spruce-fir forest. This transition zone, called by some the Acadian Forest, is rich in species diversity and micro-site variation. Boreal species, such as balsam fir, white and black spruce, tamarack, and white birch, tend to be at the southern end of their range in this area, while species such as red spruce, hemlock, and white and red pine tend to be at the northern end of their ranges. The area in northern Maine west of the Allagash River and extending to the top of Maine is dominated by purer spruce-fir types with hardwoods and mixed forest types prevalent on better-drained sites. Indicative of the transition zone in which the property lies, however, most all townships contain stands in the full continuum from softwoods to mixed types to hardwoods.

General description of land management system(s):

Excerpt from Forest Management Plan (2017-2042):

Harvest treatments and silvicultural prescriptions represent the merged objectives of growth and yield, markets, operations, and biological objectives. J. D. Irving, Limited has developed a series of silvicultural treatment categories as the basis for planning, modeling, and communications. These are generalized categories, and therefore are subject to modification based on conditions for each individual site. These modifications occur under the direction of the supervising regional forester. Our timber management objective is to increase the sustainable growth and yield of quality timber from the forest. Therefore, our overall goal in designing prescriptions is the identification of healthy, quality growing stock to leave as residual stand components while directing removals at lower quality, slow growing, and unhealthy stems. These treatments are also modified with respect to wildlife and biological considerations, according to the company policy for retention of islands and patches in clear-cut areas, and unique site-specific features identified in all harvest areas.

The harvest prescriptions we utilize sort into two distinct groups:

1. Even-aged Management: prescriptions where the forest stand is managed as predominantly one or two age-classes, and where the stand is ultimately replaced with a young age-class. This grouping includes the regeneration systems of clear-cutting, over-story removal and shelterwood harvest, as well as intermediate treatments such as commercial thinning. Even though these treatments are categorized as even-aged, they often include the management and maintenance of two-storied or three-storied stands. Below is the array of prescriptions under this grouping:

➤ *Clear-cuts: Removes most of the merchantable stems of all species within the definition of operability. The treatment is generally applied in mature to over-mature stands and leads to the creation of new, even-aged stands through either natural regeneration, planted trees, or a combination of both. Operational variations include leaving residual islands or patches of standing timber largely for wildlife purposes and defining block boundaries and shapes to be less square and angular and better fitting to natural stand boundaries. We have described these modifications under the term – variable retention clear-cuts.*

➤ *Over Story Removal:* Over story removal harvest prescriptions remove most of the merchantable stems of all species in a single treatment entry. This even aged management prescription is targeted to protect and release well established regeneration in the under story. Tree planting is not required following an over story removal harvest.

➤ *Commercial Thinning:* Commercial thinning is generally prescribed in planted stands or previously pre-commercially thinned areas. The primary objective of this treatment is to remove a portion of the trees, usually focusing on lower quality stems, in order to allow the remaining trees to continue growing vigorously. This prescription generally removes 40-60% of the merchantable volume. Depending upon the species, density, and site productivity, commercial thinning may be prescribed in stands varying from 18 to 30 years old. Once a stand has been commercially thinned, it is locked out from harvest eligibility for at least the next 10-year period.

➤ *Shelterwood Prescriptions:* Shelterwood treatments are often practiced in stands with a goal of promoting understory trees, natural regeneration and/or salvaging imminent mortality. In most situations, this prescription is even aged management. Depending upon the specific shelterwood prescriptions, 40% to 70% of the standing volume may be removed in the first pass, focusing on the lower quality and less vigorous trees. The second entry is normally delayed by 10 to 25 years, depending upon the specific stand conditions and objectives. There are some variations on the standard shelterwood that may be prescribed in specific circumstances including irregular shelterwood and some group selection methods.

2. *Uneven-aged management:* prescriptions where the forest is managed to maintain and expand several age classes with an objective to retain a forest canopy indefinitely. This grouping typically includes individual tree selection and riparian zone treatments. Where a truly balanced uneven aged forest can be created, it will be pursued. But some forest conditions under these prescriptions will indefinitely maintain a dominant development. The array of prescriptions under this grouping includes:

➤ *Riparian – Selection Harvest:* The purpose of selection harvesting in riparian stands is to regenerate and maintain an uneven-aged forest structure. This prescription typically occurs in riparian zones, but may also occur in areas deemed special management zones.

➤ *Single Tree Selection:* Single tree selection harvest is usually classical uneven-aged management. Ideally, this prescription targets tolerant hardwood, tolerant mixed wood or any cedar dominated stands. Sometimes it may also be used in stands with significant components of Red Spruce. In addition, harvesting in riparian zones, recreational, aesthetically important, or other constrained zones may require that a single tree selection treatment is utilized. Typically, uneven aged management may remove 40% of the stand volume each entry, depending upon the specific stand condition with subsequent entries separated by 20 to 30 years. The objective of the single tree selection treatment is generally to develop a full range of age and diameter classes in the stand; as well as to provide a suitable diversity of tree species at all times.

Harvest treatments are performed using the following harvesting systems (See BMP's for machine selection process and harvest techniques):

➤ *Mechanical Harvester Single Grip (MHS):* MHS harvesting incorporates various at-the-stump processors combined with forwarders (porters) used to transport wood to the roadside.

➤ *Mechanical Full Tree (MFT) Harvesting:* MFT harvest systems utilize a fellerbuncher, grapple skidder, delimeter, slasher, chipper, and grinder combinations.

➤ *Mechanical Processor in Box (MPB) Harvesting:* MFB harvest systems utilize a fellerbuncher, grapple skidder, processor, chipper, and grinder combinations.

➤ *Mechanical Processor at Roadside (MPR) Harvesting:* MPR harvest systems utilize a fellerbuncher, grapple skidder, delimeter, chipper, and grinder combinations.

