



## J.D. Irving, Limited Woodlands Operations – 2012 SFI Re-certification Audit

In September 2012, an audit team from KPMG Performance Registrar Inc. (KPMG PRI) carried out a re-certification 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 (105,000 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 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 full scope assessment against all of the SFI program objectives for:

- Forest management planning;
- Forest 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 forest resources;
- Landowner outreach;
- Use of qualified resource and qualified logging professionals;
- Adherence to best management practices when fibre sourcing;



Findings – J.D. Irving, Limited Woodlands Operations – 2012 SFI Re-certification Audit Page 2

- Legal and regulatory requirements;
- Forestry research, science and technology;
- Training and education;
- Community involvement in the practice of sustainable forestry;
- Public land management responsibilities;
- Communication and public reporting; and
- Management review and continual improvement.

The scope of the 2012 SFI re-certification audit of J.D. Irving, Limited’s woodlands operations included all of the woodlands operations in New Brunswick, Nova Scotia and Maine, as well as fibre procurement activities for the Company’s sawmills located in Dixfield, Maine and in central New Brunswick.

**The Audit**

- **Audit Team** – The SFI re-certification 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. Chris Ridley-Thomas, EP(EMSLA) was the audit team leader on the engagement.
- **Audit Approach** – Re-certification audits are conducted to evaluate the Company’s continuing conformance with all SFI® and ISO 14001 requirements while 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 all SFI objectives as this was a re-certification audit.
- **Site Visits** – The field audit took place over a two week period in mid to late September 2012 and assessed performance at field operations in Maine and New Brunswick. Forestry program planning, implementation and monitoring were assessed in Black Brook, Sussex, Deersdale, CMS (Chipman, Miramichi and St. George) and Maine woodlands operations. The audit also focused on the Company’s fibre procurement operations in central New Brunswick and in Dixfield, Maine. The work included an assessment of field activities and the design of the underlying EMS and its delivery on the SFI® objectives. An intensive field inspection program covered 36 roads, 51 harvesting units, 37 silviculture sites and 7 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 2012 SFI re-certification / ISO 14001 surveillance audits were to:

J.D. Irving, Limited SFI Re- certification Audit	
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:**

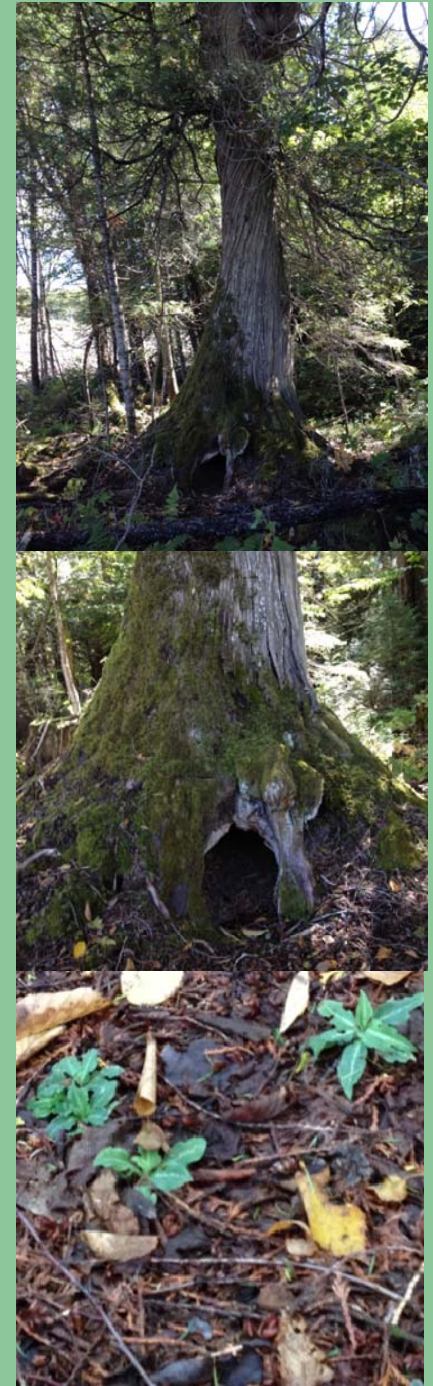
Are not non-conformities but are comments on specific areas of the SFM System where improvements can be made.

- 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 ISO 14001:2004 and the 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.

