Forest Management Public Summary

for

Lindsay & Dixon Limited

Certification Code:  SW-FM/COC-1148
Date of Certification:  February 19, 2004
Date of Public Summary:  February 2004
Updated: 2005

This document was produced according to the guidelines of the Forest Stewardship Council (FSC) and the SmartWood Program. No part of the report should be published separately.

Certifier:

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ACRONYMS

AAC  Annual Allowable Cut
ALP  Annual Logging Plan
CITES Convention on Trade in Endangered Species
DBH  Diameter at Breast Height
DoC  Department of Conservation
FMU  Forest Management Unit
FSC  Forest Stewardship Council
GM  General Manager
GIS  Geographic Information System
HCVF  High Conservation Value Forest
IFU  Indigenous Forestry Unit
ILO  International Labor Organization
L&D  Lindsay and Dixon Ltd
LINZ  Land Information New Zealand
MAF  Ministry of Agriculture and Forestry
NZFS  New Zealand Forest Service
OSH  Occupation Safety and Health
P&C  Principles and Criteria of the FSC
RMA  Resource Management Act
RTE  Rare, Threatened, and Endangered
SFM  Sustainable Forest Management
SFMP  Sustainable Forest Management Plan
SW  SmartWood Program

INTRODUCTION

To earn SmartWood certification, a forest management operation must undergo an on-site field assessment. This Public Summary Report summarizes information contained in the initial assessment report, which is produced based on information collected during the field assessment. Annual audits are conducted to monitor the forest management operation’s activities, to review the operation’s progress toward meeting their certification conditions, and to verify compliance with the SmartWood standards. Addenda providing the updated information obtained during these annual audits are included as attachments to the Public Summary Report.

This report presents the findings of an independent certification assessment conducted by a team of specialists representing the SmartWood Program of the Rainforest alliance and our New Zealand representative Agriquality/CERTNZ. The purpose of the assessment was to evaluate the ecological, economic and social sustainability of Lindsay and Dixon Limited forest management.

The purpose of the SmartWood program is to recognize conscientious land stewardship through independent evaluation and certification of forestry practices. Forestry operations that attain SmartWood certification may use the SmartWood label for public marketing and advertising.
1. GENERAL SUMMARY

1.1. Name and Contact Information

Source Name: Lindsay & Dixon Ltd.
Contact Person: Ken Atkinson
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Tel: +64 03 226 6059
Fax: +64 03 226 6374
E-mail: ken.atkinson@xtra.co.nz, bernie@lindix.co.nz

1.2. General Background

A. Type of operation

Lindsay and Dixon Ltd (L&D) have access and management rights for 80 years under a contract between Waitutu Incorporation and L&D, commencing in the year 2000. Waitutu Incorporation has the forest rights in perpetuity through a contractual agreement with the NZ government. The sawmilling and logging operations of Lindsay and Dixon Ltd. have been expanded in scope to take on the full responsibilities of an active forest manager.

B. Years in operation

L&D manage lowland indigenous forests in Western Southland for the Waitutu Incorporation (Waitutu). Under their agreement with Waitutu, L&D have the right to purchase the harvestable material for a period of 80 years. These managed forests are quite separate from the Waitutu forests that for some became a household name in the 1980’s. Rather, the forests managed by L&D are entirely modified forests that were offered in compensation to the Maori owners for being denied their legal right to log their part of the Waitutu forest. The Waitutu forests that are now protected in Fiordland National Park were offered to the Maori in compensation to other land losses a century ago. Originally the forest areas under assessment were managed as State Forests by the NZ Forest Service (NZFS) and were part of the Southland Conservancy production forest estate. During 1989, while the forests were being managed by the state owned enterprise, Timberlands Southland, the land was classified as Crown forestland. From 1991 – 1996 a private company called Pine Plan NZ Ltd managed these forests for the Crown. In 1996 the Waitutu Incorporation were granted cutting rights to the forest from the Crown. Current owners have been active in the sawmilling and logging operations since purchase of Lindsay and Dixon Ltd. in February 2000.

C. Date first certified

February 19, 2004

D. Latitude and longitude of certified operation

Approximately 46 degrees 0 – 15 minutes south latitude and 167 degrees 35 –55 minutes east longitude.
1.3. Forest and Management System

Lindsay and Dixon Ltd. are directly responsible for current management of areas in Rowallan, Longwoods and Woodlaw forests under a contractual cutting right and management agreement between Waitutu Incorporation and L&D. The forest planning and management system has been developed for Waitutu Incorporation by various consultants and by the current owners since February 2000.

<table>
<thead>
<tr>
<th><strong>Owner of the land where forest operations take place:</strong></th>
<th>The New Zealand government own the land under the forest and the Waitutu Incorporation owns a forest rights lease in perpetuity.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of forest access or ownership agreement that exists:</strong></td>
<td>Waitutu Incorporation has the forest rights in perpetuity through a formal agreement with the NZ government. L&amp;D have access and management rights for 80 years under a contract between Waitutu Incorporation and L&amp;D.</td>
</tr>
<tr>
<td><strong>Forest types being managed:</strong></td>
<td>Indigenous forest dominated by silver beech (Nothofagus menziesii).</td>
</tr>
<tr>
<td><strong>Forest area being managed:</strong></td>
<td>11,920.2² hectares in the Longwood and Rowallan Forests</td>
</tr>
<tr>
<td><strong>Are there any plantations?</strong></td>
<td>Not on the land managed by L&amp;D on behalf of the Waitutu Incorporation at this time.</td>
</tr>
<tr>
<td><strong>Status of management plan(s):</strong></td>
<td>Waitutu Incorporation has a draft sustainable forest management plan (SFMP) prepared in 1997 as required by the Forests Act 1949 and amendments. Logging operations are managed under an annual logging plan submitted to and approved by Ministry of Agriculture and Forestry (MAF) Indigenous Forestry Unit (Approval Reference Number – 413019ALP11/01). Both plans are valid, current and in the process of review at this time.</td>
</tr>
<tr>
<td><strong>Annual allowable cut (AAC):</strong></td>
<td>The annual allowable cut (AAC) for Waitutu Incorporation is 23,628 cubic meters per year, and generally not to exceed 83.8 hectares in any one year if coupe felling is practised. These volumes are the total standing round wood volumes to be removed from the forest in the current year. They represent the annual permissible harvest entitlement under the SFMP including road, track and corridor salvage volumes.</td>
</tr>
<tr>
<td><strong>Modes of timber extraction:</strong></td>
<td>Harvesting is ground-based, utilizing a high track D4 dozer and excavators. The use of Helicopters and skyline cable systems is permitted under the current logging plan, subject to specific MAF approval.</td>
</tr>
<tr>
<td><strong>Summary of silvicultural approach:</strong></td>
<td>Waitutu Incorporation has been practicing even and uneven aged natural forest management, with small openings or coupe cuts as the predominant silvicultural approach. Coupes are currently limited to a maximum of 0.5 ha in size by the 1949 Forests act and amendments. These regulations limit some silvicultural management options. L&amp;D are currently proposing to review the silvicultural methods and implications in preparation for their proposed review of the SFMP.</td>
</tr>
<tr>
<td><strong>Do harvesting operations include construction of primary roads?</strong></td>
<td>Yes. Though most of rural New Zealand has pre-existing roads, in these forest areas Waitutu Incorporation, L&amp;D or their contractors has had to either build new roads or upgrade old ones. Road construction or upgrading, and access issues in general, cause anxiety with some neighbors.</td>
</tr>
<tr>
<td><strong>Percentage of timber supply from</strong></td>
<td>All timber is supplied from land managed directly by L&amp;D under their</td>
</tr>
</tbody>
</table>

² At the time of the original assessment (August 2002,) the forest area was calculated as 11,582. More recent (December 2003) GIS analysis sets the area of the forest management unit at 11,920.2 hectares. This latter figure will be used within the report as the total certified area.
<table>
<thead>
<tr>
<th>forest land directly managed by the applicant:</th>
<th>contract with Waitutu Incorporation.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volume of timber coming from each forest type.</strong></td>
<td>The zonation of these forest areas into forest types, conservation areas and other predominant use classes is yet to be carried out formally. All harvested wood comes from beech dominated indigenous forest identified in the 5078 ha MARVL inventory carried out by Pine Plan New Zealand Ltd in 1994-1997. Small volumes of podocarp and other species occur as “arisings” from the coupe system of logging. More detailed species-level volume figures by location are presented in the SFMP. The podocarp and other hardwood forest types identified by the survey (but not systematically mapped) are excluded from the production management prescriptions and sustainable yield calculations.</td>
</tr>
</tbody>
</table>

### A. Forest type and land use history

These forests are composed predominantly of silver beech (*Nothofagus menziesii*), but they also contain kamahi, mountain beech, rimu, miro, totara, pokaka, kahikatea and southern rata. Within the forests there are several *Coprosma spp.* as well as native fuchsia, and other small native trees and shrubs. Epiphytes, such as native mistletoe can also be found in abundance in some areas.

The estate is based around two main forests, i.e. the Longwood forest, which is part of the low altitude hill system of the Longwood Range, and the Rowallan forest. Both of these forests are part of a semi-contiguous block of lowland indigenous forest. Farmland, exotic forest plantations and large tracks of DoC indigenous forest estate border these L&D managed forests. The L&D managed forests are further broken down into eight forestry blocks, two in the Rowallan and the rest in the Longwood forest.

Much of Southland has been converted to agriculture but there are still scattered blocks of indigenous throughout the region in sizes ranging from a couple of hectares to extensive forests of 25,000 hectares. L&D forest blocks range in size from the 286 ha of East Pourakino (Longwood) to the main Rowallan block of 4,765 ha. In total this FSC certification covers 11,920.2 ha of forest.

The L&D forests have been clearfelled in the past and managed as production forests by their previous owners. Prior to the 1950s these forests were left to regenerate without any silviculture management. Since that time clearfelling had continued but with the addition of leaving seed tree to provide a seed bank for silver beech regeneration. This was tested during the 1950s in the Rowallan forest and the late 1970s in the Longwoods.

Since the instigation of the L&D contract with Waitutu clearfelling has ceased and now the forest is managed on a 0.5 ha coupe felling protocol. This 0.5 ha size selection is based upon the Indigenous Forestry Unit (IFU) benchmark 2.2.1.11 for the maximum beech coupe size. Any increase in coupe size has to be approved by MAF under Clause 67 of the Forests Act.
B. Size of forest management unit certified and forest use and area in production forest, conservation, and/or restoration

The zonation of these forest areas into forest types, conservation areas and other predominant use classes is yet to be carried out formally. The basic information exists and there is a wealth of historical data available from NZFS, Land Information New Zealand (LINZ), and Regional Council records that could be applied to this task utilizing a modern geographic information system (GIS).

Table 1.) Land Use Types by Area of FMU

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural or Semi-natural Forest</td>
<td>11 694.6</td>
</tr>
<tr>
<td>Plantation</td>
<td>0</td>
</tr>
<tr>
<td>Protected Area (5m buffer on 3m wide streams)</td>
<td>19.9</td>
</tr>
<tr>
<td>Special Management Areas (5m buffer on water-races &amp; tramways, 25m buffer on other (point) sites)</td>
<td>15.8</td>
</tr>
<tr>
<td>Water (1.5m buffer on 2nd &amp; 3rd order stream centrelines)</td>
<td>8.5</td>
</tr>
<tr>
<td>Infrastructure (2m buffer on track centrelines)</td>
<td>50.8</td>
</tr>
<tr>
<td>Other Uses (Forest types unconfirmed)</td>
<td>130.6</td>
</tr>
<tr>
<td>Total Certified Area</td>
<td>11,920.2</td>
</tr>
</tbody>
</table>

C. Annual allowable cut and/or annual harvest covered by management plan

The definition of sustainable management for these forests is outlined in the SFMP and must meet with the requirements of both the Forest Amendment Act 1993 and the Resource Management Act 1991. Different definitions of “sustainable management” contained in these acts have complicated the task of planning for responsible resource management. The sustainable annual allowable cut (AAC) in these forests is based primarily on estimated growth capacity supported by current inventory data, regular review and a harvest area constraint. L&D are aware that these figures need review at this time along with the wider analysis of conservation, protection and other values primary use zones within the forests.

The AAC for Waitutu Incorporation Rowallan and Longwood forests is 23,628 cubic meters per year, and must not generally exceed 83.8 hectares in any one year if coupe felling is practised. These volumes represent the annual permissible harvest entitlement under the SFMP and include road, track and corridor salvage volumes. They are the total standing round wood volumes to be removed from the forest in the current year.

All sustainable yield calculations in the SFMP relate to the silver beech croptype only. The podocarp and other hardwood croptypes are currently excluded from the production management calculations. The net available harvest area of the silver beech croptype constitutes 36% of the total L&D management estate. The maximum allowable annual harvest volume and maximum allowable annual coupe harvest area prescribed for the silver beech croptype represents 2% of the total standing volume and 2% of the net available harvest area for this croptype.

The detailed methodology and calculation basis used to derive these figures is clearly stated in the SFMP. The assumptions of growth rates, productive area and yields are generally well supported by the literature and conservative.
Table 2.) Summary of Key Statistics of AAC:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Certified Area (ha)</td>
<td>11,920.2</td>
</tr>
<tr>
<td>Young Crop Area (&lt;50 years old) (ha)</td>
<td>6,504</td>
</tr>
<tr>
<td>Total Transition crop area (50-120 years old) (ha)</td>
<td>5,078¹</td>
</tr>
<tr>
<td>Transition Crop Net permissible harvest Area (ha)</td>
<td>4,189</td>
</tr>
<tr>
<td>Maximum annual harvest area (ha)</td>
<td>83.8</td>
</tr>
<tr>
<td>Maximum annual harvest Volume (m³)</td>
<td>23,628</td>
</tr>
<tr>
<td>Nominal rotation length (years)</td>
<td>100</td>
</tr>
<tr>
<td>Total Standing volume (m³/ha)</td>
<td>466</td>
</tr>
<tr>
<td>Total Recoverable Volume (m³/ha)</td>
<td>281</td>
</tr>
<tr>
<td>Total Stem Volume growth (m³/ha/yr)</td>
<td>4.7</td>
</tr>
<tr>
<td>Recoverable yield (m³/ha/yr)</td>
<td>2.8</td>
</tr>
<tr>
<td>Scheduled SFMP review before December</td>
<td>2006</td>
</tr>
</tbody>
</table>

While the basis for the sustainable harvest is evident and well supported there is a distinct lack of operational monitoring of actual yields per hectare and data review processes in practice at present. Proposed methods and collection of key data is outlined in the SFMP but not yet implemented by L&D.