<p>➤ <i>Conventional Hand Crews: Rare occasion for specialty items. Conventional logging utilizes a cable skidder with a man and chainsaw.</i></p>
<p>Harvest methods and equipment used:</p> <p>Excerpt from Forest Management Plan (2017-2042):</p> <p>➤ <i>Mechanical Harvester Single Grip (MHS): MHS harvesting incorporates various at-the-stump processors combined with forwarders (porters) used to transport wood to the roadside.</i></p> <p>➤ <i>Mechanical Full Tree (MFT) Harvesting: MFT harvest systems utilize a fellerbuncher, grapple skidder, delimber, slasher, chipper, and grinder combinations.</i></p> <p>➤ <i>Mechanical Processor in Box (MPB) Harvesting: MFB harvest systems utilize a fellerbuncher, grapple skidder, processor, chipper, and grinder combinations.</i></p> <p>➤ <i>Mechanical Processor at Roadside (MPR) Harvesting: MPR harvest systems utilize a fellerbuncher, grapple skidder, delimber, chipper, and grinder combinations.</i></p> <p>➤ <i>Conventional Hand Crews: Rare occasion for specialty items. Conventional logging utilizes a cable skidder with a man and chainsaw.</i></p>
<p>Explanation of the management structures:</p> <p>Excerpt from Forest Management Plan (2017-2042):</p> <p><i>The headquarters of IWLLC is located outside Fort Kent, Maine. Management operations in Maine are directed independently of other regions with support from corporate specialists. Specifically, in Maine, IWLLC employs management personal in the areas of scaling, forest operations administration, trucking, productivity improvement, road building, silviculture, forest operations planning and wood procurement. Key support functions are provided by personnel based in the corporate headquarters in New Brunswick.</i></p> <p><i>Every five-year period, the allowable harvest is re-calculated based on inventory, growth estimates and an operational net down. Based on an averaged allowable cut over a fifteen-year time period, the planning forester and logging planners work to create a continuous blocked management plan. The blocking process entails grouping forest stands into operational harvest blocks and incorporating on-the-ground realities which were not considered at the non-spatial level, in addition to the rules governing the allowed opening size and delay between harvesting adjacent openings. During this process, access to future spatial blocks is planned for the subsequent five-year period.</i></p> <p><i>Harvest operations are directly administered by the harvesting supervisors and the operations superintendents. Most logging operators are independent contractors though a few are employed directly by IWLLC. All wood transport operations are administered by IWLLC trucking supervisors; roughly 20% of harvest wood is trucked by company-owned trucks and the other 80% is trucked by contractors.</i></p> <p><i>Road construction and access is planned by the Planning Forester to support forest management. With regard to construction and access, IWLLC’s objective is to build high quality, environmentally appropriate roads and to maintain roads to such standards. Some key objectives that direct the road building program are; 1) minimize area in roads, 2) maximize safety for Irving operations and the general public, 3) minimize watercourse and wetland crossings, 4) utilize current best practices for forest road construction, and 5) improve transportation efficiency. It is IWLLC’s opinion that these objectives are best served with carefully planned, straight road systems. Road construction right-of-way widths are 60’-70’ with narrower widths at brook crossings.</i></p> <p><i>Forest health and protection is maintained in conjunction with corporate-level specialists and the Maine Forest Service. Preventing and extinguishing forest fires is the highest priority protection activity. Each spring, prior to the earliest risk of fire, all staff receives training and practice on fire detection and fighting techniques. Equipment, fully functional and in top condition, is cached across</i></p>

IWLLC's land holdings, and aerial support is on standby in New Brunswick. Specifically, in Maine, forest fire protection strategy includes a strong partnership with the Maine Forest Service (MFS).

With regard to insects and diseases, corporate specialists and the MFS Health and Monitoring Division conduct insect and disease monitoring on IWLLC woodlands. Spruce budworm is the dominant forest health issue and specific strategies are employed to mitigate its potential effects. These strategies focus on keeping stands healthy and vigorous, and reducing the landscape level concentration of mature fir. IWLLC is prepared to use insecticides in future outbreaks, if necessary, although these outbreaks are difficult to anticipate or forecast. The most certain priority in a spray program is the protection of young forest stands that are growing vigorously, both planted and natural stands.

The management of biodiversity and special areas is directed by the wildlife biologist and naturalist, who reside at the corporate level, in partnership with the logging planners and forester. Special attention is paid to older successional stages as well as the area of all successional stages of forest communities.

2.3 Monitoring System

Growth and Yield of all forest products harvested:
FME has maintained a proprietary Enhance Forest Inventory system since 2011. It involves the use of LIDAR and measurement of ground plots to calibrate the data, which allows for fine-scale inventory data. Decisions about harvest unit blocking and silviculture are driven by this fine-scale inventory data, although the growth and harvest planning model is run on aggregated data at the stand level. Because the system maintains the data at a small-scale, grid analysis can be done at sub-stand, stand, block, or landscape scale. Timber harvest records are maintained in the Harvest and Inventory Management (HIM) system. As confirmed through the review of the harvest data, FME maintains records of harvest volume, product, species and acreage.
Forest dynamics and changes in composition of flora and fauna:
A portion of the land is inventoried each year and the information is used to revise volume, species, and size class data in an effort to document changes in composition. The EMS contains a schedule for monitoring.
Environmental Impacts:
The management of biodiversity and special areas is directed by the wildlife biologist and naturalist, who reside at the corporate level, in partnership with the logging planners and forester. Special attention is paid to older successional stages as well as the area of all successional stages of forest communities. The Environmental Management System (EMS) contains a schedule for monitoring.
Social Impacts:
The Public Advisory Committee Process is one mechanism used to monitor social impacts. The Outcome Based Public Monitoring Summary also summarizes social impact monitoring. The SFM Scorecard is produced quarterly using self-assessments, oversight audits and the EMS. The score card records/measures performance against selected indicators for sustainable, ecologically sound and socially acceptable forest management. The EMS contains a schedule for monitoring. Staff also use a phone application to track comments received in the field from stakeholders and track progress in addressing any concerns received.
Costs, Productivity, and Efficiency:
Monitoring includes financial, customer, internal and business growth metrics as confirmed via review of US Timberlands Forestry Report 2019 YTD, quarterly SRM report cards, and weekly meeting minutes. The EMS contains a schedule for monitoring.

3. Certification Evaluation Process

3.1 Evaluation Schedule and Team

3.1.1 Evaluation Itinerary and Activities

Date: 24 September 2019	
FMU/ location/ sites visited	Activities/ notes
Fort Kent, ME	Opening Meeting: Introductions, client update, review scope of evaluation, audit plan, intro/update to FSC and SCS standards, confidentiality and public summary, conformance evaluation methods and tools review of open CARs/OBS, emergency and security procedures for evaluation team, final site selection.
Field sites: Ferrucci, Allagash District	
Site 1: Michaud Farm Road	Michaud Farm Road is a main artery built to high standards. Alignment, location, and drainage provisions are consistent with Maine BMPs. All ditches, turnouts, cross-drain culverts and bridges observed were functioning per Maine BMPs.
Site 2: 4.5 Mile Branch Road	This spur road was upgraded for a recently-completed harvest. All ditches, turnouts, and cross-drain culverts observed were functioning per Maine BMPs.
Site 3: Harvest Block MH06784	Completed harvest block having several prescriptions carefully fit to site conditions and objectives. Reviewed overstory removal, shelterwood, and multiple-entry (selection). The selection harvest was done to meet visual protection requirements of the Allagash Wilderness Waterway. Confirmed trail width and spacing, BMPs, post-harvest remediation of excessive rutting, residual basal area, protection of desirable advance regeneration, and retention of appropriate species for sites and prescriptions.
Site 4: Branch Road to access lower portion of Harvest Block MH06784	This spur road was used for a recently-completed harvest. All ditches, turnouts, and cross-drain culverts observed were functioning per Maine BMPs. As requested by the Maine Bureau of Parks and Lands, the road has been blocked by a berm to prevent vehicles from driving to the Allagash Wilderness Waterway. While creating the road closure berm the road behind the berm was intentionally breached to allow effective cross-drain water flow.
Site 5: Harvest Block MH06850	Auditor assessed a portion of the riparian buffer, including the “no track” portion, the inner buffer, and harvests in adjacent areas. BMPs including JDI methods to protect wetlands were confirmed.
Site 6: Mile 16 Road Spur with Temporary Bridge	3,500 feet of new access road was built to excellent quality and meets Maine BMPs. The temporary bridge consists of 16 tightly-packed hemlock stringers over temporary wooden abutments. One approach with significant slope was rocked very stable. Less-steep approach not rocked and had some surface water flow along road towards bridge and into stream. Some work remains,