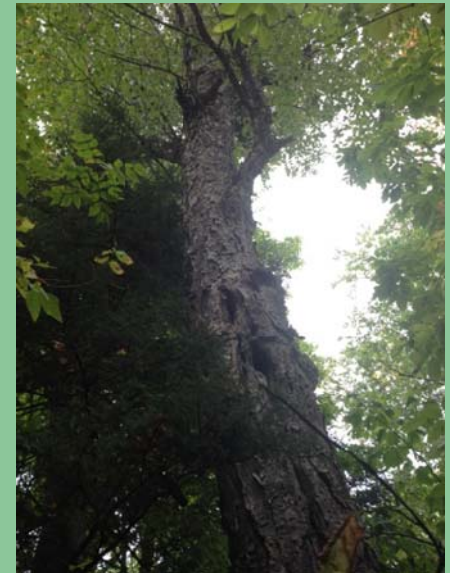
SFI Objective #	Key Evidence of Conformity
1. Forest Management Planning	Forest Management Plans (FMPs), Geographical Information System (GIS) data base/map layers, inventory data, Environmental Management System (EMS), Standard Operating Procedures (SOPs) and Policies, Sustainable Forest Management (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	FMPs, EMS, SOPs, WO, Unique Areas GIS database/map layer, Field inspections, Staff and contractor interviews.
6. Protection of Special Sites	FMPs, EMS, SOPs, WO, Unique Areas GIS database/map layer, Field inspections, Staff and contractor interviews.
7. Efficient Use of Forest Resources	Waste analyses, Utilization specifications, Biomass and residue utilization policy, EMS, SOPs, WO, Field inspections, Staff and contractor interviews.



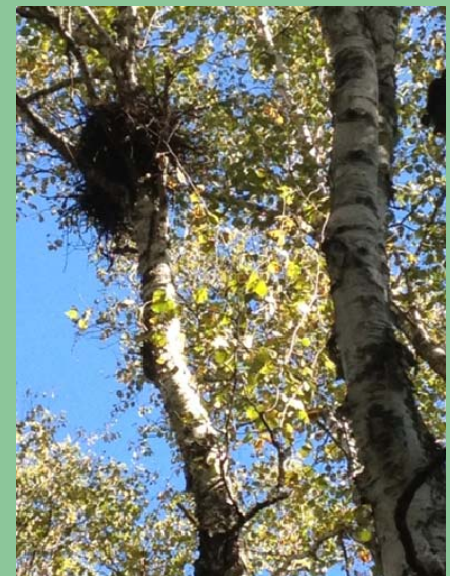
This retention patch observed during the 2012 SFI re-certification audit was well designed to protect both bear dens and rare plants (Giant Rattlesnake Plantain). These features were identified and protected under the Company’s Unique Areas Program.



SFI Objective #	Key Evidence of Conformity
8. Landowner Outreach	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.
9. Use of Qualified Resource and Logging Professionals	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, Field audit of purchase wood blocks, Staff and logger interviews.
10. Adherence to Best Management Practices	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.
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	Research records, FMPs, JDI Nursery EMS, 2011 SFI Progress Report, Interviews with key staff.
16. 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.
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	FMP, WOs, Company and DNR stakeholder engagement process/records, Staff interviews.
19. Communications and Public Reporting	KPMG PRI SFI public summary report, 2011 SFI Progress Report and supporting records, Past SFI progress reports and supporting records.
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.



JD Irving has recently established and implemented a Legacy Tree Program in order to better identify and protect trees which provide critical wildlife habitat.



Numerous stick nests observed during the field audit were identified and protected in accordance with the Stick Nest Policy established under the Company’s Policy for Maintaining Diversity in Harvested Areas.

## 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 re-certify the Company to the SFI 2010-2014 standard and continue the Company’s certification to the ISO 14001 standard. 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 2 (Forest productivity)** – A new policy has been established and implemented for inspecting road maintenance requirements in areas that have been inactive for 3 years. In addition, the Black Brook District uses truck speeds to assist in the identification of road maintenance requirements.
- **SFI Objectives 2 (Forest productivity)** – Low levels of site disturbance were observed on the blocks field reviewed and the switch to 6 wheel drive skidders in some Districts has helped to reduce rutting.
- **SFI Objectives 2 (Forest productivity)** – The field audit observed low levels of damage to residuals on plantation thinning blocks in Black Brook and good regen protection on clearcut blocks in Doaktown.
- **SFI Objectives 2 (Forest productivity)** – A Chipper Debris and Cold Deck BMP has been established and effectively implemented to minimize the debris loading footprint (observed on blocks in Sussex and Chipman).
- **SFI Objectives’ 2 (Forest productivity) and 3 (Protection and maintenance of water resources)** – A temporary crossing process and checklist have been established to promote increased use of temporary crossings and correspondingly minimize impacts to streams.
- **SFI Objectives 3 (Protection and maintenance of water resources)** – Effectively embedded culvert installations (in Saint George) and high quality culvert replacements to accommodate fish passage (in Black Brook) were observed during the field audit.
- **SFI Objectives’ 3 (Protection and maintenance of water resources) and 4 (Conservation of biological diversity)** – Effective processes have been established for the identification and protection of unique sites, islands, wetlands, rare plants, vernal pools, legacy trees, stick nests and late successional forests. Noteworthy examples were observed during the field audit in the Districts of protection of these resource values.