D. General description of details and objectives of the management plan/system

Pine Plan developed the draft management plan in 1997 for the management of Rowallan and Longwood Forests. The prescriptions contained in the plan were drafted to cover the first 100 years of future sustainable forest management. The plan has not been updated and is the current version in use.

The current owners purchased L&D in February 2000. The site and in fact the owners have considerable experience and history in the processing and marketing of beech products. L&D have a General Manager based in Tuatapere who is responsible for the day to day running and management of the company and a Forest Manager who is responsible for all in forest activities. The company employs a total of 45 people who live in either Tuatapere or Invercargill.

A harvesting system utilizing a high track D4 dozer and excavators has been chosen specifically for their ability to minimize ground disturbance. The high track D4 dozer is being used as the main extraction method with excavators being utilized in coupes to bunch logs for extraction.

Roading layout is designed to minimize the amount of roads established and maintain haul distances from coupes to the road at an optimal distance. L&D have recently employed their own logging gangs who are proactively supervised to ensure compliance with the Annual Plan.

L&D have still to instigate formal consultation with local community and stakeholders, and have still to implement formal monitoring of environmental and ecological factors.

1.4. Environmental and Socioeconomic Context

Environmental

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³ Total area for Young Crop and for Transition Crop have not yet been calculated with new GIS information. These are the original August 2002 figures, left here to give reader close approximations of age class distribution.
Before human settlement, approximately 85 percent of New Zealand’s total land-mass was in forest. Since human colonisation almost two thirds of this forest cover has been removed. About half of this forest removal has occurred in the last 150 years. As a result of this deforestation, less than a third of New Zealand is presently forested. Of present forested land 78 percent is in indigenous forest while 22 percent is exotic plantation. The total area of indigenous forest in New Zealand is 6.256 million acres, or 23% of mainland New Zealand. Of the total area of indigenous forest in New Zealand, 78% is within the Department of Conservation (DOC) estate and thus unavailable for production of timber. Additionally, 3% is privately owned and under protection covenants, amounting to some 81% of New Zealand’s indigenous forest under official protection. Therefore, some 600,000 hectares of privately owned indigenous forest is potentially available for production. In New Zealand 80 percent of the privately owned indigenous forest resource is in beech forest.

Historically there has been a trend to concentrate production forest management almost entirely to exotic forest within New Zealand. There has been the occasional case where large scale sustainable management of indigenous forest involving timber production from Crown lands has been proposed e.g. Timberlands West Coast Ltd. sustainable beech forest management and practiced e.g. Timberlands West Coast Ltd. sustainable podocarp forest management in south Westland. And there has been controversy associated with sustainable management of indigenous forest involving timber production from Crown lands in New Zealand.

Management of indigenous forests is covered by the Forests Act 1949. This act was amended in 1993 to include the provisions for sustainable management of indigenous forests on private land. The amendment became Part IIIA of the Forests Act. The aim of the Forests Act is to "promote the sustainable forest management of native forest land" (Section 67B) where sustainable forestry management is defined as "...the management of an area of forest land in a way that maintains the ability of a forest growing on that land to continue to provide a full range of products and amenities in perpetuity while retaining the forest's natural value" (Section 2).

Legislatively the indigenous forests (this does not include DoC and SILNA lands) are required to be managed sustainably if timber is harvested. The Indigenous Forestry Unit of MAF is required to monitor the plans and permits of the private forest owners.

The forests under L&D control as stated are predominately silver beech. These beech forests are potentially host to a diverse range of native wildlife. By being surrounded by DoC reserves and national park areas these forests are “stepping stones” between large tracks of indigenous forest. In the past habitat removal and severe modification of indigenous forests has caused declines and endangerment of several species. Past unsustainable forestry practices have played their part in this situation. However the factors causing initial declines (particularly land clearance and conversion to agriculture) are not necessarily the main threats now and predation by introduced mammals is one of most urgent problem confronting wildlife conservation in New Zealand.

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4 Molloy et al. (1963), McGlone (1988).
7 Wardle (2003).
8 Benecke (2000).
9 IFU also audit the records of sawmills – all of which have to be registered to mill in order to buy and sell indigenous timber sourced from private land.
10 Most convincing in this regard is Flux’s (1989) demonstration that island biogeography theory can predict almost exactly how many species went extinct on New Zealand’s four main islands between 1840 and 1975 simply by measuring the reduction in forest cover.
Most of New Zealand’s biodiversity has evolved in the absence of mammalian predators and browsers. Thus our ecological communities are vulnerable to many of these introduced mammals, including possums, feral house cats, stoats, rats and mice. (Holdaway, 1989). Stoats, ferrets, weasels (Mustela nivalis), cats, mice, hedgehogs (Erinaceous europeaus) and possums have been identified as predators of native birds, bats, lizards and/or invertebrates (see Gibb and Flux, 1973; King, 1990; Lovegrove, 1992; Brown et al., 1993; Innes et al., 1994). Possums, deer, pigs, rabbits and hares also impact on the native forest and associated vegetation. Therefore “sustainably” managed indigenous forests require a system in place to monitor the effects of these introduced pests and where possibly mitigate their adverse effects on indigenous flora and fauna.

Socioeconomic

The forest areas being managed by Lindsay and Dixon are bordered by a mixture of sheep and dairy farms, other commercial forestry plantations and public land administered by the Department of Conservation.

The land is under the ownership of the Crown but the forest is managed under a forestry right in perpetuity in favour of the Waitutu Holding Company Limited. The Waitutu Holding Company administers the forests given to the Waitutu Incorporation (which represents landless South Island-based Maori) as part of the compensation for the taking of land from Maori during the 1800s. The land allocated to the Waitutu Incorporation under the Landless Natives Act 1906 is located in Fiordland, on the southwest coast of the South Island.

However, over the years the Crown has opposed any development or milling of this land on the basis of its high conservation values. As a substitute for income generation, an agreement was negotiated in 1994 between the Crown and the Waitutu Incorporation giving cutting rights in perpetuity for the Rowallan and Longwood forest blocks. These forests are those managed by Lindsay & Dixon Ltd under contract to the Waitutu Incorporation. The Waitutu Incorporation’s own land is now treated as part of the Fiordland National Park.

There is a level of concern in New Zealand about the management of indigenous forests. This is prevalent in environmental groups, and appears to exist in a proportion (c. 30%) of the general public. Up until the 1960s, New Zealand’s timber industry was dominated by the logging of indigenous forests. Since that time there has been an increasing dominance of the industry by exotic plantation timber, with much of the remaining indigenous forest under public ownership and protection. There is strong public support for the conservation of threatened or endangered indigenous species that depend on the existence of indigenous forest. While there is concern among certain groups of the population that the harvesting of native timber is inappropriate and should not be allowed, and that sustainable management of indigenous forest is not possible, the majority of the New Zealand public appear to accept the concept of sustainable resource management and support sustainable indigenous forest management including timber production, provided it is well managed, monitored and controlled.

1.5. Products Produced and Chain of Custody

A. Chain of custody certificate

The chain of custody certificate covers the extraction and subsequent transportation of sawlogs into Lindsay and Dixon’s log yard at the sawmill, which is located in Tuatapere. L&D have had a CoC
assessment carried out on their Sawmilling and processing facilities, and by late 2002 had been certified (SW-COC-797).

B. Species and volumes covered by the certificate

Table 3.) Lindsay & Dixon Allowable Harvest

<table>
<thead>
<tr>
<th>Species</th>
<th>Scientific name</th>
<th>Volume (m$^3$ per yr)</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver Beech</td>
<td><em>Nothofagus menziesii</em></td>
<td>20331</td>
<td>Log</td>
</tr>
<tr>
<td>Mountain Beech</td>
<td><em>Nothofagus solandri var. cliffortioides</em></td>
<td>852</td>
<td>Log</td>
</tr>
<tr>
<td>Kamahi</td>
<td><em>Weinmannia racemosa</em></td>
<td>1604</td>
<td>Log</td>
</tr>
<tr>
<td>Rata</td>
<td><em>Metrosideros umbellata</em></td>
<td>535</td>
<td>Log</td>
</tr>
<tr>
<td>Rimu</td>
<td><em>Dacrydium cupressinum</em></td>
<td>135</td>
<td>Log</td>
</tr>
<tr>
<td>Totara</td>
<td><em>Podocarpus hallii</em></td>
<td>60</td>
<td>Log</td>
</tr>
<tr>
<td>Miro</td>
<td><em>Prumnopitys ferruginea</em></td>
<td>51</td>
<td>Log</td>
</tr>
<tr>
<td>Kahikatea</td>
<td><em>Dacrycarpus dacrydioides</em></td>
<td>51</td>
<td>Log</td>
</tr>
<tr>
<td>Matai</td>
<td><em>Prumnopitys taxifolia</em></td>
<td>8</td>
<td>Log</td>
</tr>
</tbody>
</table>

C. Description of current and planned processing capacity covered by the certificate

L&D have an agreement with the Waitutu Incorporation to harvest logs from the forest estate within Rowallan, Longwood and Woodlaw Forests. Prior to L&D management, almost 50% of log volume extracted from the forest was firewood. Under L&D management, logs extracted from the forest are primarily sawn for timber, though a small proportion of total log volume may still be sold as firewood (e.g. during the past 12 – 18 months about 400 m$^3$ of firewood was produced from a total log volume delivered to mill of approximately 9,500 m$^3$. The firewood component was thus only 4% and comprised the lowest quality log material). Residue from the sawmill is chipped, with the resulting chip and sawdust being supplied to farmers for stock bedding.

2. CERTIFICATION ASSESSMENT PROCESS

2.1. Assessment Dates

2002
15 June Stakeholder public notices distribution commences (e-mail, fax, mail)
24 July Public notification in newspapers (Southland Times and Christchurch Press)
12 August Initial team planning meeting
12 August Public stakeholder meeting at the Ascot Park Hotel, Invercargill, N.Z
13-17 August Field assessments, based at Tuatapere, Western Southland, N.Z
18 August Team de-briefing with Lindsay and Dixon.
30 September Draft Certification report presented to Lindsay and Dixon.

2003
12 May Comments on Draft Certification Report from Lindsay and Dixon received by SmartWood
2.2. Assessment Team and Peer Reviewers

**Original Assessment**

**Jeffrey Hayward**, Team Leader, Forester, is Asia Pacific Regional Manager, SmartWood Program of the Rainforest Alliance. M.Sc. Forestry, (Univ. of British Columbia, Canada); B.Sc. Latin American Development and Forestry (Univ. of Washington, USA). He has conducted silviculture and ecology research for the B.C. Ministry of Forests and UBC Alex Fraser Research Forest in Canada. In Oregon State, he worked for the federal government in the U.S. Bureau of Land Management in forest inventory and timber sale administration. Three years as U.S. Peace Corps community forester in Guatemala, providing technical extension services in a tripartite agro-forestry and conservation of natural resources program. Private forestry consulting for the B.C. Ministry of Forests, the FSC and IIED. Publications include research on forest certification and forest silviculture. He has conducted 20+ forest management assessments, scopings, and/or audits; conducted over 50 chain of custody assessments and/or audits; and been an instructor of five assessor-training courses (US, Malaysia, Japan, Indonesia, and Fiji).

**Allen Fraser**, Forest Ranger with 25 years experience in forestry, including forest management (NZ), forest surveys (PNG & Vanuatu), Forestry Quarantine, Chain of Custody certification, Project Management, Sawmilling, timber manufacturing, timber treatment. Trained as an external auditor. Allen is the head of the Forestry Department in AgriQuality and has several years of experience in New Zealand in auditing protocols in forestry. He has conducted management assessments and scoping audits.

**Dr. Billy Hamilton**, Ecologist, BSc Honours 1st Class (Zoology), University of Otago; PhD, University of Otago. Billy has 10 years experience in ecological work, with emphasis on animal behaviour; ecology of indigenous freshwater fish species; life history characteristics; parasitology; predator prey interactions; aquatic habitat assessment, management of native species within forest ecosystems, and predator control. Recently, he was involved in Timberlands West Coast’s (TWC) Resource Management Act (RMA) application to sustainably log beech forest and has been contracted to develop TWC’s individual species management plans, and oversee their endangered species monitoring and assessment protocols, as per FSC certification conditions. Currently he is comparing the effects of aerial and control station poisoning techniques on avian species within native forests and serving as an assessor on certification assessments.

**Dianne Buchan**, is the managing director of Corydon Consultants Ltd., a company specialising in social impact assessment, social research and community consultation particularly in relation to environmental and Resource Management related issues. Dianne has a BA in sociology and is currently completing a Masters in Public Policy at Victoria University. She is a member of the New Zealand Planning Institute and of the New Zealand Association of Impact Assessment. She is also co-leader of the social impact sub-committee of the International Association of Impact Assessment - based in the USA. Dianne has been a practicing social impact assessor for 16 years - first in central government and, since 1989, in private
practice. She practices as a social scientist throughout NZ and the Pacific. In the past two years, she has provided social science input to seven FSC audits and carried out social impact training for staff of two other forestry companies.

Peer Reviewers

Independent peer review is an FSC requirement and a vital part of the certification process. Having the scrutiny of outside scientists and other experienced practitioners is extremely valuable. In the case of Lindsay & Dixon Ltd., being only the second forest assessment within Indigenous forests in New Zealand, SmartWood sought a blend of researcher/academic expertise with indigenous forestry ecological, social, and management experience. In the case of Lindsay and Dixon, we had three peer reviewers (although the FSC requirement is two) to provide feedback, comments and criticism on the assessment report findings, conditions, and preconditions.

