Ministry for Primary Industries
Manatū Ahu Matua

THE PERMANENT FOREST SINK INITIATIVE

PROPOSALS FOR IMPROVEMENT

MPI DISCUSSION PAPER

Growing and Protecting New Zealand

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CONTENTS

FOREWORD

The Permanent Forest Sink Initiative (PFSI) forms part of New Zealand's climate change response. It was established in 2006, before the New Zealand Emissions Trading Scheme, as a first step into market-based mechanisms to help reduce national greenhouse gas emissions.

Under the scheme, landowners make a commitment to establishing a long-term forest cover, the wider environmental benefits of which may be reflected in a price premium paid for PFSI-sourced emissions units.

Due to its permanency the scheme is particularly well suited as a sustainable land use for steep, erosion-prone marginal pasture land. However, despite this, uptake to date has been slow.

Although New Zealand contributes just 0.15% of global emissions, environmental responsibility is part of our core values. We are a small country but we are actively engaged in international climate change efforts. Domestically we want to improve the PFSI so more participants and more land enter the scheme. This will benefit both national greenhouse gas reductions and wider sustainable land-use objectives.

This review of the PFSI seeks your comment on proposals to simplify the administration of the scheme, open it to more participants, and to reduce the liabilities that could result from natural events that destroy forests. Further proposals aim to strengthen the principle of forest permanence, as this is fundamental to the PFSI.

There are more than 1 million hectares of marginal pasture land that would benefit from a permanent forest cover. With carbon prices again increasing, PFSI forest is expected to represent the most economically and environmentally viable land use for some of New Zealand's most erosion-prone pastoral hill country.

Your feedback on the proposals to improve the PFSI will be an important part of shaping the future of a scheme that I view as having significant potential to increase its already useful contribution to New Zealand's climate change mitigation and sustainable land use goals.

Hon Jo Goodhew
Associate Minister for Primary Industries

PERMANENT FOREST SINK INITIATIVE SUMMARY OF PROPOSALS

An overview of the proposals to improve the PFSI are summarised below.

PROPOSALS SUPPORTING PERMANENCE

1.1 Confirm and simplify the PFSI's restricted harvest limits.

1.2 Remove the present ability to clear-fell harvest while in the PFSI (must exit first).

1.3 Require PFSI-sourced emissions units to be used to meet all liabilities.

1.4 Make minor and technical changes to ensure PFSI rules are comprehensive and consistent.

PROPOSALS PROVIDING FOR ENTRY AND EXIT FLEXIBILITY

2.1 Non-forest land may enter the PFSI (status quo), provided it is afforested within a set time.

2.2 Remove the present ability to clear areas of indigenous trees of up to 5 hectares.

2.3 For any PFSI forest allow exit at any time after 50 years from registration on surrender of both emission units gained, and an extra quantity of PFSI units that reduces to zero by 100 years.

2.4 For all PFSI forest, allow exit at any time (with surrender of emissions units gained) under circumstances that cannot reasonably have been foreseen at registration and affect a participant's ability to realise the value of their forest carbon.

PROPOSALS TO MANAGE LIABILITIES FROM NATURAL EVENTS

3.1 Remove a PFSI participant's liabilities for natural events that result in carbon losses if the event prevents the forest from being re-established.

3.2 For liabilities from other natural events, establish a self-insurance facility – a pool of PFSI emission units created by a levy (initially 5%) and available to meet 90% of individual losses.

PROPOSAL TO INCREASE SCHEME ELIGIBILITY

4.1 Allow forestry rights holders and lease holders to enter the PFSI with the agreement of the landowner.

PROPOSALS TO ENHANCE ECONOMIC RETURN FROM PERMANENT FORESTS

5.1 Provide a publicly accessible web-based platform for PFSI participants to voluntarily register information that supports recognition and traceability of wider environmental co-benefits.

5.2 Establish a one-stop shop for information on the full range of incentives potentially available for PFSI forest, and promote the PFSI as the premier sustainable land management option for marginal pastoral hill country.

5.3 Provide information to PFSI participants on opportunities to develop multiple revenue streams while operating within the restricted harvest limits.

PROPOSALS TO ADDRESS ADMINISTRATIVE EFFICIENCY AND ROBUSTNESS

6.1 Transfer administration of the PFSI to the Climate Change Response Act, retaining the existing intent of the scheme to create and maintain a long term forest cover.

6.2 Replace the existing PFSI covenant as an administrative mechanism with direct provisions in legislation, regulations and standards.

6.3 Forest establishment and management conditions formerly included in covenants will also be delivered through legislation, regulation or standards.

INTRODUCTION

Forests are an essential part of global ecosystems, and deliver a wide range of environmental and economic benefits. Long recognised for their critical role in air and water cycling/renewal, more recently their role as a carbon store has been recognised as making a useful contribution to climate change mitigation. In New Zealand, forests play a major part in offsetting national greenhouse gas emissions from energy use and agriculture. Forests, particularly permanent forest on our steeper hill country, also provide a long-term sustainable land use with well-recognised advantages for soil conservation. The accompanying reductions in sedimentation also lead to improvements in off-site water quality and reductions in flood risk.

There are more than 1 million hectares of marginal pasture land in New Zealand for which a forest cover would represent the most sustainable land use. Rates of afforestation on such land are relatively low, however, as economic returns cannot match those available from forestry in more accessible areas. The challenge is to convert marginal pasture land to permanent forest, and to develop revenue streams that are less dependent on timber extraction. Recognition of the role of forests in climate change mitigation has started to change the economic equation for establishing permanent forest, with forest carbon now having the status of a tradable commodity.