	including road crowning, which should halt observed very minor erosion of road surface.
Site 7: 2018 Herbicide and Site Preparation Block MH06856A	The previous stand was clearcut, trenched, and then sprayed using Accord XRT II 3 Quarts/Acre, Arsenal 12 Ounces/Acre, Oust 1 Ounce/Acre. The planted trees appeared healthy and the site appeared to be fully-stocked.
Field sites: McCarthy	
Site 1 – MH 6391 Blackstone	Deer yard that had winter shelterwood treatment. Clear boundaries were visible and matched harvest plan. Harvest plan is electronic and was supplied to the harvester.
Site 2 – MH 6356	High Conservation Value Forest (HCVF 4), smelt fishery and late successional forest stands. A number of rare plants may occur on such a site such as Giant rattlesnake plantain.
Site 3 - 3297	Commercial thinning in 2015 of Norway Spruce. Prescription opened up 3 sides of most trees. Residual damage was not evident. Good growth in 4/5 growing seasons.
Site 4 - 6636	Herbicide treatment was applied in 2018. Application was an aerial application conducted by contractors. A notification of intent to treat with herbicides is sent to all adjoining properties prior to application.
Site 5 - 6383	Shelterwood hardwood management stand. Discussion regarding Beech regrowth management.
Site 6 – 6383b	Older hardwood stand with shelterwood treatment. Stand was entered a number of years ago.
Meister	Document review and staff interviews
Date: 25 September 2019	
FMU / location / sites visited	Activities / notes
Field sites: Ferrucci, Estcourt District	
Site 1: Planted Stand, Hafee Road, 12-Mile	A 12-year-old planted White spruce stand that was cleaned in the summer of 2019, using a crop-tree spacing approach. Originally planted to 1,800 trees per hectare, the stand had many naturally seeded volunteers (Balsam fir) and required cleaning back to the desired 1,800 trees per hectare (tph) spacing. The dominant healthy tree was released on 3 to 4 sides at a spacing to reach the target tph.
Site 2: Landry Road	Landry Road is a main artery built to high standards. Alignment, location, and drainage provisions are consistent with Maine BMPs. All ditches, turnouts, cross-drain culverts and bridges observed were functioning per Maine BMPs.
Site 3: Culvert Installation at 5-Mile, Landry Road	A 5-foot diameter plastic culvert crossing was installed 3 weeks ago to carry the brook across the Landry Road. Installation meets all BMPs, including embedding the bottom portion into the base of the stream, allowing bed-load movement to create a natural gravel surface within the culvert. Large rip-rap stones armor the stream approaches and are set at proper angle, and the road is built up above approaches to prevent road surface water from flowing directly into the stream

Site 4: Yankee Yankeetuladie Branch Road	This well-built and maintained branch road meets Maine BMPs.
Site 5: Block 6017	2016 softwood planting that received an herbicide chemical release treatment in 2017. Decided not to spray in 2018 but will likely require treatment in 2019 because at least 40% of the planted trees require release from competing vegetation. The treatment will include Glyphosate and Imazapyr (but since there is no grass competition not Oust).
Site 6: Yankeetuladie HCVF	The protected site is part of the company's unique areas program. It meets the requirements as HCVF Type 1 Old Growth. The site is reserved from harvest and used for research and teaching.
Site 7: T19R12 Block 6013, Unique Site Number 20001	Harvesting here was completed in the winter of 2018-2019 using a FB, processor, forwarder system. Two areas were reviewed: a flat, poorly drained area near the riparian buffer, and a sloping hardwood stand where yarding was uphill. Utilization was reviewed and found to be acceptable, considering equipment available and the undesirability of whole-tree skidding that would have damaged residual and skid trail but could have allowed the use of a delimber to merchandize further into the large hardwood tops.
Site 8: 8-Mile Landry Road	Road surface rutting and some downhill movement of water and road surface was observed. The site had been entered into "Collector" on May 20, 2019 but is not high enough priority to be resolved yet. No sedimentation into wetland or watercourses.
Site 9: Big 20 Rare Plant Site; Block 6006	Unique Site 202017 is the home of a rare orchid growing in a cedar swamp. Indicator plants for a rich site were observed.
Site 10: Recent Hardwood Shelterwood; Block 6006	Roadside completed shelterwood harvest in a maple-dominated hardwood stand. Good quality trees abound, well-spaced, with excellent visual appeal.
Site 11: Drive by recent CC Aspen coppice: Block 6006	Block includes retention island/peninsula and ample vigorous aspen root suckers were present.
Site 12: Block 6003	Has a legacy tree that was identified during layout and protect when stand was shelterwood cut during the summer 2018
Site 13: Block 6002	Jan 2018 CC with excellent coppice regeneration. Has two retention islands, one built around low wet area.
Site 14: Block 6002	Winter 2019 Harvest, confirmed PSL 1 buffer.
Site 15: Block 6114 (Allagash)	This somewhat atypical planted stand was commercially thinned in Nov. 2018 in cooperation with the Maine Inland Fish and Wildlife Department. The stand was planted in 1989 but not intensively managed in part because the town of Allagash doesn't allow herbicide use. Observed ground-level vegetative response including regeneration and discussed options for management.
Field sites: McCarthy/Meister, New Canada	
Site 1: Block 6441, Sly Brook Falls Road, Black spruce management (planted 1988)	Combination of thinning area and alternating strip-cuts of black spruce within self-imposed 1 km no-spray zone.

Site 2 – Dimmick Pond Road	<p>Bridge replacement where 20ft span was up-graded to 50ft span in May 2019. The prescription for the bridge was for a 1 in 100-year flood plus 20%.</p> <p>The FME participate in the Fisheries Improvement Network (FIN) which is a collaboration of forest conservation and state agencies whereby the network reports to the state on the green dot project. Green dots represent improved and sufficient fish habitat infrastructures. The FME contributed 12 dots in the 2018/2019 season.</p> <p>Culvert crossing replacement at Dimmick Pond Road also updated in 2019. Seed and straw were applied. The conservation mix for seed is vetted by the Maine Invasive Species Dept.</p>
Site 3 - 6443	Irregular Shelterwood with White Pine seed tree retention near water body. Buffers were correct and clear per harvest plan.
Site 4 – Elm Legacy tree	<p>Legacy Tree mapped and added to Legacy tree program. FME staff are encouraged to identify trees that are large (with potential wildlife habitat value) for their species in each area. Each tree is mapped and compiled in a catalogue.</p> <p>The Elm tree was located in an area that contained a beaver brook and was protected within the riparian buffer.</p> <p>Inspected a temporary stream crossing that had been removed. Straw and seed had been applied.</p>
Site 5 - 6440	Uneven aged hardwood stand shelterwood treatment in 2018/2019. A mixture of larger trees retained with some advanced regeneration. Residual damage had occurred on leave trees adjacent to skid trail (whole tree harvesting).
Site 6 – 6440b and Site 7 - 6443	Active site and logger interview.
Site 7 -	Replanting and Herbicide treatment in 2018. Aerial application. Discussion regarding site set up, good neighbor policy and Maine Board of Pesticides 3 rd party verification audit. Foresters highlighted aspects that are monitored such as water setbacks and drift.
Site 8 -	Thinning site from 2015.
Site 9 -	RSA bog mapped and originally identified by Maine Natural Heritage areas. This RSA was designated by the FME during the initial FSC evaluation in 2009.
Date: 26 September 2019	
FMU / location / sites visited	Activities / notes
Field sites: Ferrucci, Rocky Brook	
Site 1: St. Francis Road	St. Francis Road is a high-quality main artery built to JDI standards. Alignment, location, and drainage provisions are consistent with Maine BMPs. All ditches, turnouts, cross-drain culverts and bridges observed were functioning per Maine BMPs.
Site 2, 2-Mile St. Francis Road	Block 6197 Commercial thin in 20-year old spruce plantations (black spruce on one side of road, white spruce on the other) completed in the fall of 2018 using small, wheeled, single-grip processors. Stands weren't previously thinned or treated, so the