The 3 peer reviewers included:

1. **Ecologist** with M.App.Sci, 20 years professional experience in ecological work, with an emphasis on evaluation for nature conservation, natural area surveys, and protection of important conservation ecosystems, threatened plant protection and assessment of environmental effects in terrestrial and aquatic ecosystems.

2. **Ecologist/Forest Manager** with PhD Botany, 30+ years professional experience in the ecology and management of New Zealand indigenous beech forests.

3. **Forest Management/Policy Specialist** with BS Forest Science, Diploma of Agricultural Sciences and Diploma of Philosophy, 20 years professional experience in forest and landscape resource management. Expertise in operational management, economic and environmental evaluation, policy analysis and communications.

Precondition Verification Audit Team

Billy Hamilton (see above.)

Graham Lea, Forestry Field Officer, CERTENZ; trained SmartWood COC auditor; working from November 1998 to present for AgriQuality New Zealand (Christchurch) and is the Dunedin-based Forestry Field Officer responsible for the Otago and Southland regions. Mr. Lea has experience in forest product processing and marketing, quality auditing and quality systems, forest produce exports, CoC assessment and auditing, and FM auditing.

2.3. Assessment Process

During the field phase of the assessment process, the team conducted the following steps as part of the normal SmartWood certification process:

**Pre-Assessment Analysis** – Prior to beginning the assessment, Lindsay and Dixon Ltd submitted to SmartWood drafts of their forest management plans, stakeholder lists and stakeholder comments, and information tables on the properties to be included in the assessment.

The findings of the independent, scoping report by SmartWood Program assessors to forest areas managed by the Waitutu Incorporation were provided by SmartWood to the assessors as part of the team documents. The primary objective of the scoping had been to provide a preliminary evaluation (i.e. gap
analysis) for Waitutu Incorporation that would evaluate company readiness for FSC certification. The process analyzed Waitutu Incorporation forest practices and overall forest management at the “subject” (or Principle) level in the SmartWood guidelines for New Zealand in order to identify main elements that could present obstacles to certification. Additionally, the process aimed to familiarize Waitutu Incorporation management and staff with FSC certification processes, the applicable standards for forest management, and to provide additional information useful for Waitutu Incorporation to decide whether it wants to proceed with full assessment.

Assessors evaluated this information and received updates as developed. SmartWood staff and assessors communicated with L&D for clarification of documents provided and to request updated documents as these were available.

Selection of Sites – Lindsay and Dixon Ltd manages forest properties in the Southland region of the South Island of New Zealand. The assessment team made a stratification of the forests currently under L&D management, and chose sites both randomly and based upon information regarding the location, history, treatment, forest type, harvesting activity, etc., that could be observed through field visit during the assessment. The selection of sites emphasized those in the Longwoods forest area around Tuatapere, as this was where the most accessible forests were located and where most management activity has taken place. The team inspected sites within the largest forest blocks under L&D management control, as these had the most active management. Particular emphasis was made of those areas where active harvesting, thinning, and road construction operations were occurring. It was equally important to visit some sites that were recently harvested and regenerating, as well as those with a long time horizon before harvest, and those with reserve or buffer areas, culturally significant sites, and/or other forest uses.

Table 4.) Summary of Forest Areas Visited by SmartWood Assessors

<table>
<thead>
<tr>
<th>Forest/Block Name</th>
<th>Assessment Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kiwi</td>
<td>X</td>
</tr>
<tr>
<td>Cascade</td>
<td>X</td>
</tr>
<tr>
<td>Rowallan – Thinning Trials</td>
<td>X</td>
</tr>
<tr>
<td>East Pourakino</td>
<td>X</td>
</tr>
</tbody>
</table>

Field Interviews and Site Reviews – The assessment team met with various management staff, field supervisors, and fieldworkers during the assessment. In the field, the team met with forest owners as well as contractors and their crews. Site visits were planned using maps, supporting documentation, and input from managers to determine field inspection areas. Of particular interest was visiting forest stands of varied age classes and silvicultural treatments, riparian zones, mixed indigenous forest areas, sites of cultural significance, road/stream crossings, and active harvest. The forest managers for both the forest operations and processing plants were interviewed and accompanied the team to field sites. Two days were spent at the head office in Tuatapere reviewing company plans, planning documents, maps, accounting, pay roll and administration systems, chemical stores, Occupation, Safety and Health (OSH) records, log tracking documents, etc. Most interviews were conducted over the phone with a variety of stakeholders. There were some stakeholders consulted with at the public meeting held in Invercargill and other stakeholders consulted with in person during the assessment.

Assessment Report Development – The assessment report was developed over 45 days (not consecutive) after the fieldwork was completed. On the last day of the assessment, the team met to assign scores for each certification criterion, to reach consensus on findings, and to suggest conditions and
recommendations that would apply to the certification. Throughout the write-up period the assessors
continued to conduct stakeholder interviews, supplementary research, and document review.

**Peer and Candidate Operation Review of the Report** – The final draft report was reviewed by Lindsay
and Dixon Ltd and three independent peer reviewers (the normal FSC requirement is two).

**First Certification Decision** – SmartWood headquarters took the primary certification decision based on
the original certification assessment report, which included 4 pre-conditions with mandatory completion
prior to certification. This was completed after review of comments made on the draft report by operation
and peer reviewers.

**Precondition Verification Audit** - A precondition verification audit (PVA) was required to complete the
certification process for L&D because the company received a certification decision with preconditions.
The objectives of the audit were to verify that preconditions have been successfully met and to verify that
certifiable performance has been maintained. SmartWood chose an audit team of two assessors, in order to
provide sufficient coverage of pre-conditions that were related to social and ecological principles of forest
stewardship.

Prior to conducting the audit, Lindsay and Dixon Ltd submitted to SmartWood assessors the drafts of their
updated plans, stakeholder lists and stakeholder comments. Assessors evaluated this information and used
data for the design and content of the on site audit. As the preconditions tended to be procedural
based, approximately 60% of the audit time was spent reviewing documents, holding discussions with
staff and interviewing management on their close-out procedures for the preconditions, as well as
conditions that were included in the original assessment report. Field and out of office site visits were
conducted to both interview specific staff and view procedures regarding preconditions and conditions.
The field audit concluded with a de-briefing of audit findings with L&D. After the fieldwork at L&D,
stakeholders were contacted to discuss any pertinent comments they may have made in the past and to
solicit information that had not been received up to the audit date.

**Final Certification Decision** – SmartWood headquarters made the final certification decision based on
the findings of the precondition audit, demonstrating that all four 4 pre-conditions had been closed out in
satisfactory fashion. (See section 3.1, “Precondition Compliance” for a discussion of L&D performance to
comply with the preconditions.)

**2.4. Standards**

The Lindsay & Dixon Ltd. certification assessment was conducted using the SmartWood certification
standards as described in the *SmartWood Certification Interim Standard For Assessing Forest
Management in New Zealand (Fourth Draft, February 2002)*. These guidelines should be regarded as the
fundamental "starting point" for SmartWood certification field assessments and certification decisions,
applicable in New Zealand. These criteria and guidelines are based upon the Forest Stewardship Council’s
Principles and Criteria and the SmartWood Generic Guidelines for Assessing Forest Management, which
have been approved by the FSC.

The FSC currently has twenty-eight (28) national initiatives that are developing region-specific guidelines for
forestry certification in natural forests and plantations. There is now a New Zealand National Initiative.
There have also been numerous plantation certifications in New Zealand and one small indigenous forest
certification (Gowan Hill Forest) in the FSC system.

In September 1999, SmartWood distributed the first draft SmartWood Generic Guidelines to New Zealand
stakeholders, as part of the certification assessment process taking place at Gowan Hills Forest in the
Southland. This assessment was at the request of the Gowan Hills Trust; a family forest management trust managing a little over 500 hectares of indigenous silver beech-dominated forest near Winton, Southland. As a relatively small landowner, there have been very limited financial resources with which to conduct this assessment. SmartWood used this opportunity to develop guidelines to be used for assessments in New Zealand.

Since then, revisions to SmartWood draft regional standards have continued to be made (three other drafts), based on public and private input from stakeholders. This version is the fourth draft and we have been able to capitalize on the “Draft National Standards for Plantation Forest Management in New Zealand, Draft 3”, being developed by an FSC standards development group in New Zealand.

In developing this Interim Standard, a number of other documents have also been reviewed and considered, including:

- “Principles and Criteria for Forest Stewardship”, January 1999;
- Three versions of the “New Zealand Indigenous Forest Management Standards”, Discussion Draft, including “Compliance Level: Forest Amendment Act Part IIIA”. “Level One Forest Stewardship Council Certification” and “Provisional Forest Stewardship Council Certification”;
- Agreements such as the New Zealand Forest Accord, Forest Act 1993 and Resource Management Act 1991; and,
- Public summaries for various FSC plantation certifications in New Zealand implemented by other FSC-accredited certifiers.

In these Interim Standards, there are situations where SmartWood distinguishes certification requirements for small and medium versus large operations. Determining the scale of an operation will occur at the beginning of an assessment or during pre-evaluation (i.e. scoping). SmartWood is exploring the most efficient and effective methods for developing explicit standards for different size operations. These Interim Standards represent one of our initial efforts to clarify such differences, depending on scale of operation.
2.5. Stakeholder consultation process and results

Issues Identified Through Stakeholder Comments and Public Meetings

The stakeholder consultation activities were organized to give participants the opportunity to provide comments according to general categories of interest based upon the assessment criteria. The table below summarizes the issues identified by the assessment team with a brief discussion of each based upon specific interview and/or public meeting comments.

Table 5. Summary of Stakeholder Comments

<table>
<thead>
<tr>
<th>FSC Principle</th>
<th>Stakeholder comments</th>
<th>Smartwood response</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI: FSC Commitment/Legal Compliance</td>
<td>District and Regional Council staff confirmed there had been problems with Waitutu operations in the past, but since the new management took control, these are no longer a concern. Regional Council has good working relationship with L&amp;D. Recognized for seeking solutions and being proactive in seeking Council advice. Regional Council does regular monitoring of operations. Recently inspected Woodlaw block with Forest Manager to decide what was needed for stream protection before logging operation commences. Company seen as being keen to comply with RMA requirements. Local Runanga RMA officer has no concerns about RMA compliance. District and Regional Councils are supportive of forest companies going for FSC certification.</td>
<td>See FSC as compliments the standards the company has to meet under RMA and MAF requirements. Keen to have a benchmark to aspire to. No comments required.</td>
</tr>
<tr>
<td>P2: Tenure &amp; Use rights and responsibilities</td>
<td>Neighbours and local walkers and deer stalkers indicated they looked on the Waitutu lands as “their” bush. Most of those who accessed the forest for recreation did not get a permit. Many did not know who the owner of the land was – some confusion as to what was Waitutu and what was DOC land. Access to forest not prohibited and controlled in any way.</td>
<td></td>
</tr>
<tr>
<td>P3: Indigenous Peoples’ rights</td>
<td>Local Runaka and Ngai Tahu policy analyst were concerned that special sites have not been identified and they feel there may be such sites present. A local archaeologist confirmed that they had not been asked to survey the area for possible sites. It is up to Waitutu Incorporation to decide to survey, however, in any event, it was stated that bush workers should be trained in using accidental discovery protocols. Many of local Runaka are beneficiaries of Waitutu. Also many go deer hunting in bush and don’t get a permit. Runaka members gathered ferns from Longwoods Block to thatch roof of whare at Runaka office in Riverton. Not aware of any other non-forest</td>
<td>Some historic sites have been identified and mapped. Not checked by archaeologist. No Maori sites identified. Prepared to consider organising course for bush workers in using accidental discovery protocols.</td>
</tr>
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</table>
products being taken from Waitutu. Collect flax from other areas.

Runaka concerned that they have no contact with company. Some attend Annual General Meeting of Waitutu Incorporation. Runaka confirmed would like to have meeting with company to talk about what’s going on and to have chance to discuss concerns. Waitutu is in blocks and different hapu (families) relate to different blocks so L&D cannot talk to only one person from the Runaka. Policy Analyst felt it was important for company to recognise the separate status of the Runaka as representing the tangatawhenua (people of the land) from that of the incorporation, which is in effect, a private business.

Some are concerned about the impact that the harvesting may be having on the environment. Some do not feel comfortable harvesting it. Concerned that logging takes out habitat, creates a bad image for Maori, may cause disharmony in the community.

Very pleased the FSC audit is happening – hope it will provide reassurance that operation is sustainable and not damaging the environment.

<table>
<thead>
<tr>
<th>P4: Community relations &amp; workers’ rights</th>
<th>The overarching opinion in stakeholders comments was the lack of consultation between L&amp;D and the community at large. Comments tended to suggest that stakeholders were unable to give a valued judgement on the forestry management issues as they had not had any information on which to base their judgements. Some stakeholders were supportive of L&amp;D, even though they had no contact with the company for several years. Three customers interviewed. Two thought company provided a good service and charge fairly. One contractor has recently experienced problems with getting company to provide level of service required. Recently had meeting with GM to discuss. No record made of discussion. Still don’t feel issue properly resolved. Would like to have more regular dialogue with company. Significant number of testimonies of the forest area being heavily used by local people for a variety of recreational pursuits including walking, deer shooting and possum trapping. Most people do not get permits. Several said they didn’t know they were supposed to and don’t know where to apply to get one. 17 employees interviewed (6 bush workers, 4 office</th>
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<tr>
<td></td>
<td>There is free public access to the forest for hunting and general recreation. DOC allocate hunting blocks, all other access free. DOC issues permits but most people don’t get them. DOC considering stopping practice because of impossibility of policing due to lack of intensity of forestry activity. GM advised that workers were given option of joining union, having collective contract or individual contracts. Employees held meeting and decided on individual contracts and no union. Individual contracts drafted, currently being negotiated. Differences in pay rates can be explained by differences in skills and tasks.</td>
</tr>
</tbody>
</table>
staff, 7 factory workers). All come from local area.

All employees confirmed that they did not want to join a union and that they were happy with their working conditions. All enjoyed working for this company – felt very supported by owners and managers.

Pay rates generally seen as being better than other forest companies provide. Some concern at factory that women employees paid less than men. Some concern about pay rates for office staff but employees seem confident about being able to negotiate an increase when contracts reviewed.

