What’s the future for the Central North Island?

The Central North Island has long been the core of plantation forestry in New Zealand. In 2003 the region produced 11.3 million m³, just over 50% of the national harvest of 22.4 million m³. The relatively constant cut in the region compared to an increasing national harvest (Fig. 1) means that the percentage has reduced from 60% in 1996.

Fig. 1: Annual harvest volume from the Central North Island wood supply region compared to the national harvest. [Source: MAF]

The area of plantation in the region increased during the 1980s but at a lower rate than the national increase (Fig. 2). There was little new land planting in the 1990s – from 1991 to 2003 plantation area in the CNI increased by 28,000 ha. Some 12,000 ha of this was an expansion in the eucalypt estate. Nevertheless the 580,000 ha in the CNI still represents almost one-third of the national plantation estate.

Fig. 2: Plantation area in the Central North Island wood supply region compared to the national estate. [Source: NEFD]

Central North Island Forest Partnership (CNIFP) consisting of Fletcher Challenge Forests (FCF), CITIC and Brierley (the last party exited the partnership in 1999). The CNIFP estate of 165,000 ha was managed by FCF in conjunction with the existing 120,000 ha FCF estate. Although the CNIFP went into receivership in 2001, FCF continued to manage the estate until 2003.

Some features of management of the joint FCF/ CNIFP estate were:
- Harvesting with an average clearfell age of 26 to 27 years,
- Replanting of area harvested (9,000 to 10,000 ha annually) predominantly in radiata pine but with 200 to 300 ha in Douglas fir,
- Pruning of all stands with site index over 30 m and, depending on cashflow, some stands with site index 27 to 30 m.

The age-class distribution of the combined FCF/ CNIFP estate as at 2002 (Fig. 3) clearly shows the impact of the harvesting policy. There was little area older than 27 years. Annual harvest would come primarily from age-classes 26 and 27 years.

Fig. 3: Area by age-class for the combined FCF/ CNIFP estate as at 2002

In December 2003 Harvard Management Company purchased the CNIFP forests (largely Kaingaroa, Rotoehu and Whakarewarewa Forests). These are managed by its 100% owned entity Kaingaroa Timberlands.

Changes in ownership of the FCF estate also occurred during 2003. Global Forest Partners (GFP – known as UBS Timber Investors at the time) purchased cutting rights to 9000 ha of mature stands in Tahorakuri and Tauhara Forests.

Following a sequence of transactions involving Kiwi Forest Group:
- Hancock Natural Resources purchased cutting rights to 41,000 ha of plantations, principally
in Matahina and Tarawera Forests.
• Viking Timber Management (previously PruTimber NZ) bought cutting rights to 65,000 ha including younger stands in Taborakur and Tauhara Forests as well as ex-FCF coastal forests.

The current ownership of what was the combined FCF/CNIFP estate is shown in Table 1.

<table>
<thead>
<tr>
<th>Manager/Owner</th>
<th>Stocked area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaingaroa Timberlands (Harvard Management Company)</td>
<td>165,000</td>
</tr>
<tr>
<td>Viking NZ (Ontario Teachers Pension Plan &amp; Viking)</td>
<td>55,000</td>
</tr>
<tr>
<td>Hancock Natural Resources</td>
<td>41,000</td>
</tr>
<tr>
<td>Global Forest Partners</td>
<td>9,000</td>
</tr>
<tr>
<td>Total</td>
<td>280,000</td>
</tr>
</tbody>
</table>

Changes in management intention

The new owner’s have different objectives compared to FCF and CNIFP. Probably the main difference is that the need for short-term cash is less of a driver. The demands of shareholders and bankers for cash were certainly major imperatives for FCF and CNIFP. In contrast, Kaingaroa Timberlands is concerned with wealth creation for shareholders both through short-term cashflows and long-term increases in the crop value. Viking, Hancock and GPP are seeking to maximise the return from the standing trees for which they have cutting rights.

As a result of the new owners’ objectives there have been changes in management intention including target rotation age, silviculture, species choice, and replanting strategy. There have also been shifts in strategy by CHH Forests for its 145,000 ha CNI estate (see the paper by Jeremy Fleming that follows).

Target rotation age

Kaingaroa Timberlands aim to increase target rotation age from 25-26 years to 29-30 years over the next 10 years. CHH is moving towards target rotations of 28-32 years. Any resource forester with experience of yield regulation will appreciate the challenge in increasing the maturity of an estate – the only way to increase the maturity of the CNI estate is to reduce the harvest in the short-term. In the case of Kaingaroa Timberlands the annual radiata pine harvest has been reduced from 2.4 million m³ to 2.0 million m³. When the target rotation of 29-30 years is achieved a harvest level of 3.0 million m³ will be sustainable.