	harvest was delayed and heavier than the norm. Observed diverse understory.
Site 3: Carney Road	Carney Road is a high-quality main artery built to JDI standards. Alignment, location, and drainage provisions are consistent with Maine BMPs. All ditches, turnouts, cross-drain culverts and bridges observed were functioning per Maine BMPs.
Site 4: Block 6266 Winter clearcut Softwood Stand	Site has been harvested and disk-trenched, but not yet planted. Low, wet portion not trenched and will not be planted.
Site 5: Block 6266 Reserve Block	A 35-acre reserve patch for surrounding clearcut blocks. Area includes a wet run and tree conditions representative of pre-harvest conditions.
Site 6: Block 6266 Summer clearcut Softwood Stand	Site has been harvested and disk-trenched, but not yet planted.
Site 7: Block 6266 Selection harvest softwood stand	Confirmed that appropriate silviculture was employed, and that wildlife retention was done per company guidelines.
Site 8: Irregular Shelterwood	Active Irregular Shelterwood Harvest on moderate to steep slopes. Timberdown Logging is the contractor, set up for steep logging including tracked harvesters with self-leveling cabs. Interviewed harvester operator and reviewed a portion of the completed harvest.
Site 9: Block 6266, 4 Mile Carney Road	Summer clearcut Intolerant Hardwoods and Fir removed, has been trenched and will be planted to spruce mixture.
Site 10: Block 6266, 4 Mile Carney Road	Shelterwood harvest completed in a cedar-dominated softwood stand on a wet site. Soils were protected by harvesting on deep snow during February and March of 2019 and by judicious use of logging slash on the harvester/forwarder trails.
Site 11: 3 Mile Carney Road	When the road was straightened to meet JDI standards the former curved sections were initially retained, and some portions used for access. Several portions of the roads have been decommissioned, including berms and transplantation using clumps of native shrubs and forbs.
Site 12: 3 Mile Carney Road	Observed remediation of chip box landing including trenching.
Site 13: 19 Mile Carney Road	Completed Irregular shelterwood harvest on sloping site. Also reviewed block last cut 20 years ago, confirming growth and stand composed of healthy trees of desirable species adapted to the site.
Field sites: McCarthy	
Site 1 – MH 06572a & b	Herbicide application site where 5 landowners had been notified. FME also receive notifications from adjacent landowner’s herbicide applications on the neighboring properties.
Site 2 – MH 06571a	Cross checked old map stream area that had been corrected through site ground truthing. The water course had been correctly mapped by FME staff. Area of aspen retention had suffered windblow damage. Clear boundaries of sections with no herbicide application due to water courses. Rutting was visible and forwarder ditches had not been rehabilitated. This had been recorded by the forester in the EMS system the prior year and was queued for remediation works.

Site 3 - LSA	Wood frog LSA outside of riparian buffer in contiguous landscape section providing an edge effect for deer and moose, and a browsing area. Late successional cedar were evident throughout.
Site 4 – Chase Lakes HCVF	Unique landscape area of 520ha along lake edge. North Maine Woods activity site (Bear blind). Area was identified by Maine Natural Heritage and Areas as having a unique value. The FME mapped area as HCVF due to number of rare plants and wildlife the area can support. White pine nest and perch sites were evident, bald eagle nests, and plants such as White baneberry, Lycopodiopsida and Medeola virginiana were present.
Site 5 – Theriault Road	Bear den cedar tree with presence of Giant Rattlesnake plantain. Discussion regarding training and illustrative training materials available to foresters. Additional discussion on research sites within the FMU for research by staff and multiple universities in the region.
Document review and stakeholder calls: Meister	
Date: 27 September 2019	
FMU/ location/ sites visited	Activities/ notes
Ashland, ME	Document review, and staff and stakeholder interviews
Ashland, ME	Closing Meeting Preparation: Auditor(s) take time to consolidate notes and confirm evaluation findings
	Closing Meeting: Review preliminary findings (potential non-conformities and observations) and discuss next steps

3.1.2 Total Time Spent on Evaluation

A. Number of days spent on-site assessing the applicant:	4
B. Number of auditors participating in on-site evaluation:	3
C. Number of days spent by any technical experts (in addition to amount in line A):	0
D. Additional days spent on preparation, stakeholder consultation, and post-site follow-up:	2.5
E. Total number of person days used in evaluation:	14.5

3.1.3 Evaluation Team

Auditor name:	Kyle Meister	Auditor role:	Lead Auditor
Qualifications:	Kyle Meister is an FSC Forest Management (FM) and Chain of Custody (COC), Sustainable Biomass Partnership, and Roundtable on Sustainable Palm Oil Supply Chain Certification Lead Auditor with SCS Global Services. He has conducted FSC FM pre-assessments, evaluations or surveillance audits in Bolivia, Brazil, Canada, Costa Rica, Dominican Republic, Indonesia, India, Japan, Mexico, New Zealand, Spain, and all major forest producing regions of the United States. He has conducted COC assessments in Bolivia, Canada, Panama, and the United States (California, Georgia, Kentucky, North Carolina, Oregon, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia). Mr. Meister has successfully completed CAR Lead Verifier, ISO 9001:2008 Lead Auditor, SA8000 Social Systems Introduction and Basic Auditor, RSPO Supply Chain Lead Auditor, SBP Lead Auditor, and FSC Lead Auditor and Trainer Training Courses. He holds a B.S. in Natural Resource Ecology and Management and a B.A. in Spanish from		