All workers felt confident that in the event of a dispute, it would be dealt with fairly by management. One recent incident of a grievance between a female and male employee. According to aggrieved party, GM handled “really well”.

H&S committee meets monthly. Workers in factory, mill and office assessed work places for hazards and drew up a list of changes required. These accepted positively by management. Workers have copy of company’s H&S Policy. Workers in general felt that workplaces a lot safer now than under previous management. OSH Forest Inspector recently inspected forest operations. Found everything in order. Several minor issues identified – quickly addressed. Considered L&D safety procedures as good as anywhere in Otago and Southland.

Management very encouraging of training. Most workers are currently undertaking modules or planning to start soon. All workplaces have first aid kits and employees trained to use it.

Ten neighbours interviewed, none have had any pro-active contact with the company. Two had recently had contact over straying cattle in the forest. Most neighbours were concerned about the process of clear-felling – because of visual impact and/or concerns about perceived damage to the environment. Other concerns raised included possibility of weed regrowth in coupes, gorse growing along boundaries, possums and deer control, the state of boundary fences, difficulty in locating the forest boundary and silt run-off from cleared areas into streams. Most did not know who to contact to voice these concerns, some did not know L&D were managing the forest and none had ever been approached by the company to discuss issues around management of forest. Almost all neighbours said they would welcome contact from the company. One thought there was going to be a public meeting to enable neighbours to discuss concerns.

Grievance procedures set out in new employment contracts

GM attends H&S meetings. Several improvements made in response to recommendations from employees.

Forestry trainer has been booked to evaluate qualifications of bush workers and work out what further training required to bring them up to uniform standard.

Company acknowledges it needs to do better in community consultation. Held off having meetings until after FSC process – in retrospect probably not a good decision. Waitutu Incorporation keen to improve consultation. GM has met with DOC and Fish & Game since taking up position 3 months ago. Company does not have a list of neighbours and other stakeholders. No public meeting planned. Company was considering contacting neighbours individually.

Forest manager undertook to visit farmer with unresolved grievance and sort out problem. He had not been aware of situation previously.

See L&D as a community business. In addition to sponsorship and donations, pay for time off for employees involved in local volunteer fire-brigade, ambulance service and Search & Rescue.
One example of unresolved grievance (prior to new management) – trees being dumped in a creek causing siltation problems and logged trees falling on fences. No responsibility taken by company. Still not fixed.

Lindsay and Dixon have good relationship in community. Seen as generous supporters of community events, a community-based company and good employers.

### P5: Benefits from the forest

Company looking at measures to add value in mill. Local furniture market is core of L&D business. Committed to maximising value.

**Precondition audit comments:**

Some stakeholders raised concerns such as increased sedimentation into streams.

**Precondition audit response:**

Company confirmed they place emphasis on local processing and adding value. At the time of the field visit the factory was processing beech timber for a theatre stage in the UK.

### P6: Environmental Impact

There was a wide gap between stakeholders with respect to indigenous forest management. Some NGOs and individuals were totally against any form of indigenous timber harvesting. The opinion was expressed that no matter what the forestry company did they would be still opposed to it in principle. Other stakeholders were philosophically opposed but thought that if harvesting were to occur it would be best regulated and achieved in a sustainable way. Other stakeholders indicated reserved support for L&D’s certification. But no matter what the stance all stakeholders indicated concern that ecological values (particularly forest structure) should be maintained.

**Precondition audit comments:**

L&D should be dedicated to identification and protection of important conservation species and their habitat.

**Precondition audit response:**

There is a dichotomy in New Zealand with respect to the use of timber. On the one hand, it is acceptable by the majority of groups that exotic species can be planted and harvested where seen fit by forestry companies as long as the relevant New Zealand acts and accords are met. On the other hand, thoughts on indigenous forestry are contentious. Some groups oppose all types of indigenous forestry no matter what safeguards are met and/or whether the laws, acts and accords of the land are met. It is important for FSC principles and criteria be adhered to and that only sustainably managed forests can gain certification. Also that the important conservation values contained within these sustainably managed forests are at least protected and where possible enhanced for the benefit of all the communities and stakeholders.

**Precondition audit response:**

Identification and protection of habitat and species are covered by several conditions. (See 3.3)

### P7: Management Plan

Due to the lack of consultation with stakeholders most had not seen a summary or copy of the management plan. Many stakeholders said they couldn’t make a comment on the forestry operation, as they had no access to the plan.

L & D have indicated that they will be making available their management plans in the future, possibly through the use of a company website. In the past they have been unable to do so due the cost and size of the documents involved. It was realised during the assessment that L & D had been remiss in providing...
<table>
<thead>
<tr>
<th>P8: Monitoring and assessment</th>
<th>Due to the lack of consultation between L&amp;D and stakeholders, the latter were in the main unable to make comments on monitoring and assessment protocols or the lack of them.</th>
<th>See comments on P7</th>
</tr>
</thead>
<tbody>
<tr>
<td>P9: Maintenance of High Conservation Value Forest</td>
<td>NGOs have indicated that the lowland forest which L&amp;D manage are HCVF and thus should not be logged at all. This was also the stance taken by some individual stakeholders. From interviews with neighbours and others, there is a significant sense of local ownership of beech forest. Seen as “their bush”. Local Runaka are sensitive to the impact of forest operations on their reputation as kaitiaki (guardians) of the land. <strong>Comments during precondition audit:</strong> Responses by stakeholders highlighted the importance of the historic and ecological values contained within the estate as well as the protection of waterways from pollution. The appropriateness of using the HCVF definitions of Jennings et al. (2002) was questioned by some stakeholders with respect to the fact that this is not an FSC endorsed guide. Additionally the FSC criteria for HCVF were also contested in some cases. Some stakeholders suggest that covenant land within Lindsay and Dixon estate should be classed as HCVF. While these covenant areas are likely to contain ecosystems and potentially species of conservation value they do not necessarily constitute HCVF. Forest and Bird suggested that the habitat of the mistletoe Peraxilla colensoi should be classed as HCVF. From their discussions, Forest and Bird has pointed out that this species is spread throughout western Southland. Additionally, while it is protected from forestry operations within DoC’s estate its abundance is declining.</td>
<td>The SmartWood assessors applied the criteria of P9 to this operation and indicated strongly to the L&amp;D management that high conservation values needed to be assessed. While the appropriateness of Jennings et al. (2002) is open for discussion, the FSC criteria on HCVF were used for the process of this audit. Lindsay and Dixon exclude these covenant areas from their operations. The declining abundance of mistletoe may be caused by introduced browsers, such as possums, which can have a critical effect on this species’ survival. SmartWood has issued conditions for the use of browser control in areas within their estate where introduced mammalian pests threaten this species and other species of conservation concern. SmartWood does not believe it is justified to classify the mistletoe habitat as HCVF.</td>
</tr>
</tbody>
</table>

* NB in the local dialect, Runaka is used instead of Runanga*
3. RESULTS, CONCLUSIONS AND RECOMMENDATIONS

3.1. General Discussion of Findings

Table 6. Summary of SmartWood Assessment Team Findings by FSC Principle

<table>
<thead>
<tr>
<th>Principle/Subject Area</th>
<th>Strengths</th>
<th>Weaknesses¹¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1: FSC Commitment and Legal Compliance</td>
<td>L&amp;D are firmly committed to FSC and comply with all New Zealand laws. Owners of the company and management expressed their commitment to FSC. L&amp;D also appeared to be following all the regulatory laws with respect to forestry. Attitude of management towards compliance. Good relationship with regulators.</td>
<td>L&amp;D did not have on-site copies of relevant legislation. L&amp;D do not exercise formal control over illegal activities and access to the forests. There was no system in place for regularly updating company access to laws and regulations. L&amp;D were unaware of their responsibilities under international agreements, such as CITES. Lack of documentation on hand to guide decisions according to regulatory requirements. Reliance on advice from regulators and consultants as to what is acceptable practice rather than having explicit procedures that reflect laws and regulatory requirements.</td>
</tr>
<tr>
<td>P2: Tenure &amp; Use Rights &amp; Responsibilities</td>
<td>Clear right to harvest the forest is identified. Good relationship with the owners of the cutting rights (Waitutu Incorporation) Willingness to allow public access to forest areas.</td>
<td>Copies of relevant documents were not held on site to verify the rights. Lack of any information as to who is using the forest at any particular time. Lack of procedures to control access in the interests of safety and prevention of illegal use.</td>
</tr>
<tr>
<td>P3 – Indigenous Peoples’ Rights</td>
<td>Over 830 indigenous people and their families (including many members of local Runaka) get financial benefit from forest through shareholding in the Incorporation. Perceived willingness to consult with local indigenous people. Good relationship with the Board of the Waitutu Incorporation.</td>
<td>Lack of policy or procedures for recognising status of local Runaka Lack of policy to meet with local Runaka to discuss proposed activities and any concerns. No procedure for identifying or protecting Maori sites of importance</td>
</tr>
</tbody>
</table>

¹¹ Weaknesses that were identified during the original assessment of August 2002, unless otherwise stated. SmartWood framed mandatory conditions to address such weaknesses and the precondition audit demonstrated considerable improvement in the intervening 14 months.
| P4: Community Relations & Workers’ Rights | L&D is recognized as being a good employer and a business with a community spirit. L&D is pro-active in promoting local employment. Good relationship with all employees. Staff have confidence in dispute management procedures. Willingness to allow for employee input into management decisions. Thoroughness of compliance with Health and Safety regulations. Strong encouragement and financial support for training at all levels. Comparatively high rates of pay for forest and factory workers. (Other sectors not compared). Generally good relationship with customers and suppliers. Seen as fair and accounts paid promptly. Seen as generous contributors to community activities both in cash and in kind. | Formal stakeholder consultation has not been carried out. No record of stakeholders. No system for communicating with stakeholders on a regular basis. Limited contact with neighbours. Management planning does not include procedures for assessing the social impacts of proposed operations [weakness addressed, see precondition compliance summary below]. |
| P5: Benefits from the Forest | L&D are only permitted to extract species and volume specified in 1.5. Emphasis on adding value to products at the local level. Emphasis on employing local people. | No record of non-timber products in the forest. No record of any uses for non-timber products. |
| P6: Environmental Impact | Substantial history of Forest Management dating back to the New Zealand Forest Service. Roading techniques instigated by the forest manager have made a vast improvement on previous construction. Oil is recycled for use in the sawmill while left over chemicals are used for weed control at the mill site. L&D are trying to develop culverts to meet the site specific requirements within the forest. | Limited monitoring has been carried out since NZFS. L&D have not developed assessment protocols that allow them to identify rare, endangered, threatened species present within their forest estate. There is also a lack of information on the indigenous ecosystems present, species composition within these areas. This leads to an inability of L&D to identify representative ecosystems within their estate and therefore they are not able to develop management plans for the protection of these ecosystems and/or key conservation species. There has been no training for staff in the correct use of chemicals within the forest. Staff have not gained the necessary qualifications for the safe handling, storing and application of chemicals. |
Staff is not trained in what to do in a fuel or chemical spill situation or who to contact if such an event occurs. Staff is not provided with materials to clean up or mitigate spills. Also there is no effective communications system in place so that managerial staff and/or appropriate authorities can be notified of a major spill.

### P7: Management Plan

| Management plan contains detail to carry out forest operations. | The management plan contains a list of procedures relevant to riparian buffer zones, coupe harvesting and tree protection. | The plan needs to be reviewed and contains prescriptions (e.g. monitoring) that are currently not carried out. The plan had not been made publicly available. |

[weakness addressed, see precondition compliance summary below]  

Not all the protocols set out in the management plan have been instigated in the field.

The management plan does not provide any protocols for the identification and protection of rare, endangered and threatened species. The management plan does not provide any protocols for the identification of areas of high conservation value.

No socio-economic context for forest operations set out in management plan.  
No procedures for stakeholder consultation  
No procedures for social impact assessment  

### P8: Monitoring & Assessment

| L&D have begun their own stream sedimentation monitoring programme and have taken over the monitoring of regeneration plots from the IFU. | Both the stream and regeneration monitoring protocols do not have enough sample plots or possess a balanced design to achieve a measurable outcome. |

There is no assessment or monitoring of the rare, threatened and endangered species and habitats present or likely to be present within their forests.

No procedures for socio-economic impact monitoring.

### P9: Maintenance of High Conservation Value Forest

| L&D have not assessed whether they have any HCV within their forests. |

[weakness addressed, see precondition compliance summary below]  

Limited acknowledgement of how to manage for values other than timber production.

| P10 - Plantations | N/A | N/A |

**Precondition compliance:**
Precondition 1: Prior to certification, there shall be an explicit protocol for identifying or recognizing potential Maori sites. In addition, there shall be a training course on accidental discovery for the bush workers to learn to identify local sites. This would be a course that would outline how to proceed in cases of accidental discovery. (Criterion 3.3)

Finding: Lindsay and Dixon had approached local Runaka, Historic Places Trust, Archaeological Society, Department of Conservation, Southland District Council and the Southland Museum and Art Gallery with regard to the presence of sites of historic, archaeological and/or cultural interest contained within their forest estate. This contact was through correspondence, phone calls, and meetings as well as during an “open field day”. Discussions had been held on the specific protocols acceptable by Tangata Whenua for the identification and protection of archaeological, waahi tapu and historic sites. Silent files/records were also discussed with the Runaka. Lindsay and Dixon have kept a record of their correspondence and meeting minutes and the audit team viewed such documentation.

As part of their discussions with local Runaka, Lindsay and Dixon requested names of suitably qualified people, acceptable to local Maori, with respect to running archaeological accidental discovery courses. From these discussions Lindsay and Dixon was able to select an appropriate expert and for this purpose, the Collections Manager of Southland Museum and Art Gallery. This person conducted a seminar on the identification and recognition of Maori sites for all of L&D’s harvesting crew during September 2003. Orakia Apirima Runaka was also approached for comments on Lindsay and Dixon’s policy for the identification and protection of historical and archaeological sites. Lindsay and Dixon adopted this policy once S. Bull of Orakia Apirima Runaka accepted it.

