



# REPORT Forest Certification



## J.D. Irving, Limited Woodlands Operations – 2015 SFI® Re-registration Audit

Between September 23 and October 2, 2015, a 4 person audit team from KPMG Performance Registrar Inc. (KPMG PRI) carried out a re-registration audit of J.D. Irving, Limited's (JDI's) woodlands operations against the requirements of the 2015-2019 Sustainable Forestry Initiative® (SFI®) Forest Management and Fiber Sourcing standards. To provide for a more efficient audit, an ISO 14001 surveillance audit was conducted at the same time. This Certification Summary Report provides an overview of the audit process and KPMG's findings.

### Description of J.D. Irving, Limited Woodlands Operations

#### 1. Forest Management Operations

JDI's forestry operations occur on both freehold and Canadian Crown Land and are managed out of JDI's woodlands offices located in New Brunswick (St. Leonard, Chipman, Doaktown, Deersdale, Sussex and St. George), Nova Scotia (Truro) and Maine (Fort Kent). The freehold land is in New Brunswick (728,000 ha), Nova Scotia (50,000 ha) and Maine (505,000 ha). On Canadian Crown Land in New Brunswick, the company operates a sub-license on Licenses' #9, #3, #5, #1 and #8 and manages License #7 (1,038,000 ha). The existing annual sustainable harvest levels established for JDI's Crown Licenses and Freehold lands are noted in the following two tables.

Crown License Annual Volume Allocations (m <sup>3</sup> )								
New Brunswick							Nova Scotia	Total Crown
#1	#3	#5	#7	#8	#9	Total NB		
212,000	140,000	40,000	1,574,000	7,000	446,000	2,419,000	35,000	2,454,000

Freehold Annual Sustainable Harvest Levels (m <sup>3</sup> )					
Maine	New Brunswick			Nova Scotia	Total Freehold
	Northern	Central	Southern	Total NB	
1,085,000	875,000	516,000	334,000	1,725,000	2,865,000



All woodlands districts track their annual harvest levels by broad timber type (softwood and hardwood) against these established annual harvest levels, with their respective performances in achieving the levels measured on a sustainable forest management report card. Performance in recent years has been close to the targets, with the annual averages for the actual harvest levels averaging overall slightly below the calculated allowed annual harvest levels (with the 2014-15 harvest level averaging out overall to 15% below the established allowable levels across all districts).

Consistent with prior years, sub-licensee operators on License #7 in New Brunswick have operated under the JDI Environmental Management System (EMS) and are included within the scope of JDI's ISO 14001 and SFI certifications.

JDI operates throughout New Brunswick in the Southern and Northern Uplands, the Eastern Lowlands and Highlands and the Continental Lowlands. These areas are, to varying degrees, forested with stands of Spruce (red, black and white) and Fir (balsam), with smaller areas of white pine dominated forests along with cedar in lower lying areas. There are also intermittent components of red pine, hemlock, tamarack and Jack pine. Hardwood stands are stocked most heavily with red maple and sugar maple, with components of yellow and white birch and poplar. Transitional areas often contain stands of mixed hardwood and softwood forest.





## J.D. Irving, Limited Woodlands Operations – 2015 SFI Re-certification Audit Page 2

Maine woodlands contain largely the same species as in New Brunswick, but with a larger proportion of hardwood stands and a smaller proportion of pine stands.

Woodlands operated by JDI in all jurisdictions are managed for timber production (for both hardwood and softwood), with consideration and protection of unique sites, late successional forests, deer wintering areas and mapped riparian zones. JDI carries out varied silviculture systems, including even aged, uneven aged and shelterwood silviculture regeneration systems, along with pre-commercial thinning and commercial thinning to meet its timber supply/quality and ecological objectives. All even aged, clearcut stands prescribed for planting are planted with trees grown in J.D. Irving’s nurseries from seeds originating from specific, ecologically suited seed zones.

