



# REPORT Forest Certification



## J.D. Irving, Limited Woodlands Operations – 2013 SFI Surveillance Audit

In September 2013, an audit team from KPMG Performance Registrar Inc. (KPMG PRI) carried out a surveillance audit of J.D. Irving, Limited's (JDI's) woodlands operations against the requirements of the 2010-2014 edition of the Sustainable Forestry Initiative® (SFI) standard. 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

JDI's forestry operations occur on both freehold and Canadian Crown Land. The freehold land is in New Brunswick (750,000 ha), Nova Scotia (91,000 ha) and Maine (508,000 ha). On Canadian Crown Land in New Brunswick, the company operates a sub-licence on licence #9, #3, #5 and #1 and manages licence #7 (1,038,000 ha). The annual volume allocations are 438,000m<sup>3</sup> on licence #9, 117,000m<sup>3</sup> on licence #3, 10,000m<sup>3</sup> on licence #5, 180,000 m<sup>3</sup> on licence #1 and 1,256,000m<sup>3</sup> on licence #7. Additional Crown volume allocations exist in Nova Scotia (35,000 m<sup>3</sup> a year).

All of the JDI forestry operations have previously (2000-2001) individually completed both ISO 14001 registration and SFI® certification. The more recently purchased Miramichi Timber Holdings freehold land was added to JDI's SFI® certification program in 2006. Consistent with prior years, sub-licencee operators on licence #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's procurement 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 (9 in New Brunswick, 1 in Nova Scotia and 1 in Maine). Procurement operations for all of the sawmills, pulp, paper and corrugated medium mills are included within the scope of JDI's SFI® certification.

### Audit Scope

The audit was conducted against the requirements of the 2010-2014 edition of the SFI standard, and incorporated a limited scope assessment against the SFI program objectives for:

- Forest management planning;
- Forest productivity;
- Protection and maintenance of water resources;
- Conservation of biological diversity;
- Efficient use of forest resources;
- Adherence to best management practices when fibre sourcing;
- Legal and regulatory requirements;
- Community involvement in the practice of sustainable forestry; and
- Management review and continual improvement.



The scope of the 2013 SFI surveillance audit of J.D. Irving, Limited’s woodlands operations included all of the woodlands operations in New Brunswick and Maine, as well as fibre procurement activities for the Company’s sawmills located in northern New Brunswick.

### The Audit

- **Audit Team** – The SFI and ISO 14001 surveillance audits were conducted by a three person audit team. The team included 2 certified environmental auditors from KPMG PRI (an SAF certified forester and a biologist), and a consulting forester. Craig Roessler, EP(EMSLA) was the audit team leader on the engagement.
- **Audit Approach** – Annual surveillance audits are conducted to ensure that action plans are implemented and selected SFI® and ISO 14001 requirements continue to be met.
- **Audit Focus Areas** – The audit focused on assessing actions taken with respect to opportunities for improvement identified during previous KPMG PRI audits and actions to maintain SFI conformance against selected SFI objectives.
- **Site Visits** – The field audit took place over a two week period in mid to late September 2013 and assessed performance at field operations in Maine and New Brunswick. Forestry program planning, implementation and monitoring were assessed in Northern NB (Black Brook), Central NB (Deersdale, Chipman and Doaktown), Southern NB (Sussex and St. George) and Maine woodlands operations. The audit also focused on the Company’s fibre procurement operations in northern New Brunswick. The work included an assessment of field activities and the design of the underlying EMS and its delivery on the selected SFI® objectives. An intensive field inspection program covered 35 roads, 51 harvesting units, 27 silviculture sites and 6 procurement 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 2013 SFI and ISO 14001 surveillance audits were to:

- Evaluate the progress of J.D. Irving, Limited’s woodlands operations towards implementing the corrective actions developed to address the opportunities for improvement identified during previous audit visits.
- Assess the extent to which the Operation’s environmental management system (EMS), forest management plans (FMPs) and practices conform to the requirements of the ISO 14001:2004 and SFI 2010-2014 standards.

### Evidence of Conformity with SFI 2010-2014

Primary sources of evidence assessed to determine conformity with the SFI 2010-2014 standard are presented in Table 1 below.

#### J.D. Irving, Limited SFI Surveillance Audit Findings

Major non-conformities	0
Minor non-conformities	0
Opportunities for improvement	5

#### Types of audit findings

##### Major non-conformities:

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

##### Minor non-conformities:

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, which must be fully implemented by the operation within 3 months.

Major non-conformities must be addressed immediately or certification cannot be achieved / maintained.

