

# Explanatory Note to accompany the SLIMF Reserve Calculator

## Background:

During the course of the development of the National Standard it was recognised that some Small Forest Growers - though implementing land management practices that are laudable and regionally recognised as environmentally enhancing – would not always be able to meet the demands of FSC Principle 6 and Principle 10, as the draft(3.1) New Zealand Plantation Standard stood at that time. As such, the NZFFA negotiated for greater flexibility in the Reserve contributions (Refer Criterion 10.5 below). The attached SLIMF Reserve calculator reflects the Standards Development Group's recognition of the role that small forests have to play in New Zealand's sustainable land management, whilst ensuring that the ecological integrity of the Standard is retained.

It has been recognised by the Standards Development Group that it is appropriate for Farm Foresters (a subset of Small Forest Growers) to use their whole properties to meet the Reserve requirements of Principles 6 and 10 of the Standard. That is, rather than simply assessing a farm's woodlots in isolation from the remainder of the farm, a whole-of-property approach is suitable when considering Reserves management.

**Criterion 10.5: A proportion of the overall forest management area, appropriate to the scale of the plantation and to be determined in regional standards, shall be managed so as to restore the site to a natural forest cover**

A minimum area of reserve set-asides equal or equivalent to 10% of the **management unit** by Ecological District (or ecosystem characterisation at a similar scale such as LENZ III) will be managed to be protected and/or restored to natural vegetation over time.

## Discussion: Small Forest Calculator for Reserve Contribution

The accompanying Small Forest (SLIMF) calculator for reserve contribution outlines a number of potential methods in which a Management Unit (MU) can meet the Standard's requirement for a minimum of a 10% reserves set-aside (as outlined above in Criterion 10.5).

There are several points to consider when stakeholders are evaluating the SLIMF Reserves Calculator:

1. Multipliers are set in relation to the level of indigenous biodiversity and ecosystem protection and restoration that is gained through the specific category of reserve contribution. For example, Reserve Category 3a (Protection and Management of very poorly represented ecosystems (<1% of the original area of that ecosystem type remains) ) has a Multiplier of X 3.0, reflecting the ecological importance of managing these very degraded ecosystems. Retaining representative ecosystems is a fundamental component of a healthy landscape, and the multiplier here recognises this.

In contrast, Reserve Category 8 (Alternative forest crop species apart from Radiata pine and Douglas-fir) has a much lower ecological value and as such has a 'negative' multiplier attached to it of X 0.1.

2. Three Management Unit (MU) size classes exist, being 0-40 hectares; 41-400 hectares and 401-1000 hectares. The smaller MU size classes have greater flexibility in the methods by which the Standard's Reserve requirement is able to be met, reflecting the limitations that arise from small landholdings. As the MU increases to 1000 hectares, the flexibility in method of Reserves contribution is reduced, becoming increasingly aligned with the Reserve requirements of the Large (non SLIMF) MU's.
3. The categories of Reserve contribution are sequential and hierarchical, with the highest value from the first three categories of Reserves. The first three categories (1a-1d, 2a-2b and 3a) all relate to the management and protection of existing indigenous ecosystems or of rare, threatened or endangered species. Positive multipliers are added when particularly rare or threatened ecosystems / species are being managed for.
4. Reflecting the objective of the criterion, Forest Managers need to try and manage for the first three categories before considering other Reserve categories. The ability of all three MU size classes to meet the full 10% Reserve requirement through the first three categories reflects the ecological value of these three categories.
5. Reserve Category 4 (Restoration of representative ecosystems) involves restoration of an ecosystem, rather than protection and management of an existing ecosystem. The effort implied in such activity is reflected by its X 1.5 multiplier, but the ability to use this as a Reserves contributor reduces as the MU size increases (refer Point (2) above).
6. Reserve Category 5 (Permanent exotic or mixed native / exotic riparian) has been incorporated into the SLIMF Reserve calculator to encourage protection of waterways and the associated in-stream values. Because waterways are being protected, the use of exotic forest is allowable and a X1.0 multiplier is attached. Note that only a proportion of the 10% of the reserve requirement can be met through this category.
7. Reserve Category 6 (Non harvestable permanent exotic or mixed exotic / indigenous) provides for shelterbelts or other 'permanent' forests which have been established for reasons other than for timber production. The permanency of these Reserves within the landscape ensures they have an environmental benefit, especially within agricultural landscapes. The low indigenous biodiversity value of these reserves limits the potential contribution to the total 10% Reserve target.
8. Reserve Category 7 (Indigenous species plantation and / or continuous cover forest management) recognises the environmental benefit provided by this low-impact, biodiversity enhancing forest management practice. Harvesting is a part of managing these reserves.

9. Reserve category 8 (Alternative forest crop species, excluding short term coppicing for firewood) encourages a diversity of tree crops. Its low biodiversity value is reflected in the negative (X0.1) multiplier that is applied.
10. Reserve category 9 (Off-site Reserves contribution) provides for MU's that do not have the ability to meet all of the 10% Reserve target. Depending on the MU size class, a proportion of the Reserve requirement is able to be met by association with other Members of a certified FSC Group Scheme. To retain the ecological integrity, the associated Reserve must be met within the same, or a neighbouring Ecological District that is within the same Ecological region.

The 0-40 hectare MUs that have no potential to meet the 10% MU Reserve target, due to the whole MU being planted out in timber crop, have further capacity to meet their Reserve requirement by undertaking a redesign of the forest immediately following harvest. In this forest redesign, the Forest Manager must plan to meet the Reserves target through the categories outlined in the SLIMF reserve calculator.

11. Lastly, if Forest Managers believe they have an environmentally-credible way of meeting the Reserves target, but cannot meet it with the categories listed, they are able to present a case to the National Initiative. The National Initiative, charged with governing the National Standard, will determine whether alternative reserves contributors will satisfy the requirements of the National Standard.