

Margaret Horner, Science Communicator at Scion, discusses the role of the Forest Stewardship Council certification process in New Zealand and how it fits in to the planned National Standard for Certification of Plantation Forest management.

Rainforest destruction and indiscriminate logging have sparked worldwide environmental concerns about how forests are managed. This concern translates into consumer demand for forest products that come from sustainably managed forests.

Certification systems that use independent auditors to verify responsible forest management enable growers to access wealthy markets in Asia, North America and Europe. In New Zealand, the certification of choice currently is the Forest Stewardship Council (FSC) system. The mission of FSC is "to support environmentally appropriate, socially beneficial, and economically viable management of the world's forests".

Of the 1.8 million hectares of plantation forest in New Zealand, 1 million are FSC certified. Over 150 chain-of-custody certificates have been granted to wood processors, and the list is growing by the year. Chain-of-custody verifies that a product meets certification standards at each stage of the production chain, from forest to final retailer.

The commitment to FSC comes with responsibilities to comply with ever-increasing international standards. Every forest certified under FSC must comply with Principles and Criteria for Forest Stewardship. These Principles and Criteria, defined by FSC, are the foundation upon which the international standard for responsible forest management is built.

A number of recent developments within FSC will change how these standards are administered in New Zealand, and will impose new obligations on certified growers. On the positive side, the development of a national standard for New Zealand will help to provide an assessment framework that is relevant to our industry.

(See table over page)

New Zealand forestry companies holding current FSC	
certification:	
Blakely Pacific Ltd	29,492 ha
City Forests Limited	19,980ha
Craigpine Timber Limited	3,594 ha
Crown Forestry - West Coast Forests	29,702 ha
Ernslaw One Ltd, South Island Region	28,604 ha
Ernslaw One Ltd, North Island Region	100,765 ha
Hancock Forest Management (NZ) Ltd	249,714 ha
Hikurangi Forest Farms Ltd	35,005 ha
Juken New Zealand Ltd	75,751 ha
Lindsay & Dixon Limited	11582 ha
Nelson Forests Limited	77,930 ha
NZ Forest Managers Ltd	48,679 ha
Pan Pac Forest Products Ltd	44,937 ha
PF Olsen Limited	61,778 ha
Rayonier NZ Limited	48,511 ha
Southland Plantation Forest Company	12,605 ha
Timberlands Limited	198,726 ha
Wenita Forest Products Ltd.	29,086 ha
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Awaiting the green light on national standards

It has been a long time coming, but a National Standard for Certification of Plantation Forest Management in New Zealand is finally on the table. If endorsed by FSC, this standard will impose new rulings on the way certified forests are managed in this country.

For the people involved in negotiating the national standard, this milestone is no small achievement. The 10 members of the Standard Development Group represented most plantation forest owners, major environmental organisations, social interests and Maori. After much debate and compromise, this group has succeeded where previous attempts have failed over the past ten years. What has made the difference?

Participants believe their success points to a maturing in relationships between the various parties, improved communication and a greater understanding of the diverse viewpoints involved. While this observation is undoubtedly true, there are a number of compelling reasons why many forest growers wanted the national standard in place sooner rather than later.

Why is a national standard needed?

The Principles and Criteria laid down by FSC provide overarching rules that are applicable worldwide. They are not negotiable. However, for this international standard to work properly, it needs to be adapted at a regional or national level. This refinement process considers the legal, social and geographical conditions of forests in different parts of the world.

Since the New Zealand plantation forestry model falls outside the paradigm of natural forest management, it is particularly important for our unique conditions to be taken into account. The way to do this is to develop a national standard that is agreed on by all parties. The newly developed standard is then submitted to FSC so they can check it aligns with the unwavering Principles and Criteria.

Once the national standard is endorsed by FSC, certified forests will need to comply with it at their next audit. Compliance will be overseen by a national FSC committee, which is yet to be formed. New Zealand growers see a national committee as being far preferable to the alternative option, which would make them answerable to an international panel that doesn't understand our operating environment.

Over the last 11 years, in the absence of an agreed national standard, each of the three FSC certification bodies operating in New Zealand (i.e. SGS, Scientific Certification Systems and Smartwood) have been using their own interim standards. At the FSC general assembly in July 2011, it was agreed that multiple standards would no longer be allowed, making an agreed national standard imperative.

Improved consistency

It is generally agreed that the national standard will improve consistency and transparency in certification decisions. At the ground level, it means clearer guidelines for auditing New Zealand plantations, regardless of which certification body a forest owner may use. Looking at the bigger picture, the rigour associated with this process helps to enhance the credibility of the FSC certification scheme as a whole, which is good for all certified growers.