In 2006 the Government introduced the Permanent Forest Sink Initiative (PFSI) as the first scheme to offer a market-based approach to increasing carbon sinks and help offset New Zealand's greenhouse gas emissions. It offered private landowners with forests established for the first time after 1989 (known as "Kyoto forests"[1]) the opportunity to earn emissions units for the increase in carbon stored within their forests. The units can be sold to greenhouse gas emitters through either voluntary or mandatory emissions trading markets.

The Government wants to build on the early success of the PFSI by providing opportunities for wider participation, assisting with management of liabilities from natural disasters, promoting the environmental benefits of permanent forest cover, and simplifying administration.

These objectives must be achieved without compromising the scheme's reputation for delivering a range of long-term environmental benefits wider than just carbon sequestration, as this is seen to be the core purpose of the PFSI.

The Ministry for Primary Industries (MPI) began a review of the scheme in 2013 and engaged broadly with existing PFSI participants and other stakeholders to understand their views on and ideas for the scheme and potential improvements that could be made. This paper presents the resulting proposals for improving the scheme, for your comment.

What is the Permanent Forest Sink Initiative?

The PFSI was introduced in 2006, with the purpose of allowing landowners with permanent Kyoto forests to realise the value of carbon stored in those forests from 1 January 2008 onwards.

The PFSI is governed by Part 3B of the Forests Act 1949, and Regulations made under that Act. It predates the New Zealand Emissions Trading Scheme (NZ ETS), which was introduced in late 2008 under the Climate Change Response Act (CCRA) 2002. Between implementing the PFSI and the NZ ETS, knowledge of carbon market operations increased considerably. This is reflected in the greater level of sophistication and robustness in the legal and administrative basis of the NZ ETS.

To be eligible for the PFSI, a forest must:

- be "permanent" (implemented operationally by restricting harvest for 99 years);
- be established on or after 1 January 1990 (on land that was not forest land on 31 December 1989);
- be human-induced (by planting, seeding, or promotion of natural seed sources);
- not consist of more than 5 hectares of land that was cleared on or after 1 December 2007, which predominantly contained naturally occurring indigenous trees.

1 Kyoto forests are forests that meet NZ's adopted thresholds for forest area, crown cover and height under the Kyoto Protocol, and were established on or after 1 January 1990 on land that was not already forest land on 31 December 1989. Also known as "post-1989" forests.

PFSI participants enter into a covenant with the Crown that includes restricted harvest and other forest management conditions. The covenant is registered against their land title(s), and is in perpetuity, although it also confers on participants a right to terminate at any time after 50 years (with surrender of emissions units received while in the scheme). Only landowners may register a PFSI forest.

PFSI participants with less than 100 hectares of forest use the default carbon tables in the Climate Change (Forestry Sector) Regulations 2008 to determine the increase in carbon stocks in their forests. For larger forests, the Field Measurement Approach must be used to determine any increases in carbon. These carbon assessment methods are common for forests in both the PFSI and NZ ETS.

Permanent forest cover, and the higher level of environmental benefit that accompanies it, distinguishes forests in the PFSI from those in the NZ ETS. Forests in the NZ ETS are generally short-rotation commercial plantations, intended for clear-fell harvest. By contrast, the majority of forests in the PFSI comprise regenerating indigenous species that will not have any significant timber value for many years (under restricted harvest). PFSI forests are also generally established on marginal lands, for which clear-fell harvest is not sensible either as an economic nor environmental option.

Early success

The PFSI was New Zealand's first market-based solution providing Kyoto-compliant emissions units to offset greenhouse gas emissions, and continues to contribute to New Zealand's overall emissions reduction target. High carbon prices during the first commitment period (2008 – 2012) resulted in a relatively good level of uptake of the scheme. Markets also acknowledged that permanent forests deliver additional environmental co-benefits, which was reflected in the price premium paid for PFSI-sourced emissions units.

Feedback from participants on the value of the PFSI has been highly positive. They consider the principles behind the PFSI are sound, and there is generally strong support to continue the PFSI as a scheme that is distinct from the NZ ETS. Forest permanence, and the superior environmental benefits of a permanent forest cover, are seen unanimously as core value propositions of the scheme.

The costs associated with the PFSI are generally low, and Government recognises that increased participation is a cost-effective way to increase carbon storage and contribute to sustainable land management outcomes. However, when carbon prices are low it becomes more difficult to meet management costs. As carbon prices have fallen over the last several years the rates of entry into the PFSI have also dropped – though recent increases in price have begun to again spark interest.

Government agreed in 2013 that a review was warranted to identify ways to increase participation in the PFSI by identifying opportunities to increase revenue, and to reduce compliance and administration costs.

Lifting participation

There are currently 61 participants in the PFSI, with a total forest area of 15,900 hectares. Of this area, 73 percent is indigenous forest, 9 percent is Douglas-fir, 6 percent is radiata pine and 7 percent is area where forests are still being established (mainly with indigenous species).

Government wants to see greater use of the scheme to achieve important environmental and sustainable land-use objectives, in addition to its current focus on encouraging carbon storage. Feedback from stakeholders to date indicates that they consider the barriers to increased uptake are:

- limited ability to exit the scheme and change land use;
- potential liabilities from carbon loss due to natural events (disasters) – especially if the risks associated with future climate change are underestimated;
- the inability of people other than landowners to access the scheme; and
- a lack of formal recognition of the wider environmental co-benefits delivered by a permanent forest cover.

Some stakeholders with land under Te Ture Whenua Māori Act have expressed concerns that the long-term nature of the PFSI may be a deterrent to uptake because it could create a level of constraint on the land use choices of future generations. The challenge with this, and more generally, is how to provide a level of flexibility within the scheme without undermining forest permanence and the wider environmental co-benefits that a commitment to maintaining a long-term forest cover provides.