The Lindsay and Dixon policy outlines sites that are to be protected and such sites are to be recorded in the mapping system. Information as to the likelihood of such sites existing within their estate are collated from the records of the Historic Places Trust, Southland District Council, Archaeological Association, Department of Conservation, Tangata Whenua and the Southland Museum and Art Gallery. Within the policy it is stated that if necessary archaeologists will be engaged during harvest planning operations and/or if sites are discovered during operations. Such an approach will also be made to the Tangata Whenua.

Conclusion: Based upon the above finding the auditor finds that the:
Precondition has been fully met and closed out.

Precondition 2: Prior to certification, L&D shall develop indicators and procedures for ensuring that the social impacts of forest operations are assessed and incorporated into management planning. (Criterion 4.4)

Finding: Lindsay and Dixon contracted Gerard Fitzgerald of FAS, a sociologist and anthropologist to develop indicators and procedures for ensuring that the social impacts of forest operations are assessed and incorporated into management planning. The policy and procedures outlined by Fitzgerald and adopted by Lindsay and Dixon use flow charts to clearly define the responsibilities of management with respect to SIA. The policy and procedures also discussed how SIAs should be implemented and when. The SIA outlined a 7 step procedure for SIA starting with 1) the operation, management decision, policy intended; 2) scoping the potential social effects; 3) consultation process; 4) identifying alternatives; 5) identifying approved mitigation; 6) monitoring and 7) consents and approval process. While these procedures meet the precondition above, they have not been put into action as yet.

Conclusion: Based upon the above finding the auditor finds that the:
Precondition has been met and replaced by condition 5.

Precondition 3: Prior to certification, L&D shall undertake an assessment to determine existence of high conservation value forest (HCVF) within the area subject to certification. This assessment shall be in accordance with the six High Conservation Value criteria defining HCVF as specified by FSC, and will be undertaken in consultation with other forest users, the local office of DoC, indigenous forest researchers, environmental NGO’s, the local runaka, Historic Places Trust, neighbours and other interested parties. Any areas assessed as being HCVF shall be recorded on maps. (Criterion 9.1)

Finding: Lindsay and Dixon contracted Jan Derks of TACCRA Ltd., to assess the conservation values of their estate. The initial approach was to use the six High Conservation Value criteria defining HCVF as specified by FSC and use them in the New Zealand context. This was achieved using guidelines from Jennings et al. (2002) and applying them to the forest estate. In tandem with this assessment, Lindsay and Dixon, through TACCRA, contacted stakeholders and asked them to comment on what they considered to be HCVF within the estate. These stakeholders included the local office of the Department of Conservation, indigenous forest researchers, environmental NGO’s, the local Runaka, Historic Places Trust, neighbours and other interested parties. Of the twenty-two stakeholders contacted only eight replied to Lindsay and Dixon. A further stakeholder sent in their reply to the audit team during follow up contact.

Lindsay and Dixon’s assessment concluded that while there are areas of conservation value within their forest estate none of these areas constitute HCVF as defined by FSC criteria and as outlined by Jennings et al. (2002).

Conclusion: Based upon the above finding the auditor finds that the:
Precondition has been met and the conditions 19 and 31 have been raised.

Precondition 4: Prior to certification, L&D shall make available to the public a summary of the management plan (Criterion 7.4)

Finding: Lindsay and Dixon has made a copy of their management plan available to the public on the company website. Additionally there are copies available to the public within the company’s office in Tuatapere. Ken Atkinson suggested that through future open days, and as they update their stakeholder list, Lindsay and Dixon would be able to inform more people of the availability of these documents.

Conclusion: Based upon the above finding the auditor finds that the:
Precondition has been fully met and closed out.

3.2. Certification Decision

Based on a thorough field review, analysis and compilation of findings by this SmartWood assessment team Lindsay & Dixon Ltd. is recommended to receive joint FSC/SmartWood Forest Management and Chain of Custody (FM/COC) Certification with the stipulated conditions and based upon the successful completion of the preconditions listed above.

In order to maintain certification, Lindsay & Dixon Ltd. will be audited annually on-site and required to remain in compliance with the FSC principles and criteria as further defined by regional guidelines developed by SmartWood or the FSC. Lindsay & Dixon Ltd. will also be required to fulfil the conditions as described below. Experts from SmartWood will review continued forest management
performance and compliance with the conditions described in this report, annually during scheduled and random audits.

3.3. Conditions and Recommendations

Conditions are verifiable actions that will form part of the certification agreement that Lindsay & Dixon Ltd. will be expected to fulfil at the time of the first audit or as required in the condition. Each condition has an explicit time period for completion. Noncompliance with conditions will lead to decertification.

**Conditions**

**Condition 1:** By the end of the first year of certification, L&D shall make themselves conversant with the laws and acts, determine which articles/provisions of these apply to their management, and demonstrate this by having them accessible and well described to staff and employees. (Criterion 1.1)

**Condition 2:** By the end of the first year of certification, L&D management will collate a list of species present or likely to be present within their forests that are governed by CITES (as per the Schedules in the Trade in Endangered Species Act 1989) and make their staff aware of their obligations under this international agreement. (Criterion 1.3)

**Condition 3:** By the end of the first year of certification, L&D shall document and implement a system of control, monitoring and recording of forest access, use and harvest of non-timber forest products. L&D will liaise with the Department of Conservation to ensure, as far as practicable, that each entities’ systems are compatible. A component of this system will be a program to inform the public about what activities are unauthorised or destructive. (Criteria 1.5, 2.2)

**Condition 4:** During the period of certification, L&D shall hold regular meetings (at least annually) with the local runaka to explain their forest management regime and to discuss any concerns that the local iwi may put forward. (Criterion 3.2)

**Condition 5:** By the end of the first year of certification, L&D shall demonstrate that social impact assessment has been carried out before commencing new operations and in the management of existing operations. L&D shall be able to ensure that all affected parties who have legal or customary rights are notified and consulted prior to the commencement of new operations. (Criterion 4.4)

**Condition 6:** By the end of the first year of certification, L&D shall develop a policy on how they will conduct stakeholder consultation. (Criterion 4.4)

**Condition 7:** By the end of the third year of certification, L&D shall have procedures and monitoring protocols in place to assess damage to non-harvested forest resources. (Criterion 5.3)

**Condition 8:** By the end of the first year of certification, L&D shall develop a procedure that will specify sites for dry season logging. (Criterion 5.5)

**Condition 9:** By the end of the first year of certification, L&D shall establish riparian buffer zones based on zones of riparian influence and not an arbitrary width, including a sample of streams less than 3m with riparian buffer zones and clear prescriptions governing any permissible harvesting. (Criterion 5.5)


**Condition 10:** By the end of the third year of certification, L&D shall have planning and monitoring systems in place to collect accurate information on the area harvested, to reconcile the scaled volume harvested per coupe versus the standing volume, and to undertake a review of the annual allowable cut. (Criterion 5.6)

**Condition 11:** By the end of the third year of certification, L&D shall research and monitor the effects of using a range (within provisions of the Forests Act 1949) of coupe sizes on the forest dynamics such as age class distribution and retention of old-growth trees. (Criterion 5.6)

**Condition 12:** By the end of the second year of certification, L&D shall develop and implement a structured approach to conducting pre-operations site assessments to identify high risk areas based on rare, threatened, or endangered habitat as well as soil and/or water sensitive areas. Assessment shall take into account the retention of hole nesting habitat and mistletoe host plants such as old-growth trees, food resources such as podocarps, and soil and/or water sensitive areas. (Criterion 6.1)

**Condition 13:** By the end of the third year of certification, L&D shall have set up protocols for management of areas identified as having high conservation values as determined according to FSC-defined criteria. All identified areas will be demarcated on maps and protected in the field. Ecological assessment of sites supporting rare, threatened and endangered (RTE) plant and animal species will be undertaken and protocols for management of areas supporting important species (RTE species) will be documented and implemented. (Criterion 6.2)

**Condition 14:** By the end of the third year of certification, L&D shall have documented protocols for management of important species (RTE species) and field staff or harvesting contractors shall be trained to recognise important species such as mistletoe, kaka, bats etc. and their potential habitat, and be trained in implementation of the practical measures for their conservation. (Criterion 6.2)

**Condition 15:** By the end of the first year of certification, L&D shall implement systematic, defined procedures for the protection and retention of large old trees both on the edge of the coupe and within the coupe area. These procedures must take into account the retention of these trees over several and not single rotations. (Criterion 6.3)

**Condition 16:** By the end of the first year of certification, L&D shall document and implement podocarp species management prescriptions specific to forest types within its estate, with the aim of ensuring podocarp densities and size class structures within forest types are retained or enhanced, provided implementation of such prescriptions will not unduly restrict operations or access, render operations within a complete forest type uneconomic or take precedence over management for other values. (Criterion 6.3)

**Condition 17:** During the period of certification, continuous riparian buffers within harvesting blocks shall be designated and marked on maps for all streams at least 3 metres wide and for the selected sample of ecologically and environmentally important waterways (to be buffered) that do not meet this 3 metre wide criterion during pre-harvest compartment mapping. (Criterion 6.4)

**Condition 18:** By the end of the first year of certification, topographic maps shall be supplied to field crews that indicate areas suitable for all weather harvesting or dry weather only. These maps should also indicate the riparian areas and other areas of conservation importance. (Criterion 6.5)

**Condition 19:** By the third year of certification, L&D shall implement an integrated pest management strategy for the protection of the mistletoe *Peraxilla colensoi* within its estate. (Criterion 6.6)
Condition 20: By the end of the first year of certification, L&D staff shall be trained in the correct procedures to contain and mitigate fuel and oil spills within the forest. Equipment to carry out these procedures will be made available to crews. (Criterion 6.7)

Condition 21: By the end of the third year of certification, L&D shall develop management procedures for wilding monitoring and removal. (Criterion 6.9)

Condition 22: By the end of the first year of certification, L&D shall adhere to its plan with respect to not selecting coupe areas that would cause the coupe to straddle a permanently flowing watercourse. (Criterion 7.1)

Condition 23: By the end of the third year of certification, maps describing the species composition of protected areas and the ecosystem type shall be included in the forest management plans. (Criterion 7.1)

Condition 24: By the end of the third year of certification, the management plan shall contain management prescriptions and monitoring protocols for the protection of rare, threatened, and endangered species and habitats. (Criterion 7.1)

Condition 25: By the end of the first year of certification, L&D shall set performance standards for the activities of all contractors. Regular formal meetings will be held between L&D and contractors with matters discussed and agreements reached, recorded and filed. (Criterion 7.3)

Condition 26: By the end of the first year of certification, L&D shall develop and implement monitoring programmes to measure the effects of introduced browsers within their forests and implement pest control accordingly. (Criterion 8.1)

Condition 27: By the end of the first year of certification, L&D shall develop and implement monitoring programmes to assess the effects of forest roading and harvesting on stream water turbidity and temperature. (Criterion 8.1)

Condition 28: By the end of the third year of certification, L&D shall develop and implement monitoring programmes to assess change in key indicator species that should include, where present, species classified as rare, threatened or endangered (Criterion 8.1)

Condition 29: By the end of the first year of certification, L&D shall increase the number of regeneration plots that shall be installed per year to ensure that there is regularly measured and monitored regeneration information. (Criterion 8.2)

Condition 30: By the end of the first year of certification, L&D shall make publicly available a summary of monitoring indicators. (Criterion 8.5)

Condition 31: During the period of certification, Lindsay and Dixon shall continue their assessment of the conservation values contained within their estate to ensure that if any HCVF are discovered then the appropriate protection methods will be implemented. (Criterion 9.1)

Several nonbinding recommendations were advanced to encourage the company’s efforts towards improvement.
SmartWood Certification Annual Addendum to the Public Summary for Lindsay & Dixon Limited 2005; SW-FM/COC-1148

1. AUDIT PROCESS

1.1. Auditors and qualifications:

**Jeffrey Hawyard, Forester/Team Leader**
Mr. Hayward is Asia Pacific Regional Manager, of the Rainforest Alliance SmartWood Certification Program, based in Jakarta, Indonesia. He has conducted over 20 forest management assessments, scopings, and/or audits and over 60 chain of custody assessments and/or audits. He has conducted silviculture and ecology research for the B.C. Ministry of Forests and UBC Alex Fraser Research Forest in Canada. In Oregon State, he worked for the federal government in the U.S. Bureau of Land Management in forest inventory and timber sale administration. For three years he worked with the U.S. Peace Corps as a community forester in Guatemala, providing technical extension services to an agroforestry and conservation of natural resources program. His private forestry consulting has been for the B.C. Ministry of Forests, the FSC and IIEF. Publications include research on forest certification and forest silviculture.

**Dr. Billy Hamilton, Ecologist**
BSc Honours 1st Class (Zoology), University of Otago; PhD, University of Otago. Billy has 13 years experience in ecological work, with emphasis on animal ecology; ecology of indigenous freshwater fish; predator prey interactions; aquatic habitat assessment, management of native species within forest ecosystems, and predator control. Billy has also been involved in sustainably managing beech forest and the environmental issues surrounding harvesting SILNA (South Island Landless Natives Act) land. More recently Billy has been researching the effects of aerial 1080 poisoning on native bird species, surveying and protection of South Island robins from exotic forest practices, and aquatic and terrestrial assessment surveys for FSC certified forestry companies. Billy has served as an assessor for SmartWood’s New Zealand certification activities since 2002 and is a lead assessor. Billy has taken part in over 14 FSC assessments, audits and reviews.

1.2. Audit schedule
1.3. Sampling methodology:
After a review of company’s documents about actions taken to address conditions, and discussions with staff about current and previous operations, the auditors determined the sites to evaluate in the forest. These were structured to include sites where 0.5 hectare coupe logging had taken place in 2004 and 2005, and also where a trial in selection (single tree and small groups) had commenced in 2005. Two days of forest visits would permit inspection of active harvesting, recently completed harvesting, and forests harvested in the past two years, since the first assessment.