	the University of Michigan; and a Master of Forestry from the Yale School of Forestry and Environmental Studies.		
Auditor name:	Michael Ferrucci	Auditor role:	Team auditor
Qualifications:	<p>Mike Ferrucci is qualified as a RAB-QSA Lead Auditor (ISO 14001 Environmental Management Systems), as an SFI Lead Auditor for Forest Management, Procurement, and Chain of Custody, as an FSC Lead Auditor Forest Management and Chain of Custody, as a Tree Farm Group Certification Lead Auditor, and as a GHG Lead Auditor. Mike has led Sustainable Forest Initiative (SFI) certification and precertification reviews throughout the United States. He has also led or participated in joint SFI and Forest Stewardship Council (FSC) certification projects in nearly one dozen states and a joint scoping or precertification gap-analysis project on tribal lands throughout the United States. He also co-led the pioneering pilot dual evaluation of the Lakeview Stewardship Unit on the Fremont-Winema National Forest. Mike Ferrucci has 33 years of forest management experience. His expertise is in sustainable forest management planning; in certification of forests as sustainably managed; in the application of easements for large-scale working forests, and in the ecology, silviculture, and management of mixed species forests, with an emphasis on regeneration and management of native hardwood species. Mike has conducted or participated in assessments of forest management operations throughout the United States, with field experience in 4 countries and 33 states. Mike has been a member of the Society of American Foresters for over thirty-five years. He is Past Chair of the SFI Auditor’s Forum. Mike is also a Lecturer at the Yale School of Forestry and Environmental Studies, where he has taught graduate courses and workshops in forest management, harvesting operations, professional forest ethics, private forestry, and financial analysis.</p>		
Auditor name:	Ciara McCarty	Auditor role:	Team auditor
Qualifications:	<p>Ms. McCarthy is a FSC Senior Lead Auditor at SCS Global Services and a forestry professional with experience in a number of environmental certification schemes in Europe, Australia, and the USA. She graduated from the University of Wales and Oregon State University with a BSc Forestry (Hons). Additionally, Ms. McCarthy is a lead auditor for the Sustainable Biomass Program.</p>		

3.2 Evaluation of Management System

3.2.1 Methodology and Strategies Employed

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 reviewing documents and records, interviewing FME personnel and contractors, implementing sampling strategies to visit a broad number of forest cover and harvest prescription types, observing implementation of management plans and policies in the field, and collecting and analyzing stakeholder input. When there is more than one team member, each member may review parts of the standards based on her or his 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, interviews, stakeholder comments, and reviewed documents

and records. Where consensus among 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.

3.2.2 Pre-evaluation

- A pre-evaluation of the FME *was not* required by FSC norms.
- A pre-evaluation of the FME was conducted as required by and in accordance with FSC norms.

3.3 Stakeholder Consultation Process

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).

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. A public notice was sent to stakeholders at least 6 weeks prior to the audit notifying them of the audit and soliciting comments.

3.3.1 Stakeholder Groups Consulted

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. Stakeholder groups who are consulted as part of the evaluation include FME management and staff, consulting foresters, contractors, lease holders, adjacent property owners, local and regionally-based social interest and civic organizations, purchasers of logs harvested on FME forestlands, recreational user groups, tribal members and/or representatives, members of the FSC National Initiative, members of the regional FSC working group, FSC International, local and regionally-based environmental organizations and conservationists, and forest industry groups and organizations, as well as local, state, and federal regulatory agency personnel and other relevant groups.

3.3.2 Summary of Stakeholder Comments and Evaluation Team Responses

The table below summarizes the major comments received from stakeholders and the evaluation 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.

Stakeholder Comment	SCS Response
<p>I lead a stakeholder driven applied research cooperative, the Cooperative Forestry Research Unit at the University of Maine. J.D. Irving Limited has been a member in good standing contributing financially and through in-kind services to our cooperative for many years. Their foresters and managers regularly attend meetings, workshops and field tours. They also host long-term forest management research field studies on their property and contribute to discussions on new research to pursue related to the improved management of forests, wildlife habitat and sustainability goals.</p>	<p>Participation in cooperative research was confirmed via review of financial records, interviews with FME staff, and FME staff’s calendars. Of note, the FME has provided opportunities for stakeholders to view its stream crossing upgrades, attend rare plant identification training, and other field tours.</p>
<p><i>The audit team interviewed and inspected several harvesting contractors regarding health & safety, pay rates & payment system, working conditions, and labor. Below is a summary of comments and questions that contractors consented to sharing:</i></p> <ul style="list-style-type: none"> • The Proforma system works out OK, but there are tight margins. You earn less per ton on JDI, but typically get work for 40-45 weeks, which often is more than on other lands; • We earn higher rates on JDI, but it is about the same as what you could earn on other ownerships; • JDI handles its own trucking and road maintenance, while other landowners require harvesting contractors to include those services; • We got a raise in Proforma this year. There is also a dry bonus if trucking is delayed for seven weeks and harvested material dries in the field, which reduces overall tonnage; • We review Proforma with JDI at the beginning of each logging season (typically February). We receive the Proforma and the rate sheet prior to signing a contract. We review Proforma with JDI every 8 weeks to see if any adjustment in rates is warranted, but we can talk to them at any time; • There is a contractor webpage that we can use to review payment and load summaries. We compare these online records to our own; 	<p>All harvesting contractors interviewed and inspected demonstrated that First AID and Spill kits were available and accessible onsite. The audit team inspected equipment, trailers, and trucks for leaks and overall organization and safety; no issues were detected. All harvesting contractors confirmed annual training via Certified Logging Professional (CLP) or Professional Logging Contractors (PLC), in addition to participation in the FME’s annual spring training event. The FME confirms training, qualifications, insurance, and other requirements as part of due diligence prior to signing contracts.</p> <p>The FME provided a demonstration of the Proforma system to the audit team, which factors in the topics of concern noted by stakeholders.</p> <p>The fact that the FME separates trucking and road maintenance from harvest contracting was confirmed in multiple interviews with contractors and FME staff, as well as review of the underlying assumptions of the harvester Proforma worksheets. Multiple harvesting contractors confirmed that Proforma is reviewed at least every eight weeks.</p> <p>Attracting and retaining workers is in fact a challenge for much of Aroostook County, the primary region where the FME operates. Statistics from government (e.g., Bureau of Labor Statistics, U.S. Census Bureau, Maine Center for Workforce Research and Information) and university (e.g., UNH) websites accessed on October 6, 2019</p>