Māori own significant areas of remote marginal pastoral hill country that is delivering little economic return and is well suited to permanent forest. As part of the consultation process we are keen to understand what changes to the scheme would be required to encourage greater Māori participation in the PFSI.

Objectives for the review of the Permanent Forest Sink Initiative

The high-level objectives of the PFSI review are to:

- increase the area of permanent forest to achieve both long-term carbon storage, and wider environmental and sustainable land management benefits;
- increase total economic benefits for participants; and
- improve the administration of the scheme for both participants and Government.

Key improvements to increase participation while enhancing integrity and value

From feedback during engagement to date on the PFSI review, MPI has developed 6 key proposals to improve the PFSI. These are expected to better support both creation of permanent forest and the delivery of wider environmental co-benefits as the core value propositions of the scheme, while widening opportunities for participation and improving administrative efficiency. In summary, the objectives of the proposals are to:

1. Better support permanence.
2. Provide options for entry/exit flexibility that are consistent with permanence.
3. Improve management of liabilities and financial risk from natural disasters.
4. Expand scheme eligibility beyond landowners.
5. Enhance the economic return from permanent forest.
6. Improve administrative efficiency and robustness.

The discussion that follows is arranged in 6 sections to address each of these topics. Each section has proposals for improvement to the present scheme, and some questions on the proposals for your comment. This phase of consultation seeks your overall feedback on whether:

- *you expect the proposals to make the scheme more attractive to participants and stakeholders?*
- *there are other changes you consider would be more effective (please give details)?*

1 SUPPORTING PERMANENCE

Summary of Present Status and Issues

The PFSI review established that forest permanence (as implemented by restricting harvest) is considered the key principle behind the PFSI. It is also the primary point of difference with NZ ETS forests. The wider environmental benefits that permanent forest provides have been recognised by the market paying a premium for PFSI-sourced emissions units. This price premium was an important part of the justification for separating PFSI-sourced emissions units into a distinct category in the New Zealand Emissions Unit Register (NZEUR) in 2013.

Ensuring that the rules for the PFSI support permanence is clearly an important part of the future of the scheme. However, despite being a "permanent" afforestation scheme, the PFSI presently allows for:

- restricted harvest during the first 99 years; and
- clear-fell harvest after 99 years.

Allowing a minor level of tree felling within a permanent forest is appropriate to provide for good forest management, and can provide a small additional revenue stream to help cover management costs. However, MPI wishes to confirm whether the current level of restricted harvest is the best compromise between revenue from such harvest and the additional value that the market assigns to permanent forest.

To ensure the core value proposition of the PFSI is enhanced, there is a need to recognise that the wider environmental co-benefits that permanent forest provides will temporarily reduce, or may even cease, when restricted harvest occurs. At present, the liabilities that arise under restricted harvest can be met with non-PFSI units, and as such there is currently no exact equivalence between entitlements for benefits, and surrender to meet liabilities. Equivalence is important in establishing the integrity of similar schemes internationally, and would strengthen the credibility of the PFSI. Without it, the distinction between PFSI forests and those in the NZ ETS is weakened.

Proposals to Enhance Permanence

Confirming and simplifying restricted harvest levels

The present harvest limits require that at least 80% of the pre-harvest basal area[2] of the forest – assessed on a hectare-by-hectare basis – remains after the first harvest. Any subsequent harvest is limited to the basal area removed during the first harvest, or to retaining 80% of the current pre-harvest basal area, whichever is greater. No subsequent harvest may occur until the forest has recovered the basal area removed in a prior harvest.

MPI seeks to confirm whether stakeholders still consider the present 80% limit to be valid. MPI also recommends that in future any restricted harvest limit be based on average pre-harvest above-ground carbon stocks rather than on basal area. This information will already be available from data used to prepare emissions returns, and will avoid the cost of a hectare-by-hectare assessment of pre-harvest conditions.

PROPOSAL 1.1

Retain 80% as the value used in the restricted harvest limit to operationally define permanence, but change the limit to be based on average pre-harvest above-ground live carbon stocks.

2 Basal area means total stem cross-sectional area per hectare.

Proposal 1.1 preserves the intent of the current harvest restriction, but offers a simpler assessment method which is expected to reduce costs for participants. Stakeholders may consider that restricting harvest to a level other than the present 80% limit is more appropriate. If so, it is important they justify how the reputation of the PFSI will be maintained under such conditions.

NOTE: restricted harvest under the PFSI is at present subject to 2 exemptions (subject to approval by MPI), for which no change is proposed:

- when the forest is affected by a natural disaster; or
- as necessary to complete a public work.

It is however proposed that it be made explicit that the forest needs to be re-established after these events unless the nature of the event prevents this (see Proposals 1.4 and 3).

Remove the ability to clear-fell harvest

Under current settings it is possible to have a registered PFSI forest that is clear-fell harvested after 99 years. Providing for such harvest may have been justified when the PFSI was first developed, before the NZ ETS existed. However, the NZ ETS provides for the value of forest carbon to be realised in forests established for commercial clear-fell purposes. As such, MPI recommends that it is appropriate to remove clear-fell harvest as an option under the PFSI (Proposal 1.2). This will support permanence as a core principle of the PFSI, without decreasing the harvesting opportunities available to foresters overall. Under the proposal, clear-fell harvest could only occur after the landowner has exited the scheme.

PROPOSAL 1.2

Enhance permanence by removing the ability to clear-fell harvest PFSI forest after 99 years.

Using PFSI emissions units to meet surrender obligations

To maintain the integrity of the PFSI when restricted harvest occurs, or when a landowner exits the scheme, MPI is proposing the mandatory use of PFSI units to meet carbon liabilities. Requiring equivalence between emissions units received for entitlements and those surrendered to meet obligations is expected to strengthen the credibility of the PFSI, ensuring it remains a scheme distinct from the NZ ETS. Similar equivalence requirements are well-established in international schemes.