For these reasons alone, the national standard is worth striving for. But there is another underlying driver at work. The pragmatists of the industry see the national standard as being the most prudent way of protecting their interests in the face of impending changes within FSC.

A buffer against change

The current FSC Principles and Criteria have been in place since 2002. These fundamental international rules are being reviewed, and they are expected to get tougher. Many forest growers view the current FSC Principles and Criteria as too restrictive already. Their fear is that plantation forestry and FSC certification may become incompatible.

For example, a percentage of the forest estate must be put aside as reserves. As FSC reviews its Principles and Criteria this reserve area is expected to increase, at a cost to the grower.

FSC also prevents the planting of genetically modified (GM) trees or the use of any GM organisms in certified forests. Yet many growers see potential in GM

technology and want to see this technology properly tested and evaluated.

Other FSC rulings restrict chemical use, which makes things difficult in most areas of New Zealand, where herbicide use is a basic requirement of economical forest establishment. All of these requirements have a bottomline impact, and stricter standards could prove too costly to sustain.

While the current review of FSC Principles and Criteria is making many foresters nervous, the national standard provides a buffer to any immediate changes that may be made. Once New Zealand's national standard is accepted by FSC, it remains in place for the next five years. Many see this as a holding pattern, providing short term security for New Zealand plantations that are currently FSC certified.

Once the five year period ends, the process of developing a national standard will begin all over again. In the face of tougher Principles and Criteria, some growers could be tempted to bow out of the scheme. As consumers demand reputable certification, and as FSC grows in strength within the marketplace, it may not be a simple choice to make.

If not FSC, then what?

The huge investment in FSC by New Zealand companies is paying off by providing access to valuable Asian and North American markets where the demand for certified wood products is increasing. But FSC isn't the only certifier in town and growers are keeping an eye on their options.

In Australia, the dominant certification brand is the Programme for the Endorsement of Forest Certification (PEFC) which has endorsed the Australian Forest Standard (AFS). While PEFC is the largest scheme globally in terms of forest hectares certified, FSC has a higher number of forests certified. FSC also claims greater reach into more markets through exponential growth of its chain-of-custody certification for a diverse product range.

Owing to the high costs involved with setting up a national PEFC scheme, FSC presents a more affordable option for a forest estate on New Zealand's scale. FSC is also the preferred certification of our biggest export customers. However, PEFC does carry weight in certain markets, and is generally considered more business-friendly than FSC. For those who want to hedge their bets, it is possible to be certified under both schemes.

For many New Zealand growers, PEFC remains an

attractive alternative, although none have opted for it. Indeed, Hancock Forest Management recently purchased Forestry Plantations Queensland in Australia, which is a PEFC certified forest. Hancocks are seeking FSC certification for the new estate.

The distinguishing feature between the different forestry certification schemes is that FSC is the only one with the support of the key non-government organisations (NGOs), commonly known as 'environmentalists'. While this affiliation is seen as a strength, it also throws up plenty of challenges for growers.

Greenpeace New Zealand spokesman Grant Rosoman has been closely involved with FSC for many years and has applied his share of pressure to the industry.

"Certification is about ensuring responsible forest management for the greater good of society. It's a continuous process of learning and improvement. The standards will need to keep rising if we're ever going to do the right thing by the environment."

However, Rosoman is adamant that the cost of meeting these standards should be better shared.

"There needs to be more value returned to the land or forest owner. That's the missing component at the moment. Hopefully the gap will be filled as environmental services from forestry begin to generate cash value," he says.

Rosoman says that as FSC officials learn more about New Zealand's situation, they are taking a more favourable view of our plantation model. FSC allowed plantations into the scheme because they wanted to see plantations take the pressure off natural forests. New Zealand is one of the few countries in the world that can actually demonstrate it working.

Timberlands Forest Risk Manager Colin Maunder has been actively involved in efforts to build a good relationship with FSC and believes there is room for negotiation on both sides. He is also part of a growing international lobby group to ensure forestry companies get a bigger say.

"Having been through an FSC general assembly and seen it in action, I can see how robust the process is. There's a lot of politics, but there are checks and balances as well," he says.

"We can sit down with a difference of opinion and nut it out. By engaging in the process we can have an influence. We may not agree with everything in the resulting policy, but at least we've all had our say and we had the opportunity to put a stop to anything bad. If you're not there at the table, things can go awfully wrong." Others take a less favourable view of the process. NZIF President Andrew McEwen has serious reservations about forest certification in general.

"FSC and other certification schemes are pushing up the costs for forestry compared with less environmentally friendly land use and materials, but who is actually going out and telling the consumer this?"