Each woodlands district goes through a management planning process for the Company’s freehold lands on a 5 year basis. Crown operations follow a scripted planning process from the New Brunswick Department of Natural Resources (DNR), with the most recent plan submitted to the DNR in 2014. Freehold strategic plans have more flexibility but are designed to an equivalent standard. Long-term resource analyses are conducted and forest inventories for timber and non-timber values are maintained in support of long-term strategic and ongoing operational planning that meet established timber and non-timber resource objectives. Growth and yield modeling is undertaken internally to project future forest conditions and associated annual sustainable harvest levels for managed and natural forests. Strategic planning is supported by a land classification system, soils inventories and depth to water table information. Recent plans have also incorporated refined forest inventory data based on LiDAR technology. All plans are based on the Woodstock forest management model, with at least the first 5 years of harvest blocks spatially identified. This is then hard-wired to the operating plans providing for a significant level of control over the implementation of management plan commitments. Each plan addresses non-timber issues, particularly with respect to biodiversity conservation and water protection. Other non-timber issues addressed in the strategic planning process include such delineated special management zones as deer wintering areas, areas set aside under the Company’s Unique Areas Program and riparian zones and incorporation of the Company’s targets for old and very old late successional forests.

Other resource values identified during pre-screening, layout and operational planning are reflected in the GIS database for operational planning purposes (i.e., set asides, buffers or modified harvesting boundaries or practices to protect high conservation value forests, rare/endangered plants, animal species of concern, raptor/heron stick nests, visual quality, historic, geologic values, etc.). Site level operational plans incorporate specific operational approaches and silviculture strategies for addressing regulatory requirements and Company practices and commitments for identifying, managing and protecting specific timber and non-timber resource values.

### 2. Fiber Sourcing Operations

JDI’s fiber sourcing operations in New Brunswick, Nova Scotia, Prince Edward Island, Quebec and Maine provide fiber for the Irving Paper Limited and Irving Pulp and Paper Limited mills in Saint John, New Brunswick, the Lake Utopia Paper corrugated medium mill in St. George, New Brunswick and 11 sawmills (8 in New Brunswick, 1 in Nova Scotia and 2 in Maine). Fiber sourcing operations for all of the sawmills, pulp, paper and corrugated medium mills are included within the scope of JDI’s SFI fiber sourcing certification. JDI’s procurement program is an important component of meeting each mill’s fiber requirements.

### 2015 JD Irving, Ltd. SFI 2015-2019 Re-certification Audit Findings

Minor nonconformities from previous audits that remain open	0
New major nonconformities	0
New minor nonconformities	0
New opportunities for improvement	7

#### Types of audit findings

##### Major nonconformities:

Are pervasive or critical to the achievement of the SFM Objectives.

##### Minor nonconformities:

Are isolated incidents that are non-critical to the achievement of SFM Objectives.

All non-conformities require the development of a corrective action plan within 30 days of the audit. Corrective action plans to address major nonconformities must be fully implemented by the operation within 3 months or certification cannot be achieved / maintained. Corrective action plans to address minor nonconformities must be fully implemented within 12 months.

##### Opportunities for Improvement:

Are not nonconformities but are comments on specific areas of the SFM System where improvements can be made.

## J.D. Irving, Limited Woodlands Operations – 2015 SFI Re-certification Audit Page 3

Purchased stumpage activities are carried out under JDI's environmental management system and are subject to the same level of planning and monitoring as occurs on JDI's freehold lands.

In New Brunswick, reliance is placed on marketing board monitoring processes established through the SFI Implementation Committee (SIC) to address the SFI BMP monitoring requirements for non-stumpage fiber purchases – i.e., external purchase monitoring is based on an empowerment model whereby the marketing boards do their own monitoring on an agreed upon sample basis, the results of which are reported to the SIC (which in turn drives the selection of activities (including training) that the SIC supports). KPMG's re-check of the monitoring results from a sample of Southern New Brunswick Marketing Board monitored blocks and review of affiliated monitoring records (private land BMP surveys and 2014 annual report summarizing BMP survey results) determined that the monitoring process continues to function effectively in New Brunswick. In Maine, BMP monitoring of non-stumpage purchases is based on the monitoring process established under the Certified Logging Professional (CLP) program, whereby CLP certified loggers are inspected and their performance evaluated against a number of BMP criteria. JDI purchase wood managers acquire the summarized results of this monitoring for the CLP certified loggers operating on land from which the Company procures logs to gain data on their performance level. The KPMG audit verified that performance levels have been high in recent years and the process continues to function effectively in Maine. The process established in Nova Scotia, whereby the purchase wood manager conducts supplier audits in both Nova Scotia and PEI, was found to also address the SFI fiber sourcing BMP monitoring requirements. The results of each of these BMP monitoring processes feed into the SIC meetings and is used as an input for determining training strategies for the subsequent year.