<ul style="list-style-type: none"> • Finding people for the nightshift is hard. Overall, it is hard to keep good people right now; • JDI offers to pay for training of new employees of contractors; • JDI is closer to home for several contractors, which also helps to attract some workers; • How are holidays and healthcare considered in the Proforma system?; • Contractors varied in the division of shifts. The most common allocations for a 5-day work week were three eight-hour shifts, two twelve-hour shifts, and two ten-hour shifts with four hours a shift for the contractor to supervise or do repairs. One other model encountered was a four-day work week with three shifts for 40 hrs. total/worker (or 10-hr. workdays); • How contractors handle general health insurance costs for themselves and their employees varied greatly. Some contractors and/or their employees are covered through their spouses’ plans, some pay a bonus to their employees so that each may seek his/ her own health insurance, and others pay for health insurance for their employees. In some cases, employees refuse health insurance without explanation; • How contractors handle retirement benefits for themselves and their employees varied greatly. Some have retirement plans and others do not. Some of those that do not have plans pay a higher rate or a bonus to their employees. Some employees opt out of retirement plans if it is offered. • Some contractors have spoken to JDI about getting access to resources for health insurance and other benefits; • I am not interested in the loggers’ union. The people that want it are lazy; • I don’t care one way or the other about anyone the union, but I don’t think that it is the solution; • I’m not sure yet about the logger cooperative; • I have mixed feelings about the logger’s cooperative; and 	<p>reveal that the county is losing population, that the population is aging, and that unemployment, while on decline, is still higher than in much of the rest of Maine. These and other statistics are leading some in the County to implement projects to maintain or attract people to the area (refer to article from April 7, 2019 in the local news, The County). Interviews with multiple harvesting contractors and FME staff confirm that maintaining and attracting a qualified workforce is a challenge in multiple local industries, including forest products.</p> <p>The FME provided a demonstration of the contractor webpage, which shows various statistics such as loads delivered, payments received, bonuses, etc. Multiple contractors confirmed having accessed the contractor webpage.</p> <p>Multiple FME staff interviewed independently confirmed that they have offered resources on benefits providers to harvesting contractors as part of annual spring training events.</p> <p>Interviews with FME staff also confirm that no organizations representing harvesting or hauling contractors have approached the FME to date. It should be noted that the S.P. 444 - L.D. 1459 only came into effect a few days prior to the onsite FSC audit. Refer to OBS 2019.1.</p>
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<ul style="list-style-type: none"> I don't understand the logger's cooperative that well, but it's a good thing to keep a level playing field. 	
<p>There was new legislation passed in June 2019 related to logger and hauling contractor cooperatives for collective bargaining. The law came into effect on September 19, 2019. JDI intimidates the local workforce. There was a public hearing on April 29, 2019 and JDI testified against this legislation.</p> <p>There is also a law (LD 639, passed May 2013) that requires that the landowner provide a rate sheet to the contractor for payment quotes.</p> <p>The average annual salary regionally is about \$35,000.</p> <p>JDI closed the roads to keep the audit team from consulting contractors, such as people that I support.</p>	<p>The FSC certificate for the FME is limited to its forest landholdings in Maine, as described in section 1.1 of this report. Other affiliated businesses and lands are outside of the scope of this certificate. Harvesting contractors interviewed had a range of opinions on collective bargaining, as can be demonstrated in the comments they allowed the SCS audit team to include in the previous row.</p> <p>SCS searched for testimonies that occurred on April 29, 2019 on the following website (conducted on October 6, 2019): http://legislature.maine.gov/bills/testimony.html.</p> <p>A keyword search of the results for said date using the term "Irving" yielded no results. For the bill, LD 1459, the search yielded testimonies from representatives of the following organizations: LP Building Solutions, Verso Corporation, Professional Logging Contractors of Maine, Weyerhaeuser, Maine AFL-CIO, Pingree Associates Inc., St. Francis, Maine, Maine State Legislature (2), Freeport, Local 7 Ironworkers, Hermon, International Association of Machinists and Aerospace Workers, Seven Islands Land Company, Maine Forest Products Council, Fort Kent, Woodlands Huber Resources Corporation, Resident, and Portland. Note that Irving or affiliated entities were not in the list of testimonies provided.</p> <p>A search for "Irving" in all testimonies provided in the 129th Legislature yielded testimonies for LDs 754, 614, 1060, 1173, 1181, 1436, 1282, and 1691 (March-May 2019). Note that LD 1459 was not among the results.</p> <p>Per interviews with a sample of harvesting contractors, FME staff, and this stakeholder group, no organizations have approached the FME before or during the audit to exercise any rights under S.P. 444 - L.D. 1459. Refer to OBS 2019.1.</p>

	<p>Per review of US Census statistics cited in the response to the previous comments, the median annual household income in 2018 was \$39,021. This means that half of the householder fell below this line and half of them were above. So, \$35,000 is a reasonable estimation for the average.</p> <p>As can be ascertained from the collection of comments that the audit team received from harvesting contractors, the audit team had no difficulty in conducting a wide sample of interviews and attaining a variety of opinions on labor issues. Furthermore, email records reviewed with time signatures indicate that roads were closed due to weather and the potential impacts for rain on the road system. See email Date: 9/23/19 7:50 AM (GMT-05:00): “All Irving maintained roads will be closed to trucking from 9-24 midnight (tonight)to 9-25 midnight (tomorrow morning)due to the forecasted rain. If there are any concerns please let me know.” (sic). See also email Date: 9/24/19 4:07 PM (GMT-05:00): “All Irving Woodlands maintained roads will be OPEN tomorrow, September 25th at 4:00 am to trucking. This is subject to change depending on weather conditions. Thank you.” The fact that these messages were received was confirmed via interviews with one stakeholder who saw them.</p> <p>The audit team experienced wet conditions on the first day of the field audit (September 24) and for parts of the second day (September 25). In addition to the email records and the audit team’s field observation, weather records for the area can be reviewed to confirm that it was rainy those days (see Time and Date and Weather Underground for examples of data and Weather.com for a daily summary of each day of September 2019).</p>
<p>We saw an herbicide application that went right up to a water body.</p>	<p>Through review of herbicide application maps, prescriptions and notifications, as well as observation of a sample of application sites in the field, no applications near water bodies was detected.</p>
<p>We have no issues with JDI. They are a huge asset to Northern Maine. I have no information on the</p>	<p>There is a current debate over the use of herbicides going on in the State legislature. The</p>

<p>logging cooperative. Herbicides are a mixed bag- they are good and bad. We need to have a study to find out why the bird populations are down.</p>	<p>FME contributes to research through the Cooperative Forestry Research Unit. Per review of herbicide prescriptions and maps, field observation, and interviews with FME staff and stakeholders, it was found that the FME adheres to herbicide label requirements and, when possible, avoids use of more than one herbicide application to planted stands. As multiple industries use herbicides and there are other variables affecting bird populations (e.g., climate change, plastic pollution, urbanization, etc.), any research should be conducted carefully to ensure that causes of population decline can be identified.</p>
<p>We consult with JDI on public safety, such as in controlling truck traffic. We have a good relationship with JDI.</p>	<p>Through a demonstration of the stakeholder engagement app and FME staff calendars, interactions and responses to stakeholder comments were reviewed. Comments and actions taken are recorded in the FME's tracking system.</p>
<p>JDI has taken us on several field visits, including aerially by helicopter. They show us areas that they are planning to harvest each year and consult with hunting outfitters for input on hunting. In our meetings anyone can speak and JDI encourages feedback. Anyone can call them. We provided feedback about a town road that washed out after cutting- they fixed the road at no cost to the town. We have a good relationship with JDI. There is an ordinance in our town that does not allow them to spray herbicide and they respect it.</p>	<p>Several FME staff involved with the herbicide program brought up the town ordinance that does not allow the FME to spray in one township, Allagash, which was confirmed via review of maps of aerial applications. None of the aerial applications for 2019 overlap with this township.</p>
<p>We can confirm that there have been no violations on the part of JD Irving's herbicide applicator contractor on JDI's land in the past 5 years. Maine's buffers indicate that applications must be per the labels' instructions and that applications of aerial herbicide be done away from water bodies. There is an obligation to notify residents or rights-of-way within 1,000 ft. of the edge of the spray zone per pesticide rules. It does not mean that one cannot spray within this 1,000 ft. buffer, but notification must occur and one cannot legally drift onto another property without written consent and meeting any other applicable regulations. Newspaper, Board of Pesticides Control, and Poison Control</p>	<p>The SCS audit team discovered, through review of maps and applicator prescriptions and field observation, that the FME respects a 1-km notification buffer, which exceeds regulatory requirements. Oftentimes, no spraying occurs in this buffer zone. FME staff stated that every attempt is made to keep the number of applications to a minimum, such as through timing of application to be most effective at controlling competing vegetation and avoiding damage to crop trees, use of different hoses and nozzles that better target competing vegetation, and surfactants.</p> <p>The comments on aerial vs. backpack spraying are noted. There are other types of application</p>