He believes that forest certification schemes have lost sight of the competition between forests (that require certification) and other land uses, which can lead to conversion of forest land to other, less environmentally benign, uses.

Rosoman says while this may seem unfair, the reality is that forest certification schemes exist, while schemes for other land uses do not.

"If forestry companies want to be seen as good guys, they need to get certified. If there was an international scheme for the certification of dairy farms, we'd be out there putting pressure on farmers. But there isn't - yet."

McEwen says FSC places too much emphasis on forcing forest owners to fix up the perceived sins of history and other land uses, as far as biodiversity is concerned.

"The environmental outcome would be better if everyone took a bigger perspective. It's in all our interests to promote the use of renewable wood, instead of making it even harder for timber producers to compete against non-renewable products."

At the recent FSC general assembly, Maunder succeeded in getting a motion approved by FSC to promote certified wood over competing building materials. Could this be one step closer to a fairer playing field?

Many commentators believe the ultimate downfall of 'green certification' will be the worldwide proliferation of schemes for all manner of products. Not only is this confusing to the public, it can be downright misleading, as more and more patently unsustainable materials show up on the market with a 'green tick'.

"Many of these schemes are anti-science or treat different products in an inconsistent manner. They sound good until you lift the covers and find too many short cuts, which mislead the public who deserve better," McEwen says.

Maunder agrees, but believes the forestry labels could out-live some of the others and that FSC is as robust as they come.

"Forests always engender environmental concerns, because deforestation is such an emotive issue, for obvious reasons. Whatever happens in the future, we need to keep doing the right thing. Like it or not, certification is part of modern forest management, and if we want to have any say in how it works, we need to keep showing up at the table."

The National Standard – what will it mean for forest growers?

The National Standard for Certification of Plantation Forest Management in New Zealand will become operative once it is endorsed by FSC. At the time of writing this endorsement is yet to be received, but it's (hopefully) not far off.

The big question is: how will the new rulings affect current forest management practices?

Reserves

FSC recommends 10% of the land area in plantations to be set aside as reserves to protect natural biodiversity. Since New Zealand plantation forests are exotic species, the Standard Development Group had the unenviable task of trying to work out how the principle can apply here.

Colin Maunder from Timberlands was a member of the group representing the economic chamber. He says the set-aside of natural reserves was the main sticking point in all their negotiations. The debate was resolved through a process that requires certificate holders to consider their options for setting aside reserves, using various formulae linked to ecological districts or regions.

"The preferred option is to reserve natural forest on your land so it falls within the ecological district that you're working in. According to FSC guidelines, this reserve must be suitable habitat to support natural biodiversity and, ideally, endangered species. If the opportunity is to do the right thing within your own forest, that's where you do it," Maunder explains.

The complications come in when a forest owner doesn't have any options for natural reserve on their estate, or if the natural vegetation they do have doesn't contain any decent biodiversity.

"There's no point in channelling money and effort into patches of scrub that have no real ecological value," he says. "Nor is there any expectation to convert plantation to natural forest, although that option does exist."

This is where a concept dubbed 'ecological equivalence' kicks in. This process still requires 10% set-aside, by ecological district or region, but provides alternative options that are 'ecologically equivalent' to the forest in question. This can include projects carried out to enhance a reserve outside your property.

"The key is to do your ecological equivalent as close as possible to your operating area," says Maunder.

He believes that the national standard won't change things for people who already have sufficient areas of reserves on their land. Some, however, will need to do more. This is a hard pill to swallow for growers who relinquished claim on their native reserves through reallocation of conservation land.

"The reason we haven't got 10% to put aside now is because we lost it. Most of the natural forest areas that were previously part of our estate were put into Department of Conservation management in 1987 with the dissolution of the Forest Service, so that's where FSC doesn't seem fair. Sadly, we now find ourselves penalised for doing the right thing in the past. That's a scary thing with environmental standards and regulations. Leadership in these areas can be perversely unrewarded," he says.

Maunder believes that the agreed process, while not a perfect solution, was the best compromise they could achieve using ecological principles. At the end of the day, completion of the national standard depended on it.

"We all agree that being part of FSC imposes an obligation to manage biodiversity. The intention is to create or conserve viable ecosystems that contain rare species. Of course this is going to cost money. It's up to forest growers to decide whether the investment is worth it."

Small forests

Many growers of small forests see benefit in gaining FSC certification, but the bureaucracy involved is a big hurdle. Among the FSC forest growers in New Zealand, farm foresters are notable by their absence. Woodlot growers have the option of entering group schemes, such as those offered by PF Olsen Ltd, to make compliance collectively easier.