### Audit Scope

The audit was conducted against the requirements of the 2015-2019 SFI Forest Management and Fiber Sourcing standards and incorporated a full scope assessment against the SFI program objectives for:

- Forest management planning;
- Forest health and productivity;
- Protection and maintenance of water resources;
- Conservation of biological diversity;
- Management of visual quality and recreation benefits;
- Protection of special sites;
- Efficient use of fiber resources;
- Recognize and respect Indigenous Peoples' rights;
- Legal and regulatory compliance;
- Forestry research, science and technology;
- Training and education;
- Community involvement and landowner outreach;
- Public land management responsibilities;
- Communications and public reporting, and
- Management review and continual improvement.

In addition to the above, the following SFI Fiber Sourcing standard objectives were assessed with respect to the Company's fiber sourcing program:

- Biodiversity in fiber Sourcing;
- Adherence to Best Management Practices; and
- Use of qualified resource and qualified logging professionals.



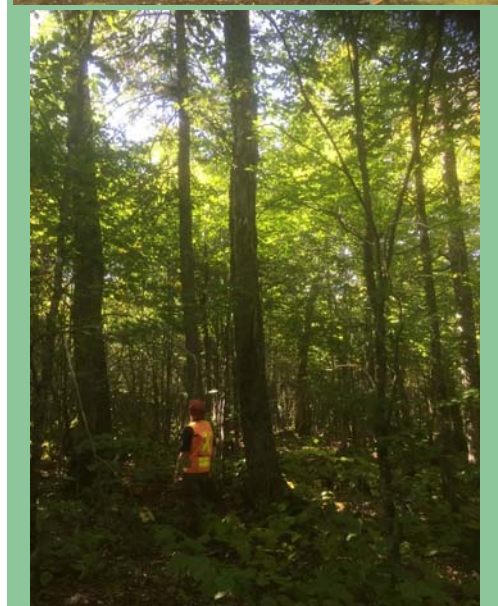
The audit examined the installation of numerous bridges and culverts. Seen above in the upper picture is an example of a recently installed bridge with associated established sediment control measures.

The lower picture depicts the recent installation of a culvert, including the standard Company practice of grass seeding the approaches in order to minimize the risk of erosion and sedimentation (both pictures taken in Maine).



### The Audit

- Audit Team** – The SFI re-certification and ISO 14001 surveillance audits were conducted by Craig Roessler, RPF(BC), EP(EMSLA), CF(SIF), Chris Ridley-Thomas, RPBio(BC), EP(EMSLA), Neil MacEachern, RPF(BC), EP(EMSLA) and Clark Brander, RPF(NS). Craig Roessler, who was the lead auditor on the engagement, is an employee of KPMG PRI and has conducted numerous forest management audits against a variety of standards, including SFI, CSA Z809, FSC and ISO 14001. Chris-Ridley Thomas and Neil MacEachern, employees of KPMG PRI, and Clark Brander, an independent consultant, also have considerable experience conducting SFM audits against a variety of standards.
- Audit Approach** – The 2015 audit involved an on-site assessment of all elements of the Company’s sustainable forest management system and SFI program and selected elements of the ISO 14001 standard. The audit also focused on assessing Company actions taken with respect to addressing the opportunities for improvement identified during previous KPMG PRI audits. Visits were made to all JDI operations with forest management responsibilities in New Brunswick, Nova Scotia and Maine and fiber sourcing operations in New Brunswick, Nova Scotia and Northern Maine to evaluate conformance with the requirements of all applicable objectives of the 2015-2019 SFI Forest Management and Fiber Sourcing standards.
- Site Visits** – The field audit took place over a two week period in late September and early October 2015 and assessed performance at field operations in Maine, New Brunswick and Nova Scotia. In total, 27.8 days were dedicated to the audit, of which 6 were off site, and 19.8 on-site. Forestry program planning, implementation and monitoring were assessed in Nova Scotia, Northern New Brunswick (Black Brook), Central New Brunswick (Deersdale, Chipman and Doaktown), Southern New Brunswick (Sussex and St. George) and Northern Maine woodlands operations. The audit also focused on the Company’s fiber sourcing operations in southeast New Brunswick, Nova Scotia and northern Maine. The work included an assessment of field activities and the design of the underlying EMS and its delivery on the SFI objectives. The field inspection program covered 54 roads, 55 harvesting units, 9 commercial thinning operations, 25 silviculture sites, 12 procurement sites and 15 unique or special sites.
- J.D. Irving, Limited’s SFI Program Representative** – Scott MacDougall served as J.D. Irving, Limited’s SFI program representative during the audit.