<table>
<thead>
<tr>
<th>FMU or Site audited</th>
<th>Rationale for selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodlaw forest</td>
<td>2004/2005 coupe logging (roading, tracks, residual stand)</td>
</tr>
<tr>
<td>Woodlaw forest</td>
<td>2004/2005 coupe logging (podocarp retention, riparian management)</td>
</tr>
<tr>
<td>Woodlaw forest</td>
<td>2004/2005 coupe logging (coupe layout, skid decommissioning, permit system)</td>
</tr>
<tr>
<td>Woodlaw forest</td>
<td>Water monitoring site</td>
</tr>
<tr>
<td>Woodlaw forest</td>
<td>Permanent Sample Plot and regeneration site</td>
</tr>
<tr>
<td>Gumboot Forest</td>
<td>2005 (post-harvest) trial selection silviculture stand (skid, track, and remnant stand conditions)</td>
</tr>
<tr>
<td>Gumboot Forest</td>
<td>2005 (post-harvest) trial selection silviculture stand (silviculture objectives, riparian management)</td>
</tr>
<tr>
<td>Gumboot Forest</td>
<td>2005 (active logging) trial selection silviculture (residual stand, track conditions)</td>
</tr>
<tr>
<td>Gumboot Forest</td>
<td>2005 (active logging) trial selection silviculture (silviculture objectives, podocarp retention)</td>
</tr>
</tbody>
</table>
1.4. Stakeholder consultation process

<table>
<thead>
<tr>
<th>Stakeholder type (NGO, government, local inhabitant etc.)</th>
<th>Number of stakeholders informed</th>
<th>Number of stakeholders consulted or providing input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Maori</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>NGO</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Neighbors</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Recreational Group</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Stakeholders were identified through the company stakeholder list and by reviewing the communications log to determine which stakeholders had interactions with the company in the past year and what the quality of those relations had been. SmartWood contacted stakeholders during the audit, but did not notify stakeholders widely in advance of the audit.

1.5. Changes to Standards (if applicable)

No changes to the standard have occurred since the last evaluation. For the conduction of this audit as well as for the conduction of previous assessment and precondition audit, the following standard was used:

*SmartWood Certification Interim Standard For Assessing Forest Management in New Zealand (Fourth Draft, February 2002)*

2. AUDIT FINDINGS AND RESULTS

2.1. Changes in the forest management of the FMO

Since the certification was awarded, Lindsay and Dixon (L & D) have initiated a trial utilizing single tree selection as the method of harvesting, which is different from the coupe logging described within the company’s sustainable forest management plan. This trial of an alternative silviculture system has only been tried at the Gumboot forest. The idea for implementation of the trial came about 14 months ago, when studies on regeneration rates within the coupe logging regime raised some questions about the long-term sustainability of coupe harvesting as the sole silvicultural treatment. The company has chosen to proceed cautiously and is exploring alternative approaches.
At present the company has contracted a forestry consultant to build up a growth model for beech and from this develop a cutting list that would guide the selection management system. While the single tree selection is still developing, the company is making improvements as it learns through the process. The first few trials of this selection process highlighted issues with the new scheme but by continually updating the data tree extraction appears less damaging. Helpful input and guidance from the MAF Indigenous Forestry Unit and Environment Southland has been received. L & D have used 120 plots within Gumboot Forest to develop their cutting list but as said above this is continually updated as more data is available. Growth models will also be developed for podocarp species once enough data on the forest structure and regeneration are collected.

There were also changes to personnel. In the past year, the General Manager Ken Atkinson resigned. The company hired Murray Mills to oversee Marketing and Sales. Forest planning, silviculture, and management was augmented by Roger May who has been providing consulting services to the company. His work has been integral to assist L & D in the further implementation and development of management systems, particularly the use of Geographic Information Systems (GIS).

In addition, there has been increased delegation of responsibility to field crews through the trial single tree selection, as the crews must make more decisions about which trees to fall or retain. Three new crew members joined the company and completed additional days of NZQA training.

The company has had some discussions with Department of Conservation concerning possible collaboration to support the recreational use and conservation of a walking track along Port’s Water Race.

2.2. Stakeholder issues

The following bullet points highlight the perspectives shared by stakeholders during the audit or characterize the general state of consultation undertaken by the company in the past year.

- Discussions with local recreational users of the forest suggests that they are in support of L & D’s access permit system and have found that the consultation process between the company and locals has been good.
- Overall, however, the permitting system for forest use has received a lukewarm response rate in terms of permits completed;
- Iwi / Runaka satisfied with periodic updates and did not express a desire for increased number or frequency of meetings.
- One local NGO representative said they would like to have more formalized and regular contact with the company.
- L&D have not informed stakeholders about alternative silviculture system and should update them, especially when the MAF/L&D have completed a more formal summary report on the trial.
- L&D have been proactive about placing advertisements in the papers and sending letters to stakeholder groups on occasions where there are impacts (such as at the time of commencing new logging plan or when asking for opinion on the permit system.)
2.3. Compliance with applicable corrective actions

The section below describes the activities of the certificate holder to address each applicable corrective action issued during previous evaluations. For each CAR a finding is presented along with a description of its current status using the following categories. Failure to meet CARs will result in noncompliances being upgraded from minor to major noncompliances with compliance required within 3 months or face suspension or termination of the SmartWood certificate. The following classification is used to indicate the status of the CAR:

<table>
<thead>
<tr>
<th>CAR Status Categories</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed</td>
<td>Certified operation has successfully met the CAR and addressed the underlying noncompliance.</td>
</tr>
<tr>
<td>Open</td>
<td>Certified operation has not met the CAR; underlying noncompliance is still present. CAR becomes a Major CAR with a 3 month deadline for compliance</td>
</tr>
</tbody>
</table>

CAR #: Condition 1  Reference Standard #: Criterion 1.1

Non-compliance:
Major ☐ Minor ☒

There was a good state of legal compliance throughout L&D operations at the time of the assessment, but while L&D had understanding of the laws applicable to their forest operations, they did not have copies of the relevant laws on site or ready access to the laws by other means, and there were no procedures in place to obtain initial copies of these laws and similarly no systems for obtaining updates of these laws when they were changed or modified.

Corrective Action Request: By the end of the first year of certification, L&D shall make themselves conversant with the laws and acts, determine which articles/provisions of these apply to their management, and demonstrate this by having them accessible and well described to staff and employees.

Timeline for Compliance: By the end of the first year of certification

Audit findings:
The company has put together a system for maintaining laws on site or their ready access, which would allow staff and workers to be current on the legal requirements for a forest manager. L&D maintain a list in the main office of the pertinent legislation, and have created two prioritizations (Code 1 and Code 2) according to the importance and utility of the legislation to forest management. The listing covers all laws and acts listed in the certification standard. In addition, the listings identify the important components of the relevant document that apply to forestry management. The list is kept on hardfile and computer file and indicates website links. The company reviewed this relevant legislation with workers.
### Relevant Statute & Regulation Reference List, dated 25 July 2004

| Status: CLOSED |  |
| Follow-up Action (if applicable): |  |

#### CAR #: Condition 2  Reference Standard #: Criterion 1.3

| Non-compliance: Major ☐ Minor ☒ | The company had not identified what species that may be present in their forests would come under the requirements of the Trade in Endangered Species Act. |
| Corrective Action Request: By the end of the first year of certification, L&D management will collate a list of species present or likely to be present within their forests that are governed by CITES (as per the Schedules in the Trade in Endangered Species Act 1989) and make their staff aware of their obligations under this international agreement. |
| Timeline for Compliance: By the end of the first year of certification |  |

#### Audit findings:

Work was begun on this by consultants soon after the certification. A trade in endangered species list has been devised by Roger May for L & D. This list covers both species that are likely to be present within the forest estate and those species whose presence can not be ruled out but are unlikely. Information with regards to CITES has been passed on to relevant staff through meetings.

Status: CLOSED

Follow-up Action (if applicable):  |

#### CAR #: Condition 3  Reference Standard #: Criteria 1.5, 2.2

| Non-compliance: Major ☐ Minor ☒ | L&D’s policy is not well formalized. L&D have a stated policy that provides open access to all of their forests. Formal inspections of the forest units to identify illegal harvesting, settlement or other unauthorized activities do not take place. |
| Corrective Action Request: By the end of the first year of certification, L&D shall document and implement a system of control, monitoring and recording of forest access, use and harvest of non-timber forest products. L&D will liaise with the Department of Conservation to ensure, as far as practicable, that each entity’s systems are compatible. A component of this system will be a program to inform the public about what activities are unauthorized or destructive. |
| Timeline for Compliance: By the end of the first year of certification |  |

#### Audit findings:

L & D announced their new forest access permit system in the Southland Times newspaper during November 2004. This announcement asked forest users with plans to access L & D forests to complete a permit with the company before forest use. L & D had printed permit books to record several different non-destructive forest uses. In addition to the newspaper announcement, L & D sent out letters to stakeholder groups as well as holding discussions with some of them. The company ran the advertisement 3 times to make people aware of the new permit system.

Response to the announcements of the permit system has been low, and only 8 permits were issued. These permits were mainly relating to hunting access. (3 or 4 of the permits were from the company’s own crew.) The auditors contacted a stakeholder that has in the past used the forest for recreation. Discussions with this stakeholder, a member of the Deerstalkers Association, indicated that L & D had kept them fully informed of the new permit system. The stakeholder was fully supportive of the L & D
action and has found the company to be very approachable on this and other issues.

There is still some amount of unauthorized firewood collection by local people. L & D forester managers monitor the forests to see what extent of damage is occurring by firewood collection. L & D staff talked to individuals who were in the forest without the required access permit, but have not gone any further to report actions to authorities. When these individuals are encountered then it goes into the company communications log. Under their new system for control, monitoring, and recording forest access, L & D say that they will report illegal activity to the appropriate authorities.

While locked gates could solve some of the problems, this action would likely upset those who only want to use the forest in a benign manner. It is the attitude, generally held, of the people that they have the right of access in these forests. Therefore, L & D have found it difficult to fully control forest access, but have responded by putting in place their permit system.

√ DOC>Advertisement in Southland Times Newspaper, dated 19 January 2005
√ DOC>Permit Book

Status: CLOSED
Follow-up Action (if applicable):
OBS: L & D should make a more frequent effort to promote the permitting system. L & D should use additional signage at office, more promotion of the system, and use shorter, cleaner advertisements. L & D should investigate the effectiveness of locked gates for controlling illegal activities within their forests.

CAR #: **Condition 4**  Reference Standard #: Criterion 3.2

Non-compliance: Major [ ] Minor [x]
L&D have not met with the local Runaka to discuss their operations and any concerns these representatives of the local iwi might have about the management of the forests.

Corrective Action Request: During the period of certification, L&D shall hold regular meetings (at least annually) with the local runaka to explain their forest management regime and to discuss any concerns that the local iwi may put forward.

Timeline for Compliance: During the period of certification

Audit findings:
Emails in the communication log indicate that L&D has been initiating contact with the local Runaka representative. An invitation for meeting from L&D has not been followed up with by the local Runaka. L&D has been maintaining the communication through periodic updates. The audit team would observe that it seems the local runaka would like to keep interactions with the company less formal and that it is fine for the runaka) to contact L & D when they think necessary.

Most recently, meetings have taken place with DOC and local Runaka from Riverton regarding the collaboration to maintain and improve the Port’s Water Race to improve it as a short working track.

√ DOC>Letters to/from Lindsay & Dixon and Department of Conservation.

Status: CLOSED
Follow-up Action (if applicable):
### CAR #: Condition 5

<table>
<thead>
<tr>
<th>Non-compliance:</th>
<th>L&amp;D do not currently have a list of individuals, groups and organisations who would be stakeholders, however they do have maps which have all the neighbors located on them.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major □ Minor ☒</td>
<td></td>
</tr>
</tbody>
</table>

Corrective Action Request: By the end of the first year of certification, L&D shall demonstrate that social impact assessment has been carried out before commencing new operations and in the management of existing operations. L&D shall be able to ensure that all affected parties who have legal or customary rights are notified and consulted prior to the commencement of new operations.

Timeline for Compliance: By the end of the first year of certification

Audit findings:

L & D developed a policy and procedures for assessing social impacts of forestry. That was done in March 2005. The policy calls for all archaeological and waahi tapu sites and historic places to be protected, mapped, and systematically considered in operational planning. Procedures are in place for what to do in case a possible site is identified during forestry operations. Staff is to be trained in field recognition and procedures in case of accidental discovery. In the company Geographic Information System (GIS) such special sites are mapped. Most of these are historic water races, tram lines, sawmill sites. The company has identified the key resource people to turn to in terms of archaeological sites. Relevant contact persons within the Runaka/iwi are listed in the policy.

The company developed a social impact register about 1 month before the annual audit. The company has an electronic database, which has been updated and is now part of an electronic filing system that is in use. L & D have made more formal and systematic what was not formalized in the past. They have updated their list of stakeholders.

- √ DOC> Policy and procedures for assessing the social impacts of forest management and key management decisions. Dated 10 March 2005
- √ DOC> Policy and procedures for archaeological sites. Dated 18 July 2005

Status: CLOSED

Follow-up Action (if applicable):

### CAR #: Condition 6

<table>
<thead>
<tr>
<th>Non-compliance:</th>
<th>There is not a planned process for consultation, documented in the management plan or manuals.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major □ Minor ☒</td>
<td></td>
</tr>
</tbody>
</table>

Corrective Action Request: By the end of the first year of certification, L&D shall develop a policy on how they will conduct stakeholder consultation.

Timeline for Compliance: By the end of the first year of certification

Audit findings:

L&D prepared a policy for stakeholder consultation quite recently. Letters to be sent prior to operations in the 2004/2005 annual logging plan were sent to stakeholders on November 9, 2004. Stakeholder communications and record of follow up are in the communication log. The date of the mail out was a few weeks after the company received approval from the MAF for the annual logging plan.

- √ DOC> Policy for stakeholder consultation. Dated 19 July 2005

Status: CLOSED
Follow-up Action (if applicable):
OBS: L&D should send out stakeholder letters as soon as the annual logging plan is approved.