PROPOSAL 1.3

Require use of PFSI-sourced emissions units to meet liabilities from restricted harvest or for any other PFSI surrender obligations (including on exit from the scheme).

The requirement to use PFSI units may reduce the quantity of units available in the market to meet surrender obligations. However, this is not expected to pose a problem for market liquidity given that most PFSI forests are expected to remain as permanent forest. Many participants will therefore not need to retain emissions units except to cover any restricted harvest (provided that a separate mechanism is available to meet liabilities arising from natural events/disasters, as proposed in section 3). As such, the overall pool of available units should be sufficient to allow the market to function properly.

Minor and technical amendments to enhance permanence

MPI's experience with operating the PFSI has revealed a number of minor and technical issues around restricted harvesting that should be addressed to support permanence. Most of these relate to the need to make the definition of restricted harvest more precise, or are required to increase administrative clarity, robustness and efficiency. These issues are addressed in Proposal 1.4.

PROPOSAL 1.4

(i) Thinning to waste should not be considered harvesting if it involves less than 20% of average above-ground live carbon stocks.

(ii) Personal use of isolated trees on an occasional basis should also be excluded from being considered harvest.

(iii) Following restricted harvest require that the following re-establishment criteria are met:

- within 4 years stocking must be equivalent to the stocking prior to harvest; and
- for planted forests an equivalent pre-harvest crown cover must be achieved within 10 years of harvesting; or
- for regenerated forest an equivalent pre-harvest crown cover must be achieved within 20 years of harvesting.

Provided thinning to waste is of limited extent, there would normally be only temporary reductions in both carbon stocks and the environmental benefits associated with a well-developed forest cover. This is because typically the remaining trees will grow more quickly, and rapidly fill available canopy gaps. Further, thinnings remain on the forest floor for some time while they gradually decay, and can help to reduce over-land water flow and sedimentation.

There is presently a potential conflict in the PFSI rules around personal use of occasional isolated trees, as it could unintentionally impose unreasonably restrictive harvest limits. MPI therefore recommends limited felling of individual, isolated trees for personal use be allowed without it being considered to be harvesting – provided it is at levels that are not more than the personal use precedents in the Forests Act 1949 (50 cubic metres in a 10 year period) – across an entire registered forest.

There is a gap in current PFSI rules in that the time by which a forest cover must be re-established following harvest is not specified. This creates a risk that areas of non-forest land may persist for long periods of time within a "permanent forest" scheme, which may undermine the integrity of the scheme. The forest re-establishment criteria in Proposal 1.4 will mitigate this risk: when forest cannot be re-established following harvesting, the area must be removed from the scheme.

QUESTIONS

1. Do you agree with the present 80% retention figure as a restricted harvest limit? If not, what alternative would you propose and why? What evidence is available that an alternative limit would maintain forest permanence as a core value proposition of the PFSI?
2. Should the ability to perform clear-fell harvest be removed from the PFSI to enhance permanence?
3. Is there any reason why PFSI-sourced emissions units should not be required to meet all surrender obligations (including potential impacts on market liquidity)? If so, how would the reputation of the PFSI be maintained under such conditions?
4. Is 20% (of average above-ground live carbon stocks) appropriate as the limit below which thinning to waste should not be considered harvesting?
5. Are the proposed forest re-establishment conditions sufficiently rigorous, and the duration allowed for re-establishment reasonable?
6. Should a minor amount of felling of isolated individual trees for personal use be allowed, without it being considered harvesting?

2 PROVIDING FOR ENTRY AND EXIT FLEXIBILITY

Summary of Present Status and Issues

The PFSI currently provides flexibility for landowners to:

- enter areas into the scheme that do not yet qualify as forest land, but are expected to qualify in the future; and
- exit the scheme as a unilateral right after 50 years, or at any time with the agreement of the Minister (delegated to MPI).

There is an inherent tension between the flexibility offered by these conditions, and maintaining the reputation of the PFSI as a scheme to establish and maintain permanent forest. For all practical purposes, non-forest land entered into the PFSI could remain in that state indefinitely, as no simple measures exist to ensure permanent forest is actually established. This is not consistent with the intent of the scheme.

In terms of exit provisions, neither the existing legislation nor regulations envisaged a specific time at which exit from the PFSI would occur – only that a "continuous cover" forest would be established and maintained for at least 99 years. The PFSI covenant, however, confers a unilateral right for participants to exit after 50 years, although this could be seen as inconsistent with the legislation.

The only explicit exit provision provided in the legislation allows a participant to request exit at any time with the approval of MPI. However, approval is not automatic. MPI needs to weigh carefully the reasons for requesting exit against the risk that exit could undermine permanency and wider environmental benefits. In practice, MPI's discretion is therefore quite limited.

In the proposals that follow in this section, MPI seeks to:

- confirm that existing entry conditions should remain, and suggest amendments to ensure permanent forest is always established; and
- provide conditions that allow participants some flexibility to exit the PFSI, while protecting the integrity of the PFSI as a permanent afforestation scheme.

Proposals to Provide Entry and Exit Flexibility

Entry flexibility

The PFSI currently allows registration of non-forest land, but there are no simple means to ensure a permanent forest is established in a reasonable timeframe. The presence of significant areas of non-forest land in the scheme could potentially undermine its reputation. Allowing registration of non-forest land nonetheless has a number of advantages for PFSI participants, as it:

- allows them to demonstrate a commitment to afforestation as a sustainable land use over an entire area, which may facilitate compliance with territorial authority rules or provide better access to other incentives to establish forests;
- avoids the administrative complexity and cost of completing cumbersome "add-land" transactions to separately register each new area that qualifies as forest land; and
- simplifies carbon assessment under the Field Measurement Approach in larger forests by allowing sample plots to be allocated once for the entire area to be forested.