<p>notifications must be done regardless of the presence of any residential area or right-of-way.</p> <p>Worker exposure during aerial spray can be much lower than the potential during a backpack spray. Aerial systems have more sophisticated controls, such as for windspeed.</p> <p>For a comparison of potatoes versus a planted forest stand, in 2013 there were roughly 55,000 acres of potatoes in Maine and 15,000 acres of planted forest treated annually (of about 3 million acres). Herbicides such as glyphosate, insecticides, and fungicides are used during potato planting. From there, fungicides are typically applied once per week until potato harvest. There is also use of fumigants on potato crops. The herbicide application to planted forests is usually limited to 1-2 applications in the first 10 years of the planted stands' life.</p>	<p>systems, such as ground-based machinery fitted with applicators, that can also reduce the risk of worker exposure.</p> <p>The comparison of the agricultural crop, potatoes, to planted forests is noted. In the most recent year for which statistics are available, the planted area for potatoes in Maine was 49,000 acres in 2017 (see National Agricultural Statistics Service). Per Maine Forest Service Annual Silvicultural Activities reports, the average number of acres planted annually from 2015-17 was 6,976. Given that herbicide treatments usually occur the first year of planting and possibly once more depending on the success of the first treatment, 15,000 acres treated annually is a reasonable estimation.</p>
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4. Results of Evaluation

4.1 Notable Strengths and Weaknesses of the FME Relative to the FSC P&C

Table 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. Weaknesses are noted as Corrective Action Requests (CARs) related to each principle.

Principle / Subject Area	Strengths Relative to Conformity to the Standard	Weaknesses Relative to Conformity to the Standard
P1: FSC Commitment and Legal Compliance	The FME has a track record of completing its Outcome Based Forestry requirements on time.	Refer to OBS 2019.1
P2: Tenure & Use Rights & Responsibilities	No exceptional strengths noted.	None detected.
P3: Indigenous Peoples' Rights	No exceptional strengths noted.	None detected.
P4: Community Relations & Workers' Rights	The FME engages with contractors regularly to assess their performance and concerns.	Refer to OBS 2019.2
P5: Benefits from the Forest	The FME regularly updates its inventory system based on newly released technology and data to reduce inventorying costs and improve volume estimations.	None detected.

	Overall utilization observed in the field remains high despite a difficult winter logging season.	
P6: Environmental Impact	The availability of GIS on phones and tablets in staff and harvest operators' machinery ensures that riparian zones are better identified and respected in the field. The FME respects a 1-km pesticides application notification buffer, which exceeds regulatory requirements.	None detected.
P7: Management Plan	No exceptional strengths noted.	None detected.
P8: Monitoring & Assessment	The use of phone apps has ensured quicker detection and recording of road and drainage issues, allowing for them to be prioritized and repaired in a timely manner based on the sensitivity of the resource.	None detected.
P9: High Conservation Value Forests	Type 2 old growth stands have been detected and protected since the last recertification assessment.	None detected.
P10: Plantations	N/A	N/A
Chain of Custody		None detected.
Group Management	N/A	N/A

4.2 Process of Determining Conformance

4.2.1 Structure of Standard and Degrees of Nonconformance

FSC-accredited forest stewardship standards consist of a three-level hierarchy: principle, the criteria that correspond to that principle, and the performance indicators that elaborate each criterion. Consistent with SCS Forest Conservation Program evaluation protocols, the team collectively determines whether or not the subject forest management operation is in conformance with every applicable indicator of the relevant forest stewardship standard. Each nonconformance must be evaluated to determine whether it constitutes a major or minor nonconformance at the level of the associated criterion or sub-criterion. Not all indicators are equally important, and there is no simple numerical formula to determine whether an operation is in nonconformance. The team therefore must use their collective judgment to assess each criterion and determine if the FME is in conformance. If the FME is determined to be in nonconformance at the criterion level, then at least one of the applicable indicators must be in major nonconformance.

Corrective action requests (CARs) are issued for every instance of a nonconformance. Major nonconformances trigger Major CARs and minor nonconformances trigger Minor CARs.

4.2.2 Interpretations of Major CARs, Minor CARs and Observations

Major CARs: Major nonconformances, either alone or in combination with nonconformances of all other applicable indicators, result (or are likely to result) in a fundamental failure to achieve the objectives of the relevant FSC Criterion given the uniqueness and fragility of each forest resource. These are corrective actions that must be resolved or closed out before a certificate can be awarded. If Major CARs arise after an operation is certified, the timeframe for correcting these nonconformances is typically shorter than for Minor CARs. Certification is contingent on the certified FME’s response to the CAR within the stipulated time frame.

Minor CARs: These are corrective action requests in response to minor nonconformances, which are typically limited in scale or can be characterized as an unusual lapse in the system. Most Minor CARs are the result of nonconformance at the indicator-level. Corrective actions must be closed out within a specified time period of award of the certificate.

Observations: These are subject areas where the evaluation team concludes that there is conformance, but either future nonconformance may result due to inaction or the FME could achieve exemplary status through further refinement. Action on observations is voluntary and does not affect the maintenance of the certificate. However, observations can become CARs if performance with respect to the indicator(s) triggering the observation falls into nonconformance.

4.3. Existing Corrective Action Requests and Observations

Finding Number: 2018.1	
Select one: <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation	
FMU CAR/OBS issued to (when more than one FMU):	
Deadline	<input type="checkbox"/> Pre-condition to certification/recertification <input type="checkbox"/> 3 months from Issuance of Final Report <input type="checkbox"/> 12 months or next regularly scheduled audit (surveillance or re-evaluation) <input checked="" type="checkbox"/> Observation – response is optional <input type="checkbox"/> Other deadline (specify):
FSC Indicator:	FSC-US indicator 5.3.a.