<table>
<thead>
<tr>
<th>CAR #: Condition 8</th>
<th>Reference Standard #: Criterion 5.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-compliance:</td>
<td>Track construction and harvesting, especially in the wet seasons, is still leading to sedimentation events, therefore a higher level of riparian zone protection is important.</td>
</tr>
<tr>
<td>Major ☐ Minor ☒</td>
<td>Corrective Action Request: By the end of the first year of certification, L&amp;D shall develop a procedure that will specify sites for dry season logging.</td>
</tr>
<tr>
<td>Timeline for Compliance: By the end of the first year of certification</td>
<td></td>
</tr>
</tbody>
</table>

Audit findings:
L & D have developed a procedure for harvesting during wet weather. These fall within the company procedures document for earthworks planning, formation construction, and for optimizing conditions for track building and extraction. This was signed off prior to the audit. The procedure identifies key planning contingencies, such as delineation of the annual harvesting areas; location and design of forest roads; timing of forest construction; suspension of extracting operations; and, adherence to guidelines to limit soil and water impacts.

Specification of sites for dry season logging has not been done as written in the condition. Rather, the procedures for optimizing the conditions for tracking and timber extraction are designed to guide the decision making for the forest operations manager or field crews to select sites that will reduce logging impacts when weather conditions are wet. Given that weather patterns in Southland can change rapidly, daily, and that wet weather can happen in the dry or wet season, this is observed to be a more flexible approach. The procedure indicates that the company planning and mapping of extraction areas will be done with sufficient advanced action prior to field operations, so that there is two weeks forward harvesting activity available at any one time. This would permit crews to move from sites that are most susceptible to soil damage to those that have less likely hazard. The forest operations manager will monitor weather conditions and forecasts on a daily basis and advise crews of changes to tracking or extraction. The crews may be asked to move within a cutting area to more favorable tracks or skids, or to move to some other cutting areas, which would have less impact. The crews may also be asked to postpone an activity, such as hauling, until the weather settles and tracks are dry enough for extraction. L&D states that a “reserve of roadside coupes, felling sites with short haul distances, or ridge-top coupes and tracks for such situations”.

In practice, either the forest operations manager or the area supervisor make decisions for the crews to move machinery to another part of a tress selection area, or to start a new one or to otherwise stop tracking or extraction activities that would cause undue disturbance. The audit team views this as a common sense approach. It was verified through field discussions with crews and witnessed in the audit that teams change activities or curtail them based on the weather conditions.

√ DOC>Procedures and guidelines for earthworks and extraction. 18 July 2005

Status: CLOSED.

Follow-up Action (if applicable):
<table>
<thead>
<tr>
<th>CAR #: <strong>Condition 9</strong></th>
<th>Reference Standard #: Criterion 5.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-compliance:</td>
<td>Riparian buffer widths were being selected more on the size of the stream than the actual extent of the riparian area. During a field visit it was found that tracks had been run through a ‘wet’ area in close proximity to a flowing stream. This ‘wet’ area was part of the streams riparian zone and should have been buffered from track operations.</td>
</tr>
<tr>
<td>Major □ Minor ✗</td>
<td>Corrective Action Request: By the end of the first year of certification, L&amp;D shall establish riparian buffer zones based on zones of riparian influence and not an arbitrary width, including a sample of streams less than 3m with riparian buffer zones and clear prescriptions governing any permissible harvesting.</td>
</tr>
<tr>
<td>Timeline for Compliance:</td>
<td>By the end of the first year of certification</td>
</tr>
</tbody>
</table>

**Audit findings:**
The initial response by L & D to respond to the condition was to implement two levels of buffer zone classification. In addition to 20m buffers on either side of streams over 3 metres the company applied 2m buffers either side of a selection of streams less than 3 metres.

L & D identified some 19 streams < 3 metres wide and provided 2 metre buffer zones. There were 7 stream areas within the estate greater than 3 metres wide and these have 20 metre riparian buffers. No operations occur within the riparian buffer zones.

Company riparian policies had been further revised. While the 20 metre Conservation Buffers either side of streams over 3 metres were retained, the 2 metre buffer idea has been discarded. It was replaced by an approach that identified and mapped Riparian Zones of Influence (RZI) using a hydrological modeling tool based on a digital terrain model (DTM) on the company’s GIS. The procedures exclude harvesting from the Conservation Buffers but permit reduced levels of harvesting within identified RZIs. Machinery use would be limited or prohibited in such areas.

Field inspection found that there were 2 metre buffer zones on streams < 3 metres wide and in fact most buffers were of greater size than that minimum. The audit team viewed the specified buffer zone widths of 2 metres as insufficient to provide any protection to riparian areas and aquatic ecosystem, and future audits will evaluate the continuing implementation of the new system to designate RZIs in the forest.

**Status:** CLOSED

**Follow-up Action (if applicable):**
OBS: The company should set a minimum buffer size accordingly for RZIs identified and demarcated in the forest that is realistic, practical, and serves a protective function for the stream.

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<table>
<thead>
<tr>
<th>CAR #: <strong>Condition 15</strong></th>
<th>Reference Standard #: Criterion 6.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-compliance:</td>
<td>Under the coupe harvesting regime, all trees, except for trees on the perimeter, were being removed. This suggested that eventually all large old trees will disappear. These large old trees are important habitats for native bird and bat species as well as provide habitat for native mistletoe species.</td>
</tr>
<tr>
<td>Major □ Minor ✗</td>
<td>Corrective Action Request: By the end of the first year of certification, L&amp;D shall implement systematic, defined procedures for the protection and retention of large old trees both on the edge of the coupe and within the coupe area. These procedures must take into account the retention of these trees over several and not single rotations.</td>
</tr>
<tr>
<td>Timeline for Compliance:</td>
<td>By the end of the first year of certification</td>
</tr>
</tbody>
</table>
Audit findings:
L & D have begun a trial using a different tree selection methodology that potentially will provide further protection to large old trees than the original coupe logging protocols. Within this system a cutting list is being developed that allows for the retention of a percentage of old growth trees of merchantable quality per hectare. L & D are continually upgrading this cutting list as field data is received. The cutting list will be revised as data from regeneration plots is amalgamated to fit an inverse-“J” curve growth model.

During the audit, field assessment of areas harvested under the old coupe logging scheme has shown that large old trees have been left in the forest where they were not viewed as a safety hazard. In Woodlaw forest, for example, some of the large old trees have had their overhanging branches removed to reduce the safety hazard while the trees have been retained for habitat. Under the old harvesting scheme 8 trees > 60 cm were retained per hectare. The new cutting list preserves stems and volume in all diameter classes, including the largest.

Status: CLOSED

Follow-up Action (if applicable):

<table>
<thead>
<tr>
<th>CAR #: Condition</th>
<th>Reference Standard #: Criterion 6.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Non-compliance:</td>
<td>The podocarp selection procedure was based upon the position of the podocarps, i.e. those within the coupe would be felled while those on the edge may be left. Selection was also based on the number of podocarps present within a coupe area. Where there are few podocarps, then it is more likely they will be felled thus potentially changing the structure of the forest. In addition the definition of a “few” podocarps was not definitive.</td>
</tr>
<tr>
<td>Major □ Minor ✗</td>
<td></td>
</tr>
</tbody>
</table>

Corrective Action Request: By the end of the first year of certification, L&D shall document and implement podocarp species management prescriptions specific to forest types within its estate, with the aim of ensuring podocarp densities and size class structures within forest types are retained or enhanced, provided implementation of such prescriptions will not unduly restrict operations or access, render operations within a complete forest type uneconomic or take precedence over management for other values.

Timeline for Compliance: By the end of the first year of certification.

Audit findings:
The management of podocarp species has been incorporated into the “Silviculture Policy” and tree selection procedure. As yet a cutting list has not been formulated because the data on the forest structure with regards to podocarps is unknown. Therefore, the company does not harvest podocarps unless they are removed as part of road lining, track construction or damaged through other harvesting operations, or when they represent a safety concern. As sufficient data is acquired, the company will develop a cutting list and model for podocarps.

Status: CLOSED

Follow-up Action (if applicable):
OBS: L & D should advance the development of a cutting list and model for the harvesting rules concerning podocarps.
### CAR #: **Condition 17**  
Reference Standard #: Criterion 6.4

**Non-compliance:**  
- **Major ☒ Minor ☐**  

Riparian areas were previously only marked on maps where harvesting had occurred. Thus with the coupe selection procedure it was possible that harvesting areas could be situated along streams and straddling them. Mapping should have been prepared in advance showing the waterways and their riparian zones. Harvesting maps could then be developed from these and riparian zones avoided.

**Corrective Action Request:** During the period of certification, continuous riparian buffers within harvesting blocks shall be designated and marked on maps for all streams at least 3 metres wide and for the selected sample of ecologically and environmentally important waterways (to be buffered) that do not meet this 3 metre wide criterion during pre-harvest compartment mapping.

**Timeline for Compliance:** During the period of certification

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**Audit findings:**
As described in Condition 9 above L & D have identified 7 lengths of stream where the stream is > 3 m wide. These stream areas have been indicated on maps and a riparian buffer zone of 20 metres installed. In addition, L & D have set aside 19 streams < 3 m and given them a 2 m buffer. These buffers are all marked on maps. During field visits, it was observed that some of the smaller streams had buffer zones greater than 2 meters, which is commendable. It is the opinion of the auditors that a 2 m buffer is insufficient to provide any real protection to stream characteristics/values such as temperature regulation, filtering sediment load, in stream habitat provision and bank stability. Therefore, it is observed that these 2 metre buffer zones should be made wider by the company.

**Status:** CLOSED

**Follow-up Action (if applicable):**
OBS: The company should finalize the RZI protocols for identification and demarcation of streams.

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### CAR #: **Condition 18**  
Reference Standard #: Criterion 6.5

**Non-compliance:**  
- **Major ☒ Minor ☐**  

Logging crews are given verbal instructions rather than written instructions. Given the high level of supervision provided by the forest manager this approach seems to be adequate but it does have its risks and there is potential for misunderstanding.

**Corrective Action Request:** By the end of the first year of certification, topographic maps shall be supplied to field crews that indicate areas suitable for all weather harvesting or dry weather only. These maps should also indicate the riparian areas and other areas of conservation importance.

**Timeline for Compliance:** By the end of the first year of certification

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**Audit findings:**
Procedures are written down for tracking and timber extraction in the event of rain. As situation change on a daily basis, mapping seasonal logging sites would not be the best approach to respond to changing conditions. Rather, daily decisions by harvesting crews and/or forest management assessing the situation and allowing temporary moves from site to site meets the requirements under this condition.

Topographic maps are provided to crews. Maps are laminated at 1:6,000 – 10,000 scale. Block outlines are overlaid onto an aerial photograph image. These maps do not indicate the areas suitable for all weather or dry weather-only logging. These decisions are still made by the forest operations manager or supervisor at the harvesting site. As described above (Conditions 9 & 17) riparian buffer zones have
been identified and are being amalgamated into maps. Auditors checked and sighted copy of the map with the field crews at the active logging site.

Status: CLOSED
Follow-up Action (if applicable):

CAR #: Condition 20
Reference Standard #: Criterion 6.7

Non-compliance: Major [ ] Minor [x]
During field visits it was found that bush crews had no set procedures in place for the containment of fuel or oil spills or any equipment to contain such spills. In addition the crews were not sure of whom to contact in the case of a major spill and because of the lack of reliable communication equipment they may not be.

Corrective Action Request: By the end of the first year of certification, L&D staff shall be trained in the correct procedures to contain and mitigate fuel and oil spills within the forest. Equipment to carry out these procedures will be made available to crews.

Timeline for Compliance: By the end of the first year of certification

Audit findings:
It was found during the audit that spill kits had not been supplied to staff working on site. Staff interviewed were not always aware of how to contain such spills neither had they been trained in the correct procedures to mitigate fuel and oil spills. Thus, at the time of the field evaluation, this condition had not been met. Discussion with L & D management about the lack of compliance to this condition showed that there had been some confusion into what was required to close out the non-conformity. The company did try to get answers on how to contain a spill from there 1,200 litre fuel tank. They spoke to Environment Southland and the fuel companies, but couldn’t get advice or manuals to address the matter.

In the weeks after the field audit, and confirmed by the auditors in early September 2005, L & D purchased spill kits for their bush crew and provided training for their crews. This training is part of L & D’s “Procedures for Avoiding & Dealing with Fuel and Oil Spills”. This procedure outlines what a major and minor spill is, who to contact with regards to a spill, when contact should be made and how spills should be contained. This new procedure meets all the requirements under this condition.

Status: CLOSED
Follow-up Action (if applicable):

CAR #: Condition 22
Reference Standard #: Criterion 7.1

Non-compliance: Major [ ] Minor [x]
Some prescriptions outlined in the plan had not been adhered to. Specifically, in section B3, it is stated that coupes should not straddle permanently flowing streams. During field visits it was found that harvesting had straddled permanently flowing streams.

Corrective Action Request: By the end of the first year of certification, L&D shall adhere to its plan with respect to not selecting coupe areas that would cause the coupe to straddle a permanently flowing watercourse.

Timeline for Compliance: By the end of the first year of certification

Audit findings:
In the coupes that were evaluated from the last year’s logging, in the Woodlaw forest, there was no
evidence of coupes that were straddling permanently flowing streams without the required buffer in place. There were small streams, 1 meter or less, that were flowing in the wet season but would likely not flow in the dry season. Even these streams, where observed, had residual vegetation left along the water course. No evidence of machinery operations up to, or through, such streams was observed. The company is paying more attention to the protection of water courses.

Status: CLOSED
Follow-up Action (if applicable):

<table>
<thead>
<tr>
<th>CAR #:</th>
<th>Reference Standard #: Criterion 7.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition 25</td>
<td></td>
</tr>
<tr>
<td>Non-compliance: Major □ Minor ☒</td>
<td>Regular meetings are not held with contractors, so it is not conclusive that forest workers are familiar with, have been trained in, or getting the necessary supervision to implement the management plan.</td>
</tr>
<tr>
<td>Corrective Action Request: By the end of the first year of certification, L&amp;D shall set performance standards for the activities of all contractors. Regular formal meetings will be held between L&amp;D and contractors with matters discussed and agreements reached, recorded and filed.</td>
<td></td>
</tr>
<tr>
<td>Timeline for Compliance: By the end of the first year of certification</td>
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</tbody>
</table>

Audit findings:
Performance guidelines for contractors were developed in November 2004. The documented procedures were an effort to formalize and clarify the expectations, many of which may have existed already, for the contractor and crews who work for Lindsay and Dixon on a regular, daily basis. The intent of the procedures for the company was to ‘raise and standardize the level of safety throughout the forests and operational sites managed by L&D.’ Such policy was to complement existing rules and regulations.