##### Opportunities for Improvement:

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

SFI Objective #	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 Productivity	FMPs, EMS, SOPs and Policies, SFM report card, WO, Best Management Practices (BMPs) for Road Building, 2011 SFI Progress Report, Company and Department of Natural Resources (DNR) 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, WO, Best Management Practices) BMPs for Road Building, Company and DNR 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, WO, Company and DNR inspection and audit records, Field inspections, Staff and contractor interviews.
5. Management of Visual Quality and Recreational Benefits	Not in scope during the 2011 SFI surveillance audit.
6. Protection of Special Sites	Not in scope during the 2011 SFI surveillance audit.
7. Efficient Use of Forest Resources	Waste analyses, Utilization specifications, Biomass and residue utilization policy, EMS, SOPs, WO, Field inspections, Staff and contractor interviews.
8. Landowner Outreach	Not in scope during the 2011 SFI surveillance audit.
9. Use of Qualified Resource and Logging Professionals	Not in scope during the 2011 SFI surveillance audit.
10. Adherence to Best Management Practices	EMS, Responsible wood purchasing policy, Field inspections of a sample of New Brunswick Marketing Board audited sites, New Brunswick Marketing Board inspection records/results.



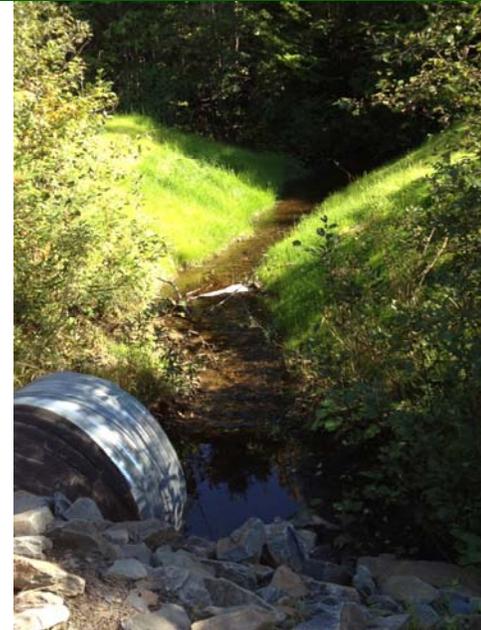
Good selection and retention of desirable, good quality and vigorous crop trees (and correspondingly good selection and removal of poor quality, unhealthy and dead/dying trees) in Commercial Thinning blocks was observed during the field audit.



JDI planners do an effective job of tailoring the silviculture system(s) being prescribed to the stand characteristics (species composition, structure, condition, age(s), etc.), site characteristics (fertility, trafficability) and broad management objectives pertaining to a particular stand. In addition to clear cut systems, a variety of partial cutting silviculture systems (including as shown in this picture shelterwood cuts) are prescribed and implemented by the Company.

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SFI Objective #	Key Evidence of Conformity
11. Promote Conservation of Biological Diversity, Biodiversity Hotspots and Major Tropical 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.
14. Legal and Regulatory Compliance	EMS, Company inspection, monitoring, audit, nonconformity, non-compliance, incident, and action plan records, DNR compliance audit reports and action plan reports, Company’s Code of Business Conduct, Field inspections, Interviews with key staff.
15. Forestry Research & Technology	Not in scope during the 2011 SFI surveillance audit.
16. Training and Education	Not in scope during the 2011 SFI surveillance audit.
17. Community Involvement in the Practice of Sustainable Forestry	EMS, WOs, 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.
18. Public Land Management Responsibilities	Not in scope during the 2011 SFI surveillance audit.
19. Communications and Public Reporting	Not in scope during the 2011 SFI surveillance audit.
20. Management Review and Continual Improvement	EMS, Corporate and District management review records, SFM report card, Internal audit records, District inspection, monitoring and audit records.



The field audit included visits to recently implemented road construction and deactivation projects. For example, the above picture shows (in the background) the portion of a winding deactivated old road where an old culvert was pulled and the banks stabilized and (in the foreground) the portion of a new straight road where a new culvert was installed.

A number of vernal pools were observed during the field audit to be well protected under the Company’s Vernal Pool Policy.



### Audit Conclusions

The audit found that:

- The Operation’s EMS, forest management plans and practices continue to meet the requirements of ISO 14001:2004 and the 2010-2014 version of the SFI standard in all material respects. Consequently, a decision has been made to continue certification to the ISO 14001 and SFI 2010-2014 standards. J.D. Irving, Limited’s SFI certification continues to be valid until November 4, 2015.
- J.D. Irving, Limited’s woodlands operations have made satisfactory progress towards addressing the findings of previous ISO 14001 and SFI audits.