Given these advantages, MPI's preference is to retain the present entry flexibility offered by the scheme provided that generic conditions are added to ensure permanent forest is actually established.

PROPOSAL 2.1

Land that is yet to become forest land may continue to enter the PFSI (status quo) provided that each hectare registered in the PFSI must:

- by 10 years after registration, if predominantly exotic forest species are growing, have a crown cover of at least 30 percent from forest species that have reached 5 metres in height; or
- by 20 years after registration, if predominantly indigenous forest species are growing, have a crown cover of at least 30 percent from forest species that have reached 5 metres in height.

The PFSI also currently includes a rule that allows entry of a small area of land from which indigenous trees that had naturally regenerated have been cleared on or after 1 December 2007, generally to allow planting of exotic trees instead. This rule is now considered unnecessary: such clearance is already subject to restrictions under both the Resource Management and the Forests Act. For simplicity, MPI recommends that the rule be removed.

PROPOSAL 2.2

Remove the present ability to clear areas of predominantly indigenous trees of up to 5 hectares on land that is to enter the PFSI.

Exit conditions and flexibility

Specifying a set of conditions that allow a degree of flexibility to exit from the PFSI, while maintaining its reputation as a permanent forest scheme, is challenging. However valid reasons for exit will always exist when unforeseen situations arise and significantly alter the ability of participants to realise the value of their forest carbon.

During the review to date, comment has also been received on the need to retain flexibility to exit as a means to respond to future unanticipated risks to forest carbon sequestration. For the PFSI, such risks could arise many years in the future, with concerns that acceleration of climate change could result in more severe weather events than is now anticipated. The counter argument to providing exit flexibility is that if greater flexibility than the PFSI provides is wanted, forest owners can instead join the NZ ETS, which imposes no exit restrictions. However, those forest owners' units would no longer attract the premium paid by the market for units sourced from permanent forests.

As a compromise between allowing fully flexible exit conditions and maintaining PFSI permanence, it is proposed that the existing PFSI exit conditions be replaced with those in Proposals 2.3 and 2.4 below.

PROPOSAL 2.3

At any time after 50 years from registration, allow exit (with the usual surrender of all emissions units received) provided that an additional quantity of units is also surrendered that:

- at 50 years after registration, is equal to 50 percent of the emissions units normally due on exit; and
- reduces linearly with time to zero by 100 years after registration.

Example: a participant decides to exit the PFSI 75 years after registration. The additional quantity of emissions units due is an extra 25 percent of the normal surrender obligation.

Proposal 2.4 seeks to formalise and make more specific the existing right of participants to exit at any time with the agreement of the Minister (delegated to MPI), while adding clear and specific conditions that MPI must consider to ensure the integrity of the scheme.

PROPOSAL 2.4

Allow exit from the scheme at any time (with the usual surrender of all emissions units received, but no repayment of any additional units), when circumstances or events occur that:

- cannot reasonably have been foreseen at the time of registration; and
- significantly affect a participant's ability to access the value of carbon sequestration in their PFSI forest; and
- are such that allowing exit is unlikely to bring the wider PFSI into disrepute as a permanent afforestation scheme.

Proposal 2.4 is an over-riding provision to allow exit in situations that cannot reasonably be anticipated and are beyond a participant's control – if such circumstances actually or potentially change the ability of the participant to realise the value of carbon stored in their forests.

QUESTIONS

1. Do you agree with the proposals for entry and exit conditions? If not state the reasons why, and if possible suggest alternatives and explain why those would work better.

2. Does the proposal that additional emissions units must be surrendered for exit between 50 and 100 years strike the correct balance between flexibility to exit and supporting permanence as a core value proposition of the PFSI? If so, do you consider setting the additional surrender requirement at 50% at 50 years, reducing to zero by 100 years, will be effective? If not, what alternative arrangements would you suggest?

3. What other measures around entry and exit should be taken to encourage greater participation in the PFSI?

3 MANAGING LIABILITIES FROM NATURAL EVENTS

Summary of Present Status and Issues

Every forest is at risk of damage or destruction through adverse natural events like fire, wind, insects/pests and disease. At present, landowners who join the PFSI face risks that such events could cause carbon losses in their forests, for which they would be liable to surrender emission units. Such losses are known as 'unintentional reversals': a carbon loss caused by a natural event that reverses forest carbon sequestration.

During engagement, stakeholders indicated that the risk of liability arising from natural events is a significant disincentive to participation. Although private forest insurance may be available to cover such events, its cost means that it is unlikely to be an economic proposition for PFSI participants. Liabilities from natural events may also represent a larger challenge for PFSI participants than for owners of short rotation forests. This is because the PFSI's long-term nature means it is more likely their forest will experience a natural event at some time during scheme membership, and the liabilities could be large if the event is severe and occurs after many years of carbon accumulation.

The PFSI is also currently at a disadvantage in relation to natural events compared with forestry in the NZ ETS. Recent amendments to NZ ETS legislation removed liability for carbon losses due to natural events if forest re-establishment was not possible after the event. To be equitable, this dispensation should be extended to PFSI participants.

Proposals to Manage Liabilities from Natural Events

There does not appear to be a strong rationale for PFSI participants to have to meet liabilities that arise, even if rarely, because a forest cannot be re-established after a severe natural disaster. MPI therefore recommends that in such circumstances a participant's liability be removed.

PROPOSAL 3.1

Remove liabilities for carbon losses in PFSI forests damaged by a natural event when the event prevents the forest from being re-established.