### Use of Substitute Indicators

No substitute indicators were utilized during the audit.

### Audit Objectives

The objectives of the 2015 audit were to evaluate the sustainable forest management and environmental management systems at J.D. Irving, Limited to:

- Determine their conformance with the requirements of the ISO 14001:2004 and 2015-2019 SFI Forest Management and Fiber Sourcing standards;
- Evaluate the ability of the systems to ensure that J.D. Irving, Limited meets applicable regulatory requirements;
- Evaluate the effectiveness of the systems in ensuring that J.D. Irving, Limited meets its specified objectives; and
- Where applicable, identify opportunities for improvement.

The field audit observed numerous examples of JDI’s policies and programs for maintaining biodiversity and unique sites being effectively implemented on the ground, including (from top to bottom) vernal pools, unique recreational areas and late successional stands.

## J.D. Irving, Limited Woodlands Operations – 2015 SFI Re-certification Audit Page 5

### Evidence of Conformity with SFI 2015-2019

Primary sources of evidence assessed to determine conformity with the SFI 2015-2019 Forest Management and Fiber Sourcing standards are presented in the following table.

SFI Forest Management Objective #	Sources of Key Evidence of Conformity
1. Forest Management Planning	Forest Management Plans (FMPs), Geographical Information System (GIS) data base/map layers, inventory data, Environmental Management System (EMS), Standard Operating Procedures (SOPs) and Policies, Sustainable Forest Management (SFM) report card, Work Orders (WOs), Field inspections, Planning staff interviews, internal audits.
2. Forest Health and Productivity	FMPs, EMS, SOPs and Policies, Sustainable Forest Management (SFM) report card, WOs, Best Management Practices (BMPs) for Road Building, 2014 SFI Progress Report, Company inspection and audit records, Silviculture records, Research records, Field inspections, Staff and contractor interviews.
3. Protection and Maintenance of Water Resources	FMPs, EMS, SOPs and Policies, Sustainable Forest Management (SFM) report card, WOs, Best Management Practices (BMPs) for Road Building, Company inspection and audit records, District road and bridge maintenance inspection records and lists, Field inspections, Staff and contractor interviews.
4. Conservation of Biological Diversity	FMPs, EMS, SOPs and Policies (including in regards to rare plant pre-screening, maintaining vertical structure (islands), legacy trees, vernal pools, protection of raptor and heron stick nests and late successional forests), Company forest species of concern manual, District rare or endangered plants manuals, Unique Areas GIS database/map layer, Sustainable Forest Management (SFM) report card, WOs, Company inspection and audit records, Field inspections, Staff and contractor interviews.
5. Management of Visual Quality and Recreational Benefits	FMPs, EMS, SOPs, WOs, Unique Areas GIS database/map layer, Field inspections, Staff and contractor interviews.
6. Protection of Special Sites	FMPs, EMS, SOPs, WOs, Unique Areas GIS database/map layer, Field inspections, Staff and contractor interviews.
7. Efficient Use of Fibre Resources	Waste analyses, Utilization specifications, Biomass and residue utilization policy, EMS, SOPs, WOs, Field inspections, Staff and contractor interviews.
8. Recognize and Respect Indigenous Peoples' Rights	JD. Irving Ltd.'s Public Advisory Committee Process document, Company and DNR stakeholder engagement process/records, FMPs, EMS, SOPs, WOs, Unique Areas GIS database/map layer, Field inspections, Staff and contractor interviews.
9. Legal and Regulatory Compliance	EMS, Company inspection, monitoring, audit, nonconformity, non-compliance, incident, and action plan records, Company's Code of Business Conduct, Company inspection and audit records, Field inspections, Interviews with key staff.



The above is an example of a Heron nest that was identified during layout and then buffered and operational timing restrictions enacted to protect and prevent disturbance of the nest and birds (Maine).