### Good Practices

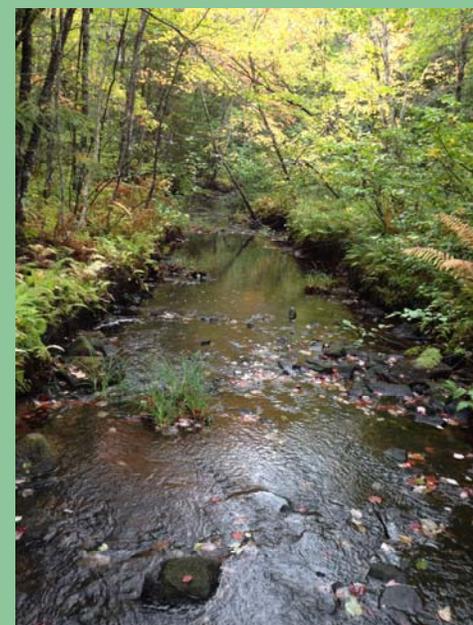
A number of good practices were identified during the course of the audit. Examples included:

- **SFI Objectives 1 (Forest management planning)** – The operation has implemented sound sustainable forestry practices under an outcome based forestry regime. The Technical Review Panel in their progress report recognized JDI’s full adherence to the desired objectives of outcome based forestry (Maine).
- **SFI Objectives 1 (Forest management planning)** – The operation is thoroughly identifying applications for LIDAR<sup>1</sup> that will assist it in more effectively and comprehensively carrying out numerous planning, management and operational activities and better meeting its SFM objectives.
- **SFI Objectives 2 (Forest productivity)** – The field audit observed good protection of crop trees and good tree selection in commercial thinning operations.
- **SFI Objectives 2 (Forest productivity)** – Good regeneration was observed in white pine shelterwoods field reviewed (Doaktown).
- **SFI Objective 2 (Forest productivity)** – The field audit of a sample of formerly overstocked plantations that have been stand cleaned observed well targeted selection of natural regen competitors as well as maintenance of suitable natural regen in understocked pockets to encourage full site occupancy (Maine).
- **SFI Objectives’ 2 (Forest productivity) and 3 (Protection and maintenance of water resources)** – Fuel tanks inspected were found to be in good shape and drip pans are routinely used when doing maintenance on machines to help reduce fuel drips to the ground (Black Brook).
- **SFI Objective 3 (Protection and maintenance of water resources)** – Noteworthy road maintenance was observed in active harvest areas (Black Brook and Sussex/St. George). In addition, roads which were graded and compacted in advance of operations were found to be well stabilized (Sussex/St. George).
- **SFI Objective 3 (Protection and maintenance of water resources)** – High quality brook culvert installs and road construction practices were observed (Chipman). In addition, fish streams were observed to be well protected through competently planned and installed crossings (open bottom culverts and bridges) and associated sediment control measures (Sussex/St. George).

<sup>1</sup>A remote sensing technology that measures distances by illuminating a target with a laser and analyzing the reflected light. The resulting images are commonly used to make high resolution maps.



This picture depicts (in the foreground) the portion of a harvest block where an over-story removal (regen. protection) prescription was implemented and (in the background) a 75 meter treed buffer protecting a small brook.



Numerous examples of effectively protected riparian areas and waterbodies were observed during the field audit.

- **SFI Objective 16 (Training and education)** – A contractor has been brought in to train road construction crews in refined BMP practices across all JDI Districts as well as to review and make updates to the Road Building Best Practices Manual .

### Follow-up on Findings from Previous Audits

The 2013 audit found that J.D. Irving, Limited’s woodlands operations continue to make adequate progress towards addressing the findings of previous ISO 14001 and SFI audits. The audit determined that the opportunities for improvement issued during the 2012 surveillance audit were satisfactorily addressed.

### New Areas of Nonconformity

The 2013 audit of J.D. Irving, Limited’s woodlands operations did not identify any nonconformities against the requirements of the SFI or ISO 14001 standards.

### Opportunities for Improvement

A total of 5 new opportunities for improvement were identified during the 2013 audit. The key opportunities for improvement noted during the audit included:

- **SFI Objective 1 (Forest management planning)** – Isolated weaknesses in the wording in operational plans (Work Order) were identified during the field audit of three harvest blocks in Doaktown (e.g., mixing up trail width with spacing distances; contradictory statements on the treatment of red pine and hemlock; and unclear hardwood harvest prescription).
- **SFI Objective 2 (Forest productivity)** – A small area (approximately 1 ha in size) outside of the Chipper D Zone was not mechanically site prepared or planted (Sussex).
- **SFI Objective 3 (Protection and maintenance of water resources)** – Road side rutting observed during the field audit was creating an increased potential for downstream siltation (Deersdale).
- **SFI Objective 14 (Legal and regulatory compliance)** – The field audit observed isolated instances where spill response BMPs could have been more effectively implemented (e.g., 1 machine did not have spill pads and 1 spill kit was observed to be filling up with water (2 blocks in Doaktown); and no spill kit could be located on site (1 block in Sussex)).
- **SFI Objective 16 (Training and education)** – 1 harvester operator in a Commercial Thinning block was not clear on the procedures to follow when encountering stick nests (Doaktown).



The audit found that overstocked plantations were well selected as part of the 2013 stand cleaning program. The field audit in Maine for example observed effectively implemented stand cleaning prescriptions that promoted improved stand quality and growth as well as full site occupancy.

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