The challenge for the Standards Development Group was to decide: what constitutes 'small'; and how could they make compliance easier for those who operate on a smaller scale? The group decided to make 1000 hectares the watershed figure to define small forests.

While all certified growers must meet the standard, the rules of compliance are scaled - so the smaller the forest, the less weighty their obligations become. PF Olsen Ltd Environmental Manager Kit Richards says the big challenge associated with group schemes is meeting the reserve obligations, particularly when the group is scattered all over the country.

"When you apply the formula for working out an ecological equivalent area for a dispersed group of forests, it becomes very complicated. It gets even worse when you

get investment partnership schemes, involving multiple shareholders, with forest often planted on ex-farmland that was completely cleared of reserves," he explains.

For an individual farmer with a woodlot on their own land, it can be relatively straightforward meeting the reserves requirement, simply by planting riparian reserves.

"For small, geographically fragmented forests, it is almost impossible to administer reserves in a way that is fair and economical," says Richards.

A possible solution could be that the group pays an agreed sum as an annual levy to support reputable non-profit organisations who are engaged in relevant conservation projects.

While the national standard does not adequately resolve this issue, it does leave the door open for further discussion. There can be little doubt that when (and if) endorsement comes through, the debate will continue.

Natural forest conversion

An element of the national standard that is unique to New Zealand is the inclusion of a fourth chamber for Maori representation. The three chambers standard to FSC are economic, social and environmental.

According to Colin Maunder, FSC initially did not want to include a fourth chamber, but they now see value in it.

"Since Maori are becoming land and forest owners in their own right, it creates a particular set of issues that need addressing. For example, one FSC principle prevents the conversion of natural forest to plantation forestry. The national standard seeks exemption for land that has reverted from uneconomic farmland into native scrub. This is relevant to a number of landowners, but to Maori in particular."

The problem arises because Maori land owners aren't able to borrow finance using their land as security. This means some haven't been able to convert uneconomic farmland into forestry, so the land was left alone and reverted to native vegetation (now defined as 'forest').

"If it's gone to gorse, that's fine. If it's gone to manuka then clearing it is deemed to be natural forest conversion, and goes against FSC principles. Now that they have resources or partners who will go into a joint venture they want the option of redeveloping their land and creating an income for their communities," Maunder says.

"For Maori who want to be FSC certified and seen as good forest owners, I totally support them – it's a fair enough exemption."

FSC and weed control

Most forestry companies in New Zealand are dependent on herbicides for controlling weeds economically. Weed control is the biggest establishment cost in New Zealand plantation forests and the single most important operation in terms of tree survival and early growth. To certified growers, FSC's restrictions on herbicides are a real challenge.

Scion has completed an in-depth review of chemical and non-chemical weed control regimes to compare the economic viability of different options. Results showed that it would not be viable for plantation growers to avoid using herbicides completely. The use of weed mats, manual, and mechanical control would be too costly and unsuitable for many sites in New Zealand. This analysis points to the importance of developing FSC compliant herbicide options for growers.

Certified forestry companies have worked closely with Future Forests Research to address concerns relating to herbicide use. A report produced by Scion helps to demonstrate the forest industry's judicious use of herbicides and supports the case for continued use of terbuthalyzine, a commonly used chemical restricted by FSC.

The report evaluates the leaching risk associated with terbuthalyzine in relation to the FSC threshold that currently makes it an "at risk" chemical in terms of future industry use.

Research indicates that the risk of leaching of terbuthalyzine was low under forest soil conditions present in most New Zealand plantations. This research has been published in the Canadian Journal of Forest Research1.

Under FSC, all future pesticide use in New Zealand will be governed by a 'draft derogation of policy', which sets up a process to determine whether highly hazardous chemicals will be allowed under certain circumstances. A New Zealand FSC committee, once established, will consider each chemical on its merits and decide how it should be used in a way that's appropriate to our local conditions.

Maunder says the industry has worked hard to show they are using chemicals in a responsible manner, which often translates into cost savings.

"The buddleia weevil [released by Scion] is a good example of how biological control can help. It's completely stripping buddleia bushes all over the place. These are the kinds of research projects we are keen to support and that show FSC that we are serious about reducing chemicals," he says.

"We're not just being pig headed about it, we are looking hard at what we do. FSC has forced the industry to be more proactive than we might have been otherwise. In return, we've found that FSC are more accepting of our position when we collaborate together and come up with sound reasons for doing what we do."

Footnote

Watt, M.S., Wang, H., Rolando, C.A., Zaayman, M., Martin, K. (2010) Adsorption of the herbicide terbuthylazine across a range of New Zealand forestry soils. *Canadian Journal of Forest Research* 40, 1448-1457.