## J.D. Irving, Limited Woodlands Operations – 2015 SFI Re-certification Audit Page 6

SFI Forest Management Objective #	Sources of Key Evidence of Conformity
10. Forestry Research, Science & Technology	Research records, FMPs, JDI Nursery EMS, 2014 SFI Progress Report, Interviews with key staff.
11. Training and Education	EMS, Environmental policy, Responsible wood purchasing policy, Company training program and records, SIC training resources/materials, Interviews with key staff and contractors.
12. Community Involvement and Landowner Outreach	EMS, WOs, Best Management Practice (BMP) manuals/handbooks distributed to landowners, SIC training resources/materials/websites, Regional stakeholder committee meeting minutes, Company records respecting community and stakeholder outreach, Staff interviews.
13. Public Land Management Responsibilities	FMP, WOs, Company and DNR stakeholder engagement process/records, Staff interviews.
14. Communications and Public Reporting	KPMG PRI SFI public summary report, 2014 SFI Progress Report and supporting records, Past SFI progress reports and supporting records.
15. Management Review and Continual Improvement	EMS, Corporate and District management review records, SFM report card, Internal audit records, District inspection, monitoring and audit records.



Where operationally feasible and silviculturally appropriate, JDI maintains advanced regeneration during harvesting, such as in this picture where young spruce were effectively retained during operations (Chipman).

SFI Fiber Sourcing Objective #	Sources of Key Evidence of Conformity
1. Biodiversity in Fibre Sourcing	EMS, Responsible wood purchasing policy, Best Management Practice (BMP) manuals/handbooks distributed to landowners, Company records respecting landowner outreach, Field audit of purchase wood blocks, Staff and logger interviews.
2. Adherence to Best Management Practices	EMS, Responsible wood purchasing policy, Best Management Practice (BMP) manuals/handbooks distributed to landowners, Certified and qualified logger lists/websites, Company records respecting the use of qualified resource and logging professionals, Company inspection and audit records, Field audit of purchase wood blocks, Staff and logger interviews.
3. Use of Qualified Resource and Logging Professionals	EMS, Responsible wood purchasing policy, Field inspections of a sample of New Brunswick Marketing Board audited sites, Marketing Board (New Brunswick) and Certified Logging Professionals (Maine) inspection records/results.
4. Legal and Regulatory Compliance	EMS, Company inspection, monitoring, audit, non-compliance, incident, and action plan records, Company inspection and audit records, Company's Code of Business Conduct, Field inspections, Interviews with key staff.
5. Forestry Research, Science & Technology	Research records, FMPs, JDI Nursery EMS, 2014 SFI Progress Report, Interviews with key staff.

## J.D. Irving, Limited Woodlands Operations – 2015 SFI Re-certification Audit Page 7

SFI Fibre Sourcing Objective #	Sources of Key Evidence of Conformity
6. Training and education	EMS, Environmental policy, Responsible wood purchasing policy, Company training program and records, SIC training resources/materials, Interviews with key staff and contractors.
7. Community Involvement and Landowner Outreach	EMS, WOs, Best Management Practice (BMP) manuals/handbooks distributed to landowners, SIC training resources/materials/websites, Regional stakeholder committee meeting minutes, Company records respecting community and stakeholder outreach, Staff interviews.
8. Public Land Management Responsibilities	FMP, WOs, Company and DNR stakeholder engagement process/records, Staff interviews.
9. Communications and Public Reporting	KPMG PRI SFI public summary report, 2014 SFI Progress Report and supporting records, Past SFI progress reports and supporting records.
10. Management Review and Continual Improvement	EMS, Corporate and District management review records, SFM report card, Internal audit records, District inspection, monitoring and audit records.
11. Promote Conservation of Biological Diversity, Biodiversity Hotspots and High-Biodiversity Wilderness Areas	NA – Company does not source fiber from outside North America.
12. Avoidance of Controversial Sources including Illegal Logging	NA – Company does not source fiber from outside North America.
13. Avoidance of Controversial Sources including Sources without Effective Social Laws	NA – Company does not source fiber from outside North America.

### Good Practices

The following good practices were noted during the audit:

- **SFI FM Objective 1 (Forest Management Planning):** Good examples of well prescribed and executed tolerant hardwood prescriptions (to grow future hardwood sawlogs) and crown release commercial thinning prescriptions (to facilitate improved stand growing stock for the next harvest entry) were observed during the field audit (identified in Sussex, St. George, Doaktown and Chipman, but widely observed during the field audit of other Districts).
- **SFI FM Objective 1 (Forest Management Planning):** The operation is continuing to expand the operational use of LiDAR (including for the prioritization of candidate pre-commercial thinning (PCT) and commercial thinning (CT) stands and refined depiction of slopes on logging plan maps) (Black Brook).
- **SFI FM Objective 1 (Forest Management Planning):** Well executed shelterwood prescriptions were observed on the blocks field reviewed in the St. George district.