<p>Non-Conformity (or Background/ Justification in the case of Observations): Utilization and log sorting on most sites visited was excellent. No merchantable material was observed left behind with the exception of one area on the Cut Lake harvest block. Per the FME personnel’s estimation, 15-30 bunches of spruce-fir were left behind on top of the hill. There are a number of potential root-causes, including difficult terrain and visibility and lack of communication between work crews, among others. Nevertheless, the material is still salvageable as confirmed through observation of the logs and since the harvest was closed less than a month ago.</p> <p>In addition to normal harvest closeout review processes that could have detected the material left behind and opening an incident in the EMS now that the area has been detected, FME staff have access to a new phone app that can be used for several analyses. FME staff showed that the mobile phone app has a map of actual trail routes taken, as recorded by each piece of harvesting equipment’s GPS. Staff stated that current analysis on the phone may be limited due to limited color schemes and superposition of multiple points taken throughout harvest (i.e., repeated use of the same trail by the same piece of equipment). There may be an opportunity to create a simple query to detect areas where the patterns of use of trails by the forwarders may not be consistent with use patterns of harvester.</p>	
<p>Corrective Action Request (or Observation): Management practices should be employed to minimize the loss and/or waste of harvested forest products.</p>	
<p>FME response (including any evidence submitted)</p>	<p>December 2018: Current technology needs to be revised by IT to allow supervisors the ability to access machine track files remotely on their phone. Today, multiple steps and repeated file management are required by supervisors to perform harvester vs forwarder comparisons. A request will be submitted to IT for options on how to improve workflow and minimize additional hands on steps for supervisors that are currently required to perform this process. As a backup, until the technology gap can be bridged, supervisors will compare forwarder track files to the block polygons to identify potentially missed area and follow the existing EMS process.</p> <p>September 2019: EMS procedures have been updated, supervisors can and are required to compare harvester trackfiles with forwarder trackfiles on a block basis to determine if areas may have been missed during extraction. The new procedure has been adequately tested and an IT solution was not required.</p>
<p>SCS review</p>	<p>December 2018: SCS will evaluate the FME’s full response at the next audit.</p> <p>September 2019: The team reviewed 5.3.a Quality Assurance Waste Audit procedure, and determined that it is no longer used. Instead there is a program of self-audits documented in the Harvesting and Roads Superintendent Self Audit template. The form is used to evaluate, among other items, “quality” which includes product utilization and product quality standards. The FME provided a demonstration of the “crumb trail” overlay and how it can be used to see if extraction machinery has missed any area that harvest machinery has entered.</p>
<p>Status of CAR:</p>	<p><input checked="" type="checkbox"/> Closed</p> <p><input type="checkbox"/> Upgraded to Major</p> <p><input type="checkbox"/> Other decision (refer to description above)</p>

4.4. New Corrective Action Requests and Observations

Finding Number: 2019.1	
Select one: <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation	
FMU CAR/OBS issued to (when more than one FMU):	
Deadline	<input type="checkbox"/> Pre-condition to certification/recertification <input type="checkbox"/> 3 months from Issuance of Final Report <input type="checkbox"/> 12 months or next regularly scheduled audit (surveillance or re-evaluation) <input checked="" type="checkbox"/> Observation – response is optional <input type="checkbox"/> Other deadline (specify):
FSC Indicator:	FSC-US, V1-0, 1.1.a
Non-Conformity (or Background/ Justification in the case of Observations): On 19 September 2019, the week prior to the onsite audit, a new law (S.P. 444 - L.D. 1459) came into effect. While no organization has approached the FME to exercise the provisions of this law, stakeholder consultation indicates that this could occur sometime prior to the next FSC audit.	
Corrective Action Request (or Observation): Forest management plans and operation should demonstrate compliance with all applicable federal, state, county, municipal, and tribal laws, and administrative requirements (e.g., regulations). Violations, outstanding complaints or investigations should be provided to the Certifying Body (CB) during the annual audit.	
FME response (including any evidence submitted)	December 2019: All complaints with respect to the new law (S.P. 444 - L.D. 1459) will be addressed using the JDI Public complaint process and tracked in the EMS database.
SCS review	December 2019: This issue will be assessed at the next onsite audit.
Status of CAR:	<input type="checkbox"/> Closed <input type="checkbox"/> Upgraded to Major <input type="checkbox"/> Other decision (refer to description above)

Finding Number: 2019.2	
Select one: <input type="checkbox"/> Major CAR <input type="checkbox"/> Minor CAR <input checked="" type="checkbox"/> Observation	
FMU CAR/OBS issued to (when more than one FMU):	
Deadline	<input type="checkbox"/> Pre-condition to certification/recertification <input type="checkbox"/> 3 months from Issuance of Final Report <input type="checkbox"/> 12 months or next regularly scheduled audit (surveillance or re-evaluation) <input checked="" type="checkbox"/> Observation – response is optional <input type="checkbox"/> Other deadline (specify):
FSC Indicator:	FSC-US, V1-0, 4.4.b

<p>Non-Conformity (or Background/ Justification in the case of Observations):</p> <p>The FME maintains consistent contact with many affected parties and other stakeholders, as demonstrated in interviews that the audit team conducted with various parties and records reviewed of the FME’s internal system for tracking comments received and any actions taken to address issues detected.</p> <p>Per interviews with stakeholders and observation of one letter sent to indigenous representatives, the contact information for one indigenous group was incorrect. All others were verified as correct.</p> <p>During the audit team’s stakeholder consultation, it was discovered that some points of contact for stakeholder organizations were out of date. It was also discovered that there are different types of stakeholders’ information being maintained by several FME staff (e.g., local stakeholder advisory groups, contractors), which, while shared with the audit team onsite upon request, were not shared prior to the onsite assessment. While stakeholders interviewed confirmed having regular contact with the FME and that they were aware that the FSC audit was taking place, having these contacts prior to the onsite assessment would ensure that stakeholders are better engaged with the audit process.</p>	
<p>Corrective Action Request (or Observation):</p> <p>The FME should ensure that its stakeholder contact information is current to ensure that it can readily receive input in management planning from people who would likely be affected by management activities.</p>	
<p>FME response (including any evidence submitted)</p>	<p>December 2019: The Regional Forester will consolidate all stakeholders under one list that includes current contact information. The list will be revised annually prior to the audit.</p>
<p>SCS review</p>	<p>December 2019: This issue will be assessed at the next onsite audit.</p>
<p>Status of CAR:</p>	<p><input type="checkbox"/> Closed</p> <p><input type="checkbox"/> Upgraded to Major</p> <p><input type="checkbox"/> Other decision (refer to description above)</p>

4.5 Major Nonconformances

X	No Major CARs were issued to the FME during the evaluation. Any Minor CARs from previous surveillance audits have been reviewed and closed prior to the issuance of a certificate.
	Major CARs were issued to the FME during the evaluation, which have all been closed to the satisfaction of the audit team and meet the requirements of the standards. Any Minor CARs from previous surveillance audits have been reviewed and closed prior to the issuance of a certificate.
	Major CARs were issued to the FME during the evaluation and the FME has not yet satisfactorily closed all Major CARs.

5. Certification Decision

Certification Recommendation	
<p>FME be awarded FSC certification as a “Well-Managed Forest” subject to the minor corrective action requests stated in Section 4.2.</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>

The SCS evaluation team makes the above recommendation for certification based on the full and proper execution of the SCS Forest Conservation Program evaluation protocols.	
Any Minor CARs from previous surveillance audits have been reviewed and closed prior to the issuance of a certificate.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
No Major CARs were issued to the FME during the evaluation.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
FME has demonstrated that their system of management is capable of ensuring that all of the requirements of the applicable standards (see Section 1.6 of this report) are met over the forest area covered by the scope of the evaluation.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
FME has demonstrated that the described system of management is being implemented consistently over the forest area covered by the scope of the certificate.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comments:	