The impacts of these changes in target rotation age on short-term wood supply are well illustrated by comparing results of the two recent harvest intention studies carried out in the CNI by MAF1. In April/May 2003, the 11 forest owners in the region with more than 1000 ha of forest were surveyed and asked for their projected harvest volumes out to 2010. (Harvest volumes for other owners were estimated by modelling NEFD data.) In May 2004, companies that had changed ownership or had publicly indicated that harvest levels would change were resurveyed. The estimates from the 2004 survey are lower by an average of 1 million m³ per year from 2004 to 2010 (Fig. 4).

Fig. 4: Comparison of harvesting intentions from 2003 and 2004 surveys (Source: MAF)

Silviculture

Kaingaroa Timberlands has indicated that it will continue to prune sites where it is profitable to do so. This is likely to see a higher proportion of the estate pruned than is that pruned by CNIFP. In contrast Viking is not pruning at all because the company is trying to minimise silvicultural costs as it does not see a return for the additional investment. It is unclear whether Hancock will continue to prune its estate.

Kaingaroa Timberlands is reviewing whether to continue with production thinning. Large-scale production thinning has long been implemented at Kaingaroa Forest in order to meet pulplog commitments under the Tasman Contract. Under this contract there was a requirement to supply 1.050 million m³ of pulplogs per year until 2005, reducing to 0.7 million m³ until 2030.

Species choice
Radiata pine continues to be the main species replanted. Kaingaroa Timberlands has continued to plant about 300 ha of Douglas fir per year. In addition the company is planting a small area of cypress (Cupressus lusitanica).

Replanting
All area harvested by Kaingaroa Timberlands is being replanted as is required under its Crown Forestry Licence (CFL). However replanting is less certain for the ex-FCF estate. Kiwi Forest Group has retained ownership of all 70,000 ha of freehold land from the ex-FCF estate. After harvesting some of this land will be replanted, some will be sold and some will be converted. In September it was announced that 25,700 ha of land at Tuhawa and Tahorakuri would be converted into pastoral farms by Landcorp under a long-term lease from Kiwi (operating as Wairakei Pastoral Limited).

Land use change is not confined to the ex-FCF estate. In October it was reported that CHH had identified 9500 ha of its CNI forest estate for conversion to dairy farming. It was noted that CHH had sold about 5000 ha for conversion over the last five years.

About half of the Viking forest is on freehold land belonging to Kiwi/Wairakei Pastoral. The other half was planted under joint ventures with landowners. Most of the agreements are for a single rotation meaning that the replanting decision will be made by the landowner rather than Viking.

Hancock has cutting rights for a single rotation for the bulk of its estate. Matahina Forest is on land owned by Kiwi. In 2004, all plantable land at Matahina was replanted by Kiwi. Tarawera Forest is on land owned by Tarawera Forests Ltd (TFL). In 2004 TFL replanted 900 ha of harvested land. Ownership of the land and the 2004 crop has just been purchased by Maori Investments Limited (MIL) from their partners in TFL – Tenon and the Crown. MIL is a holding company created in 1968 to administer the 10.8% stake in TFL that was obtained by the former owners of the Maori land in return for their land. It is anticipated that MIL will continue to replant land as it is harvested by Hancock. It is possible that MIL will form a joint venture (JV) with an investment partner for the next rotation.

The GFP cutting rights are all on land that is owned by Kiwi/Wairakei Pastoral. One issue that has arisen is that forest on this land lost FSC certification in September when Kiwi, as interim managers, formally advised that the areas felled would not be replanted and would be converted to pasture. Certification ceased because of FSC Principle 6, Criterion 10: “Forest conversion to plantations or non-forest land uses shall not occur...”. Viking and Hancock have retained FSC certification.

So what is the future of forestry in the CNI?
The impact of the changes in ownership and management intention vary with time horizon. In the short-term there will be lower annual harvest volumes as Kaingaroa Timberlands and CHH seek to increase forest maturity. In the medium term (6 to 20 years) there will be an increase in harvest volume if stands of the two largest companies are harvested at older ages with consequently higher mean annual increment. There will also be positive benefits for log and wood quality.

The long-term impact will depend on how much of the estate is replanted following harvesting. Kiwi/Wairakei Pastoral has given a clear indication that a portion of its land will not be replanted. Even more significant will be the land-use decisions made by Maori landowners of (i) Tarawera; (ii) the multitude of ex-FCF JVs; and, (iii) potentially, of Kaingaroa Timberlands CFL land.

Despite the recent publicity it is likely that the majority of the CNI estate will be replanted. FSC certification, increasing scrutiny of the environmental impacts of agriculture, Kyoto Protocol obligations, Maori connection with forestry, and cyclical improvement in the relative profitability of forestry will all work in favour of reestablishment. It is likely that at least 90% of the total CNI estate will be replanted.

So, yes, some things will change but much will stay the same. The Central North Island will continue to be the most important region for forestry in New Zealand.

Bruce Manley

Footnote
For this edition of the Journal, I invited the four largest forest owners in the CNI to provide an article giving their views on the future of forestry in the region. I thank Jeremy Fleming from CHH Forests for giving his thoughts on the issue. Unfortunately Harvard, Viking and Hancock felt it was premature to contribute an article.