Depending on the management objectives established for a stand, JDI's clearcut harvested blocks are either regenerated naturally or re-planted. Seedlings grown by JDI at its two nurseries located in Juniper and Sussex, NB are from improved seed stock to increase the survival and productivity of the future stands.

## J.D. Irving, Limited Woodlands Operations – 2015 SFI Re-certification Audit Page 8

- *SFI FM Objective 1 (Forest Management Planning)*: Sophisticated prescriptions on varied strata in a shelterwood block was observed during the field audit of a block in the Chipman district.
- *SFI FM Objectives' 1 (Forest Management Planning) and 2 (Forest Health and Productivity)*: Effective trail protection was observed in a block in the Chipman district.
- *SFI FM Objectives' 1 (Forest Management Planning) and 3 (Protection and Maintenance of Water Resources)*: Well-thought out road layout occurred to avoid wet areas in a block in the Sussex district.
- *SFI FM Objectives' 1 (Forest Management Planning) and 4 (Conservation of Biological Diversity)*: The field audit observed prescriptions well tailored to stand and site conditions (including cedar shelterwood prescriptions designed to address late successional and deer winter range objectives in Maine).
- *SFI FM Objectives' 1 (Forest Management Planning) and 11 (Training and Education) and SFI FS Objective 6 (Training and Education)*: The audit of active operations found that operator awareness levels were generally quite high with respect to operational and EMS requirements and that changes to the new version of the SOP helped address previous gaps in operator awareness (identified in Sussex/St. George, but widely applicable to all Districts visited).
- *SFI FM Objective 2 Forest Health and Productivity*: Good natural regeneration was observed in overstory removal blocks (identified in Sussex/St. George, but widely applicable).
- *SFI FM Objective 2 Forest Health and Productivity*: There is a strong public component to the herbicide program (identified in Sussex/St. George, but widely applicable).
- *SFI FM Objective 2 Forest Health and Productivity*: There was generally very good planting survival observed in the planted blocks visited during the audit.
- *SFI FM Objectives 3 (Protection and Maintenance of Water Resources), 4 (Conservation of Biological Diversity), 5 (Management of Visual Quality and Recreational Benefits) and 6 (Protection of Special Sites)*: Numerous field examples were observed of unique areas/features being identified and protected (recreation, historic, rare plants, legacy trees, vernal pool, etc.), underscoring the effectiveness of the established policies and associated planning, layout and training processes (identified in Maine, Black Brook and St. George, but more widely applicable to all Districts visited).
- *SFI FM Objective 4 (Conservation of Biological Diversity)*: JDI's legacy tree program is effectively driving the identification and protection of unique, ecologically significant trees across all operating areas.
- *SFI FM Objective 4 (Conservation of Biological Diversity)*: A den site was found to be well protected in a block in the St. George district.
- *SFI FM Objective 5 (Management of Visual Quality and Recreational Benefits)*: There is strong ongoing communication with snowmobilers regarding winter activities (Sussex/St. George).
- *SFI FM Objective 11 (Training and Education)*: The Districts' annual spring EMS training session was well attended (including the participation of contractors and their



JDI makes use of varied silvicultural prescriptions to meet its fiber flow needs and the ecological objectives for the sites (this picture of a commercial thinning block was taken in Doaktown, NB).



JDI has conducted research on the impacts of machine configurations on rutting and soil compaction. Because they distribute weight, tracks are being increasingly used to limit soil disturbance (picture taken in Doaktown, NB).



## J.D. Irving, Limited Woodlands Operations – 2015 SFI Re-certification Audit Page 9

employees) and well focused on topical environmental and safety issues.

- *SFI FM Objective 15 and SFI FS Objective 10 (Management Review and Continual Improvement):* All Districts are closely tracking and reporting out on their SFM performance targets.

### Areas of Nonconformity

No major or minor nonconformities were identified during the 2015 SFI / ISO 14001 audits.