This picture depicts one of a number of vernal pools observed during the audit that was protected under the Company’s Vernal Pool Policy.



The Company’s guidelines for installing and removing temporary crossings were found to be effectively implemented to reduce the operational impacts to streams. This picture also shows how natural drainage is being maintained and sediment control measures implemented following the removal of a crossing.



- **SFI Objective 14 (Legal and regulatory compliance)** – New emergency point signs have been erected which are linked to work order maps to facilitate more rapid response by emergency responders (observed in Chipman and Saint George).
- **SFI Objective 16 (Training and education)** – The scope of annual training is well tailored to address SFI requirements and staff and contractor SFM and operational responsibilities.
- **SFI Objective 17 (Community involvement in the practice of sustainable forestry)** – An effective level of consultation (including field review) with a community occurred to address town ordinance and community values/concerns in harvest prescriptions (Maine).

### Follow-up on Findings from Previous Audits

The 2012 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 2011 surveillance audit were satisfactorily addressed.

### New Areas of Nonconformity

The 2012 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 also identified during the audit. The key opportunities for improvement noted during the audit included:

- **SFI Objective 1 (Forest management planning)** – Isolated weaknesses in plans and inventory information being used or referenced were observed during the audits at the Districts, as follows:
  - The inventory did not accurately capture the red pine component in the stand on 1 harvest block field reviewed (Sussex).
  - The version of the management plan on site did not include the correct final targets for old forest (Sussex).
  - A work order for 1 harvest block field reviewed contained contradictory white pine and hardwood retention prescriptions (Doaktown).
- **SFI Objectives’ 2 (Forest productivity) and 7 (Efficient use of forest resources)** – The field audit observed isolated instances where Work Order prescriptions were not fully implemented (e.g., a small area of an aerial herbicide block was not treated (in Sussex), small areas of rutting from site preparation and harvest equipment on 1 block (Sussex), inconsistent or off-specification buffer operations in 2 blocks (Sussex) and an incorrect block number was marked on wood in 1 block (Black Brook)).



The Company has established targets for maintaining old and very old forests within five forest community types representative of the range of naturally occurring forest types on the land base. The stream shown in this picture is contained in an area which has been identified and protected under the Company’s Late Successional Forest Policy.



The field audit included a review of active operations in order to assess contractor and operator awareness of EMS/SFM requirements as well as operational issues associated with the blocks they were operating in.

- **SFI Objectives’ 8 (Landowner outreach) and 10 (Adherence to Best Management Practices)** – The audit determined that landowner outreach and monitoring of BMP adherence is adequately addressed in the Company’s existing fiber sourcing programs, however the following areas could be improved upon:
  - While the field audit of 4 procurement sites inspected by the Marketing Board in central New Brunswick confirmed that overall the monitoring data was accurate and consistent with observations made during the field audit, the monitoring did not identify that on one of the blocks inspected a wet area had been crossed without protection leading to moderate ruts over a small section of trail.
  - An opportunity exists for the Company to investigate whether Dixfield’s non-Maine suppliers are receiving regionally appropriate information.

**SFI Objective 14 (Legal and regulatory compliance)** – The field audit of active sites determined that fuel management and emergency preparedness and response best management practices were generally being adhered to, with isolated exceptions noted on a few sites, for example:

- A missing Transportation of Dangerous Goods label on one service truck and one mobile tank without a UN plaque affixed.
  - An insufficiently anchored fuel tank on a trailer.
  - Insufficient emergency response equipment on a few active blocks visited.
  - An older forwarder which was leaking oil.
  - Missing delineators on 2 bridges.
- **SFI Objective 20 (Continuous improvement)** – Nonconformities and corrective and preventive actions are being effectively tracked overall within the Company’s database, however a small number of nonconformities in the database did not have documented action plans, assigned personnel or expected completion dates (identified in Chipman, Doaktown and St. George).



The field audit observed a number of examples of well implemented road and bridge deactivation (above) and road construction and bridge installation (at left) practices.



**Contact:**  
Chris Ridley-Thomas, RPBio, CEA (604) 691-3088

This report may only be reproduced by the intended client, J.D. Irving, Limited, 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.  
© 2012 KPMG. All rights reserved.