Meetings were held between L&D and the contractor D.T. Kings. In these meetings, they talk about general issues and safety. The performance guidelines document was signed in November 2004 and then a revision was signed in August 2005 by General Manager Paul Balneaves. The companies are signing this protocol on an annual basis.

√ DOC>Performance guidelines and standards for transport contractors working in L&D forest estate, sawmill, and processing sites.

Status: CLOSED.
Follow-up Action (if applicable):

<table>
<thead>
<tr>
<th>CAR #:</th>
<th>Reference Standard #: Criterion 8.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition 26</td>
<td></td>
</tr>
<tr>
<td>Non-compliance: Major □ Minor ☒</td>
<td>L &amp; D were unaware of the number of introduced mammalian pest present and did not have a monitoring programme in place.</td>
</tr>
<tr>
<td>Corrective Action Request: By the end of the first year of certification, L&amp;D shall develop and implement monitoring programmes to measure the effects of introduced browsers within their forests and implement pest control accordingly.</td>
<td></td>
</tr>
<tr>
<td>Timeline for Compliance: By the end of the first year of certification</td>
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</tbody>
</table>

Audit findings:
L & D are developing a browser monitoring and control programme in line with this condition, but it has not been implemented. At present L & D are investigating the use of transect line sampling within a Tree Selection Area (TSA) to estimate and index browser damage. L & D are trialing browser damage
sampling within their PSPs as part of their pest monitoring programmes.

While robust data has not yet been collected it was felt by the audit team that L & D had made a significant step in trying to develop applicable monitoring strategies. It was deemed acceptable that L & D select a monitoring programme that meets their particular forests and forest management systems than to rush to implement an inadequate approach to meet the condition.

Therefore it was decided to close off this condition and issue a new CAR with respect to the selection and implementation of a browser monitoring strategy.

Status: **CLOSED**

Follow-up Action (if applicable):
**CAR 1/05:** L & D shall select the pest monitoring strategy to implement and measure the effects of introduced browsers within their forests. Results shall be available to SmartWood by the compliance date. Where necessary, L & D shall implement appropriate pest control.

<table>
<thead>
<tr>
<th>CAR #: <strong>Condition 27</strong></th>
<th>Reference Standard #: Criterion 8.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-compliance:</td>
<td>No direct monitoring of the aquatic environment was taking place to measure the extent of sedimentation from tracks and roading.</td>
</tr>
<tr>
<td>Major □ Minor ☒</td>
<td></td>
</tr>
</tbody>
</table>

Corrective Action Request: By the end of the first year of certification, L&D shall develop and implement monitoring programmes to assess the effects of forest roading and harvesting on stream water turbidity and temperature.

Timeline for Compliance: By the end of the first year of certification

Audit findings:
L & D have implanted a programme for monitoring the effects of forest operations on the stream environment. At present this programme involves 9 sites with quarterly samples being taken at all 9 sites within their estate. These water samples are sent to an independent body for analysis. Results of the water sample data are recorded in a spreadsheet and will eventually be amalgamated into L & D’s GIS. This amalgamation has already occurred for stream sample data from the Gumboot block (where there was active harvesting at the time of the audit).

Status: **CLOSED**

Follow-up Action (if applicable):
OBS: Company should increase water monitoring on areas where more intensive harvesting activities are planned.

<table>
<thead>
<tr>
<th>CAR #: <strong>Condition 29</strong></th>
<th>Reference Standard #: Criterion 8.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-compliance:</td>
<td>There is limited information supporting documented evidence pertaining to the quantity or quality of regeneration. The procedures for monitoring regeneration as documented in the plan need to be implemented and systematic measurements overtime need to be recorded in order to verify that regeneration has occurred. MAF may be used as a resource, but L&amp;D should take responsibility for installing and measuring regeneration plots.</td>
</tr>
<tr>
<td>Major □ Minor ☒</td>
<td></td>
</tr>
</tbody>
</table>

Corrective Action Request: By the end of the first year of certification, L&D shall increase the number of regeneration plots that shall be installed per year to ensure that there is regularly measured and monitored regeneration information
Audit findings:
L&D has a plan in place for the increase in number of regeneration plots. These are to be regularly measured and monitored. MAF IFU has done some work on regeneration in the forest in the past year. Jan Derks, a private consultant, did some of this under contract to MAF. As the silvicultural system is under change, so should the system for measuring regeneration, and so there was limited implementation to date. The company wants to ensure the system is robust and efficient, and fits the coupe logging or selection management logging the company will undertake. The company expects to have the system upgraded and improved very soon.

Status: CLOSED

Follow-up Action (if applicable):
CAR 2/05: The completion of the regeneration methodology shall be submitted to SmartWood in six months. Evidence of implementation evaluated at the audit 2006.

CAR #: 30
Reference Standard #: Criterion 8.5
Non-compliance: A public summary of monitoring indicators was not available.
Major ☐ Minor ☒
Corrective Action Request: By the end of the first year of certification, L&D shall make publicly available a summary of monitoring indicators

Timeline for Compliance: By the end of the first year of certification

Audit findings:
At the time of the audit, there were not any monitoring indicators available on the company website. Nor was there information on what monitoring was taking place or how the public could access such indicators if they wanted to review them.

In the time after the field audit, confirmed by October 15, 2005, the company did address this condition by preparing a list of the indicators that would be monitored and stating that any member of the public could receive key summaries by contacting the company. In the future, the company intends to make all of the summaries for the following indicators available on the website:

✓ Stakeholder Consultation
✓ Annual Harvest Volume Records
✓ Management of Rare, Threatened or Endangered Species
✓ Natural Regeneration
✓ Public use of Lindsay & Dixon Forest Estate
✓ Harvest of Non-timber Forest Products from Lindsay & Dixon Estate
✓ Riparian Management & Stream Monitoring
✓ Management of Introduced Pests
✓ Silviculture Processes
✓ Best Management Practices

Status: CLOSED

Follow-up Action (if applicable):
OBS: The Company should put the key summaries for the stated monitoring indicators on their website.
<table>
<thead>
<tr>
<th>CAR #:</th>
<th>Reference Standard #: Criterion 9.1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Condition 31</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Non-compliance:**

| Major | Minor |  |

At the time of the original assessment, L & D had not assessed their forests with respect to presence of high conservation values. They were unaware whether the Rowallan or Longwoods forests should be defined as High Conservation Value Forests, and SmartWood issued a pre-condition. After close out of the pre-condition, the auditors imposed a condition to ensure that L & D continued to identify HCVF.

**Corrective Action Request:** During the period of certification, Lindsay and Dixon shall continue their assessment of the conservation values contained within their estate to ensure that if any HCVF are discovered then the appropriate protection methods will be implemented.

**Timeline for Compliance:** During the period of certification

**Audit findings:**

L & D met the requirements to assess HCVF in the pre-condition audit. No HCVF was identified, albeit there are areas of conservation value which are protected in the forest. The auditors opinion is that the company compliance to management and monitoring of RTE species will address any concerns identified in the previous pre-condition audit.

It is recommended that this condition be closed and not kept open for the “period of certification”.

**Status:** CLOSED

**Follow-up Action (if applicable):**
## 2.4. New corrective actions issued as a result of this audit

<table>
<thead>
<tr>
<th>CAR #: 1/05</th>
<th>Reference Standard #: 8.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-compliance:</td>
<td>While L &amp; D are investigating different methods for pest monitoring and pest control these strategies have not been begun at present. Therefore, there is no formalised pest monitoring or control occurring in L &amp; D’s forest estate.</td>
</tr>
<tr>
<td>Major □ Minor ☒</td>
<td></td>
</tr>
<tr>
<td>Corrective Action Request:</td>
<td>L &amp; D shall select the pest monitoring strategy to implement and measure the effects of introduced browsers within their forests. Results shall be available to SmartWood by the compliance date. Where necessary, L &amp; D shall implement appropriate pest control.</td>
</tr>
<tr>
<td>Timeline for Compliance: Six months</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAR #: 2/05</th>
<th>Reference Standard #: 8.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-compliance:</td>
<td>The system for measuring regeneration had not been fully completed and there was limited implementation.</td>
</tr>
<tr>
<td>Major □ Minor ☒</td>
<td></td>
</tr>
<tr>
<td>Corrective Action Request:</td>
<td>The completion of the regeneration methodology shall be submitted to SmartWood in six months. Evidence of implementation evaluated at the audit 2006.</td>
</tr>
<tr>
<td>Timeline for Compliance: Six months</td>
<td></td>
</tr>
</tbody>
</table>
2.5. Audit observations

<table>
<thead>
<tr>
<th>Observation</th>
<th>Reference Standard #</th>
</tr>
</thead>
<tbody>
<tr>
<td>L &amp; D should make a more frequent effort to promote the permitting system. L &amp; D should use additional signage at office, more promotion of the system, and use shorter, cleaner advertisements.</td>
<td>Criteria 1.5, 2.2</td>
</tr>
<tr>
<td>L &amp; D should investigate the effectiveness of locked gates for controlling illegal activities within their forests.</td>
<td></td>
</tr>
<tr>
<td>L &amp; D should report all illegal activity to the appropriate authorities and keep a record of these interactions.</td>
<td>Criteria 1.5, 2.2</td>
</tr>
<tr>
<td>L &amp; D should consider testing alternative machinery options to the 20-tonne digger for selective harvesting to reduce ground impacts.</td>
<td>Criteria 5.3</td>
</tr>
<tr>
<td>L &amp; D should advance the development of a cutting list and model for the harvesting rules concerning podocarps.</td>
<td></td>
</tr>
<tr>
<td>L &amp; D should extend the widths of their riparian buffer zones for streams &lt; 3 metres wide. L &amp; D should set a minimum buffer size that is realistic, practical, and serves to give adequate protection to the aquatic environment.</td>
<td>Criteria 5.5, 6.4</td>
</tr>
<tr>
<td>L &amp; D should finalize the protocol for categorization of stream selection for those small streams (&lt;3 m) that should receive a buffer.</td>
<td>Criteria 5.5, 6.4</td>
</tr>
<tr>
<td>Within the forest act, Silver beech must be logged in coupes. As per the company SFM plan, the silviculture system described is for coupes. L &amp; D should obtain clear guidance from the MAF on what they must do to modify or revise the SFM plan to include the logging of silver beech in a selection system.</td>
<td>Criteria 7.1, 7.2</td>
</tr>
<tr>
<td>L &amp; D should develop tree selection criteria for single tree selection management system that includes tree form, health, and vigor as determinants for selection or retention.</td>
<td>Criteria 7.1</td>
</tr>
<tr>
<td>Stream monitoring results should be presented in a coherent way that allows comparison within and between streams. Therefore the data needs to be interpreted.</td>
<td>Criteria 8.1, 8.2</td>
</tr>
<tr>
<td>L &amp; D should increase water monitoring on areas where more intensive harvesting activities are planned.</td>
<td>Criteria 8.2</td>
</tr>
<tr>
<td>L &amp; D should put the key summaries for the stated monitoring indicators on their website.</td>
<td>Criteria 8.5</td>
</tr>
</tbody>
</table>

2.6. Audit decision

This audit was conducted for the purpose of determining whether Lindsay and Dixon’s management of forests continues to meet the SmartWood/FSC standards for responsible forestry and continue to qualify them as a certified Forest Manager. The auditors have found that L & D are complying with SmartWood and FSC requirements for certification and should continue to be certified, contingent upon the company’s compliance and attention to the Corrective Action Requests issued in this report and to any existing conditions within their original certification agreement.
## APPENDIX I: List of visited sites

<table>
<thead>
<tr>
<th>District or FMU</th>
<th>Compart ment</th>
<th>Sub-compartment</th>
<th>Auditors</th>
<th>Site description / Audit focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longwoods Forest</td>
<td>Woodlaw</td>
<td>Patterson Rd.</td>
<td>Hayward/Hamilton</td>
<td>Main forest company office. Document review, community relations and stakeholder interactions, COC and documented procedures.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Woodlaw</td>
<td>Patterson Rd.</td>
<td>Hayward/Hamilton</td>
<td>2004/05 Coupe harvest area. Stream area straddled by coupe. Riparian zone, retention of podocarps.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Woodlaw</td>
<td>Patterson Rd.</td>
<td>Hayward/Hamilton</td>
<td>2004/05 Coupe harvest area. Timber utilization and waste reduction.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Woodlaw</td>
<td>Patterson Rd.</td>
<td>Hayward/Hamilton</td>
<td>2004/05 Coupe harvest area. Old growth tree retention.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Woodlaw</td>
<td>Patterson Rd.</td>
<td>Hayward/Hamilton</td>
<td>2004/05 Coupe harvest area. Designated stream with 2 m buffer.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Woodlaw</td>
<td>Patterson Rd.</td>
<td>Hamilton</td>
<td>2004/05 Water monitoring site.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Woodlaw</td>
<td>Patterson Rd.</td>
<td>Hayward/Hamilton</td>
<td>2004/05 PSP site.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Gumboot</td>
<td>G1a</td>
<td>Hayward/Hamilton</td>
<td>2005 Single tree selection harvest area. Skid site, stream crossing.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Gumboot</td>
<td>G1b</td>
<td>Hayward/Hamilton</td>
<td>2005 Single tree selection harvest area. Old habitat trees retained.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Gumboot</td>
<td>G1c &amp; d</td>
<td>Hayward/Hamilton</td>
<td>2005 Single tree selection harvest area. Trial areas for varying density removals.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Gumboot</td>
<td>G3a</td>
<td>Hayward/Hamilton</td>
<td>2005 Single tree selection harvest area. Active logging, Skid trail design, residual stand evaluation.</td>
</tr>
<tr>
<td>Longwoods Forest</td>
<td>Gumboot</td>
<td>G3a</td>
<td>Hayward/Hamilton</td>
<td>2005 Single tree selection harvest area. Active logging. Worker understanding of standard operating procedures. Log tracking and COC issues.</td>
</tr>
</tbody>
</table>