During engagement on the PFSI review, stakeholders raised the concept of "self-insurance" to meet liabilities from adverse natural events (when the forest can be re-established). This would involve setting aside a percentage of units in a pool[3] administered on behalf of all participants, and issued against accepted claims. The concept is similar to proposals raised by forestry participants in the 2011 review of the NZ ETS. The approach was not implemented for the NZ ETS because participants can exit at any time in response to perceived risk. Also, commercial insurance was considered to be an economically viable proposition for most forests in the NZ ETS, due to the greater level of revenue available from clear-fell harvest.

For the PFSI, a more compelling argument for developing a self-insurance approach exists because there are: greater chances of experiencing a natural disaster at some stage, larger liabilities if the forest is old, and limited revenue available. Precedents exist for such an approach in Australia and California, and a similar pooled insurance approach has also been used in New Zealand as part of the former EBEX21 scheme run by Landcare Research.

The benefits of self-insurance are that it:

- provides a means to manage what is likely to be the largest risk of incurring unexpected liabilities;
- removes a key barrier to participation by reducing the liability risk, and mitigates a major concern about intergenerational liabilities;
- supports the overall environmental integrity of the scheme by ensuring that the large majority of emissions liabilities from natural events will be met even if an individual participant is so badly affected that they are not in a position to meet the liabilities themselves.

3 Also known as a "Forest Buffer Account" in some international schemes.

PROPOSAL 3.2

Establish a self-insurance facility, initially through a levy of 5%[4] of the emissions units generated from the PFSI. These units would be placed in a pool administered as a Crown holding account to meet 90% of the liabilities arising from events that:

- are natural and unintentional;
- are not caused or exacerbated by departure from accepted standards of forest management for the tree species and region concerned; and
- have impacted an area that exceeds 1 hectare in area.

It is proposed that the self-insurance scheme would be mandatory for all new PFSI participants, and available as a one-time option on transfer to the enhanced scheme for existing participants (with a phased payment over 5 years of the 5% levy on those emissions units already received).

Units would be held in an account administered by the Environmental Protection Authority (EPA) as part of its wider role in managing the NZEUR. To access units under the self-insurance facility participants would have to formally report any natural events that result in carbon losses. Evidence would need to be provided that the losses resulted from a natural event, and had not been exacerbated by poor forest management practices. Reports would need to be of an auditable standard, to maintain the integrity of the scheme. If the scheme administrator determines that an unintentional loss has occurred, a percentage of the surrender liability would be met from the self-insurance pool.

In order to encourage landowners to maintain good forest management, MPI recommends the self-insurance scheme should only cover 90% of the carbon losses that arise from a natural event. The landowner would be responsible for the shortfall. MPI would assist landowners by providing information on mitigation of risks associated with fire, wind, pests and diseases.

MPI also recommends that to help minimise administration claims, small areas of damage of less than 1 hectare would not be eligible for compensation. The 1 hectare limit is intended to apply to either the aggregate of small scattered patches of damage, or a continuous area of damage.

QUESTIONS

1. Do you agree that there should be no liabilities from natural events after which it is not possible to re-establish the forest?
2. Will a self-insurance facility reduce the major risks from natural events under the PFSI when a forest can be re-established (and if not, what risks will remain and why)?

4 Internationally, a levy of 10% has been used in similar schemes. However, for those countries fire is the largest risk, and in New Zealand the risk of fire is much less. As such, a substantially smaller figure (5%) is initially proposed for the levy. However, as national statistics on forest destruction from natural events other than fire are limited, an estimate of the total liabilities likely from all natural events is difficult to establish. The levy may therefore need to change over time, depending on the level of claims.

4 EXPANDING SCHEME ELIGIBILITY

Summary of Present Status and Issues

The PFSI currently allows only landowners (registered proprietors) to enter the scheme. Other people or entities with rights over forest on the land are not eligible to join the PFSI scheme. This can be a barrier to landowners with smaller landholdings that might otherwise form a single legal entity and use forestry rights/leases to amalgamate their forests to achieve the economies of scale that would make joining the PFSI worthwhile. Individual forest owners may also wish to amalgamate their forests so the total area is at least 100 hectares, to gain access to the greater degree of accuracy and transparency provided by carbon assessment under the Field Measurement Approach.

Under the CCRA, either the landowner or a forestry rights/lease holder can apply to be a participant in the NZ ETS, with the consent of the other party.[5] Experience to date with forestry in the NZ ETS has shown that when participation is extended to forestry rights holders and lease holders, increased and more innovative investment opportunities exist.

Proposals to Increase Eligibility

There does not appear to be any fundamental reason why forestry rights holders or lease holders should be excluded from the PFSI. Expanding eligibility to join the PFSI should increase participation by owners of smaller forests, facilitate entry of Te Ture Whenua land under multiple ownership, and provide opportunities for other forms of investment or ownership entity to join the scheme.

PROPOSAL 4.1

Allow forestry rights holders and lease holders to enter the PFSI with the agreement of the landowner.

Experience with administering forests in the NZ ETS under rights or leases has shown that it is critical that robust legal agreements exist between the landowner and lease/right holder. This is necessary to ensure that at the end of the lease/right the responsibility for existing carbon benefits or obligations is specified. Once the right/lease ends, if there is no new lease holder or right holder, participation in the PFSI would be transferred to the landowner.

It is envisaged that the same rules and processes as presently relate to entry and exit of forestry lease and rights holders under the NZ ETS would apply to an improved PFSI. These rules provide mechanisms to help landowners avoid incurring unexpected liabilities should a lease expire or be terminated.

QUESTIONS

1. Do you agree with forestry rights holders and lease holders being able to register forest land in the PFSI, with the agreement of the landowner?
2. Are there any risks to this approach that have not been considered above, and if so how would you suggest that they be mitigated?

5 Participation is more rigorously controlled however, by legislation rather than through a covenant. Proposal 6 deals with this issue.