### Opportunities for Improvement

The 2015 audit identified the following opportunities for improvement with respect to the SFI 2015-2019 Forest Management and Fiber Sourcing standards:

- *SFI FM Objective 1 (Forest Management Planning):* Work orders associated with harvest blocks field reviewed were found overall to include clear and effective prescriptions well tailored to site and stand conditions, with isolated opportunities observed to fine-tune some of the work orders to address such issues as inconsistent treatment of trails in prescriptions or maps, incorrect coding of harvest prescription, absent or ambiguous buffer instructions and absent retention instructions (various districts).
- *SFI FM Objective 9 (Legal and Other Requirements):* Field inspections of harvest blocks, roads and crossings determined that operational controls were being effectively implemented overall, with only isolated lapses observed (i.e., a buffer pushed out more than the requisite 30 meters on operable ground, a small area of exposed timber left standing on a block, Transportation of Dangerous Goods Placards missing on a large diesel tank, inoperable or inadequate fire suppression equipment, crossings with insufficient siltation prevention measures, a small amounts of merchantable timber left on a block, inadequate understanding of regen protection requirements by a new operator and an opportunity for better hardwood recovery (various districts).
- *SFI FM Objective 15 (Management Review & Continual Improvement):* An opportunity was identified for the Black Brook district to use its EMS to help it deliver on its pre-commercial thinning target (which it has struggled to achieve on some blocks in the past year) - i.e., by using its nonconformity and corrective and preventive action process and tracking system to document root causes and associated actions to address incidents of non-achievement of the target, by establishing key performance indicators to measure contractor performance against the achievement of the target, etc.
- *SFI FM Objective 12 & FS Objective 7 (Community Involvement and Landowner Outreach):* While interview evidence confirmed that Black Brook is involved in a variety of public outreach initiatives, the operation is not recording these initiatives as documented evidence of these efforts, making retrieval of this data difficult and likely incomplete.
- *SFI FM Objective 15 & FS Objective 10 (Management Review & Continual Improvement):* While JDI Maine's monitoring and auditing processes established on its pri-



JDI hosts a competition to encourage staff to identify and protect large and historic 'legacy' trees within its operating areas (upper picture was taken in Black Brook and lower picture in Deersdale).

## J.D. Irving, Limited Woodlands Operations – 2015 SFI Re-certification Audit Page 10

vate land operations have been extended to its purchase wood stumpage program operations, no documented Superintendent quality and compliance audits have been conducted to date on purchase stumpage blocks.

- *SFI FM Objective 8 (Recognize and Respect Indigenous People's Rights):* An opportunity was identified to improve upon JDI's existing First Nation communication/outreach efforts through broadened implementation of its Public Advisory Committee Process to promote greater local First Nation representation on the committees (various districts).
- *SFI FM Objective 11 & FS Objective 6 (Training and Education):* In order to address requirements of the 2015-2019 versions of the SFI Forest Management and Fiber Sourcing standards, JDI has recently updated its Purchase Wood Agreement to establish explicit provisions respecting the seller's obligation to use properly trained and qualified logging professionals. While the changes to the agreement address the requirements, it has not yet been fully rolled out and used at all of its operations (various districts).

### Audit Conclusions

The audit found that J.D. Irving, Limited's sustainable forest management and environmental management systems:

- were in conformance with the requirements of the SFI 2015-2019 Forest Management and Fiber Sourcing standards and ISO 14001:2004 standard included in the scope of the audit;
- continue to be effectively implemented; and
- are sufficient to systematically meet the commitments included in JDI's environmental policy provided that the systems continue to be implemented and maintained as required.

As no major nonconformities were identified during the audit, the audit team recommended that JDI be certified to the 2015-2019 versions of the SFI Forest Management and Fiber Sourcing standards. JDI's SFI Forest Management and Fiber Sourcing certificates are valid to October 27, 2018.



JDI enforces strict safety guidelines for the truckers it employs. Seen above is a logging truck decelerating to avoid a moose in the Black Brook area.



JDI conducts drainage area calculations for all of its crossings to ensure that culverts and other crossings are of sufficient scale to accommodate large rain events (Black Brook).

### Contacts:

Chris Ridley-Thomas, RPBio, EP(EMSLA) (604) 691-3088  
 Craig Roessler, RPF, EP(EMSLA) (604) 691 3115

This report may only be reproduced by the intended client, Sierra Pacific Industries with the express consent of KPMG. Information in this issue is of a general nature with respect to audit findings and is not intended to be acted upon without appropriate professional advice. © 2015 KPMG. All rights reserved.