5 ENHANCING THE ECONOMIC RETURN FROM PERMANENT FOREST

Summary of Present Status and Issues

Obtaining greater recognition for the wider environmental benefits associated with permanent forest has been an important topic of discussion during the PFSI review to date. As already noted, permanent forest generally delivers a greater level of environmental benefit than short-rotation forest intended for clear-fell harvest. This has been broadly acknowledged by the market in the premium price often paid for PFSI emissions units. But there is potential for more to be done to enhance economic returns.

Earlier proposals in this document to enhance permanence and support the wider environmental benefits of the PFSI are expected to increase market recognition of PFSI-sourced emissions units as a premium product. Decisions taken in 2013 to allow for PFSI-sourced emissions units to be identifiable on the NZEUR are also well-aligned with helping participants to secure financial gain for the wider and public benefits that permanent forests provide. Nonetheless, during engagement on the PFSI review stakeholders have continued to note that:

- the current structure of the PFSI does not formally acknowledge wider environmental benefits, and there is strong support for any mechanism to allow this to occur; and
- the degree of public environmental benefit associated with permanent forest warrants incentives to create such forests beyond those available through a premium market price alone.

The importance of permanent forests in delivering more sustainable land use and biodiversity objectives is well understood. Proposals in this section therefore aim to assist owners of permanent forest to gain recognition of that importance, and to deliver improved economic return by facilitating wider recognition of non-carbon values by both the market and New Zealand agencies responsible for sustainable land management.

Proposals to Assist with Enhancing Economic Return

MPI considers there are three means by which Government could support enhancement of the economic return from permanent forests, as acknowledgment of the public benefits of such forests:

(i) provide a web-based register through which PFSI participants can promote the environmental credentials of their forests, including listing any third-party environmental ratings that they have qualified for;

(ii) ensure PFSI participants are aware of the full range of incentives available to grow permanent forest as a sustainable land use, and promote permanent forest as the premium land use for marginal pasture land to agencies responsible for sustainable land use; and

(iii) provide information to assist owners of permanent forest to develop multiple revenue streams from those forests within the restricted harvest limits.

PROPOSAL 5.1

Establish a publicly accessible web-based platform that allows PFSI participants to voluntarily register their individual forests, and which provides:

(i) traceability of PFSI-sourced units to their originating forest;

(ii) information on the sustainable management needs of the land on which the forest is established, and of any formal steps taken to address those needs; and

(iii) a list of any ratings received from recognised third party agencies of the environmental benefits of the forest.

The web-based platform would allow PFSI participants to bring together and publicly promote a transparent and traceable record of information related to permanence and environmental benefits. It is envisaged that the information could include:

- a description of the forest type and a map of its location;
- information on land use capability (including erosion state and risk) from the NZ Land Resource Inventory as a measure of sustainable land use management requirements;
- a record of farm plans or other measures taken, or membership of other schemes (e.g., Erosion Control Funding Project, Ngā Whenua Rāhui scheme, or QEII covenant), that demonstrate adherence to sustainable land use practices; and
- a register of any third party ratings or similar assessments obtained of environmental benefits (e.g. the forest qualifies under the Gold Standard[6], or under the CarboNZero[7] programme).

A key benefit of providing a public link to information that demonstrates adherence to permanence and wider environmental benefit principles is that it facilitates targeting of high-value Corporate Social Responsibility markets for PFSI units. This would be expected to increase market demand and prices for those units.

The platform to host the information would either be built into the NZEUR, or be outside of but linked to the NZEUR. MPI, in consultation with PFSI participants, would develop a standard set of information that would be shared on the platform. The approach would be similar in practice to that used to provide public information about Clean Development Mechanism projects, which is available on the UNFCCC website (see **http://cdm.unfccc.int/registry**).

PROPOSAL 5.2

Establish a one-stop-shop for the full range of monetary and non-monetary incentives available for PFSI forest, and actively promote the PFSI as the premier sustainable land use option for marginal pastoral land to agencies responsible for land use.

Under proposal 5.2 MPI would consolidate information on its web site about the full range of incentives or similar support that PFSI forests are potentially eligible for. MPI would develop a package of information to ensure all NZ sustainable land management agencies are aware of the benefits of the PFSI as the premier option for sustainable use of marginal pasture land.

Examples of additional schemes that PFSI forest may also be eligible for include the Erosion Control Funding Programme (ECFP – formerly the East Coast Forestry Project), Sustainable Land Management Hill Country Erosion Programme, QEII National Trust, and Ngā Whenua Rāhui. Grant or rate relief, or funding for such things as fencing, may also be available from local authorities in some cases. Agencies including Regional Councils and the Department of Conservation have already expressed interest in collaborating with MPI on this option.

PROPOSAL 5.3

Establish and promote the opportunity to achieve multiple revenue streams from permanent forests operating within restricted harvest limits.

6 The Gold Standard Foundation, based in Switzerland, awards the prestigious Gold Standard to carbon projects that meet certain best practice rules and continually reduce carbon emissions.

7 Part of Enviro-Mark New Zealand.

The common view that permanent forest is established purely for conservation purposes, and has little opportunity for deriving an economic return, is gradually being challenged. The carbon market has provided the most important revenue stream for such forests to date, but there is increasing public demand for other forest resources. Manuka honey and oil are examples with growing importance, and kanuka-based skincare products are another emerging line. There may be opportunities for economic return through growing exotic crop species, such as ginseng, under the forest canopy. Cultivating valuable fungi species for Asian markets could be a further opportunity. Selective harvest of high-value timber trees could also augment revenues in future.

MPI proposes to take a wide view in bringing together information that may support additional revenue generation from PFSI forests, for the use of stakeholders.

QUESTIONS

1. Do you support the concept of a publicly accessible web-based platform to facilitate promotion of the permanence and wider environmental benefits of permanent forest? Or should this be left to individual forest owners and the assessment of the market?

2. If you support the platform concept, what information would you expect to be able to place on it, or find on it? If you do not support it, do you have alternative suggestions to promote the benefits of permanent forest in a transparent and traceable manner?

3. Is lack of information about the full range of incentives available to assist with establishment of permanent forest an issue for you, and if so will the proposal to consolidate and coordinate information help to address this?

4. Have you found that lack of knowledge about the PFSI and its sustainable land management benefits is an issue when dealing with territorial authorities or other land management agencies?

5. Do you anticipate that making information on the range of opportunities to develop revenue streams from permanent forest readily available would make people more likely to join the PFSI?

6 IMPROVING ADMINISTRATIVE EFFICIENCY AND ROBUSTNESS

Summary of Present Status and Issues

The PFSI design has proven to be administratively inefficient due to the use of a covenant as the primary administrative mechanism. Evolution of the covenant content over time has complicated matters: there are currently 6 different versions in use. As a result, administering the PFSI is considerably more complex than for forestry participants in the NZ ETS, even though the two schemes essentially deliver the same outcome: providing the owner with access to the value of forest carbon sequestered on their land.

Considered overall, PFSI participants face unnecessary costs primarily because:

- the use of a covenant, negotiated with each individual PFSI participant, is complex, time-consuming and costly for both participants and government, and the negotiation process (both to initiate or to change a covenant) can result in lengthy delays;
- the administrative processes that apply to the PFSI are sufficiently different in detail to those for NZ ETS participants that many of the online, automated processes developed for NZ ETS participants are not available to those in the PFSI; and
- future administrative efficiencies for NZ ETS participants, such as automating emissions returns, cannot be applied to the PFSI without adaptation – and the cost of such adaptation is difficult to justify given the relative area of PFSI forest.

Despite these challenges, feedback from PFSI participants during the review engagement process strongly favoured retaining the PFSI as a scheme distinct from the NZ ETS. Some participants also supported continuing the PFSI covenant, primarily because it has provided a simple and legally demonstrable commitment to establishment and management of permanent forest under a documented set of conditions.

Proposals to Improve the Administration of the PFSI

In principle there are two high-level options available to achieve the objective of better administration:

(i) continue to administer the PFSI under the Forests Act 1949, with substantial enhancement of the Act to strengthen definitions and improve legal transparency, flexibility and robustness; or

(ii) transfer administration of the PFSI to the Climate Change Response Act (CCRA) 2002, by defining as a "Permanent Forest participant" a person who is undertaking the new activity of "owning[8] permanent post-1989 forest land" and by including conditions that currently apply to establishment and maintenance of PFSI forests in a new definition of "permanent post-1989 forest land".

Improving the PFSI by enhancing the Forests Act would involve duplicating many of the existing forestry sections of the CCRA within the Forests Act. The Forests Act was never originally intended to deal with matters of forest carbon storage and was used to implement the PFSI simply because there was no legislative alternative at the time.

Administration under the CCRA is therefore the preferred approach to improving administration of the PFSI. The CCRA already offers a relatively complete and comprehensive framework for dealing with matters related to forest carbon sequestration, and, for example, already allows for the wider participation of lease holders and forestry rights holders suggested under Proposal 4.

The CCRA can also be readily adapted to add definitions for "permanent forest participant" and "permanent post-1989 forest land" that incorporate the key principles of the present PFSI, and which will maintain the distinction between the PFSI and the NZ ETS. The CCRA already offers a more comprehensive and complete framework to establish a robust legal basis for carbon market operations, and more consistent and transparent compliance systems. Many of the CCRA administrative and empowering provisions would be applicable to a future PFSI, with minimal alteration.

8 "Owning" is expected to include lease and rights holders; see Proposal 4.

Overall, MPI expects that administering the PFSI under the CCRA would simplify the scheme's administration and make its legal basis more robust. Stakeholders would be expected to benefit from access to more cost-efficient, responsive, online services, in common with those available to NZ ETS participants.

PROPOSAL 6.1

Transfer administration of the PFSI to the Climate Change Response Act and create definitions for Permanent Forest participant, Permanent post-1989 forest land and Continuous cover forest.

The intent of Proposal 6.1 is to mirror the existing conditions in key PFSI definitions in Part 3B of the Forests Act 1949, the Forests (Permanent Forest Sink) Regulations 2007, and the associated covenant, in the CCRA – subject to feedback on the earlier proposals in this document. All existing PFSI forest would be considered to comply with the new definitions once finalised.

Administration of the PFSI under the CCRA would remove the need for the existing covenant, as its administrative function would become embedded in the legislation, regulations or in technical standards. However, there remains the consideration that some PFSI participants have indicated they wish to retain that part of the covenant which demonstrates legal ownership of permanent forest. MPI considers that use of a notice on the land title would be a simpler administrative mechanism to provide public notification that the land, or part of it, includes permanent post-1989 forest land.

PROPOSAL 6.2

Replace the existing covenant's function to register a legal interest in permanent post-1989 forest land by a notice attached to the land title.

The present covenant also records any conditions that are intended to apply either to establishment of the permanent forest or to its ongoing management. The conditions related to ongoing management are frequently included to ensure the wider environmental benefits of permanent forest are demonstrable and realised.

Earlier proposals (under sections 1 and 2 above), if adopted, are expected to remove the present need to specify conditions for forest establishment and management on an individual basis in a covenant. Conditions would instead be in legislation, regulations or standards to ensure consistency for all participants in the scheme, while providing flexibility for further change in response to participant or market demand. Any regulation or standard would be subject to further consultation prior to implementation.

PROPOSAL 6.3

Forest establishment and management conditions formerly included in covenants will, if required, be delivered through regulations or standards under the appropriate legislation.

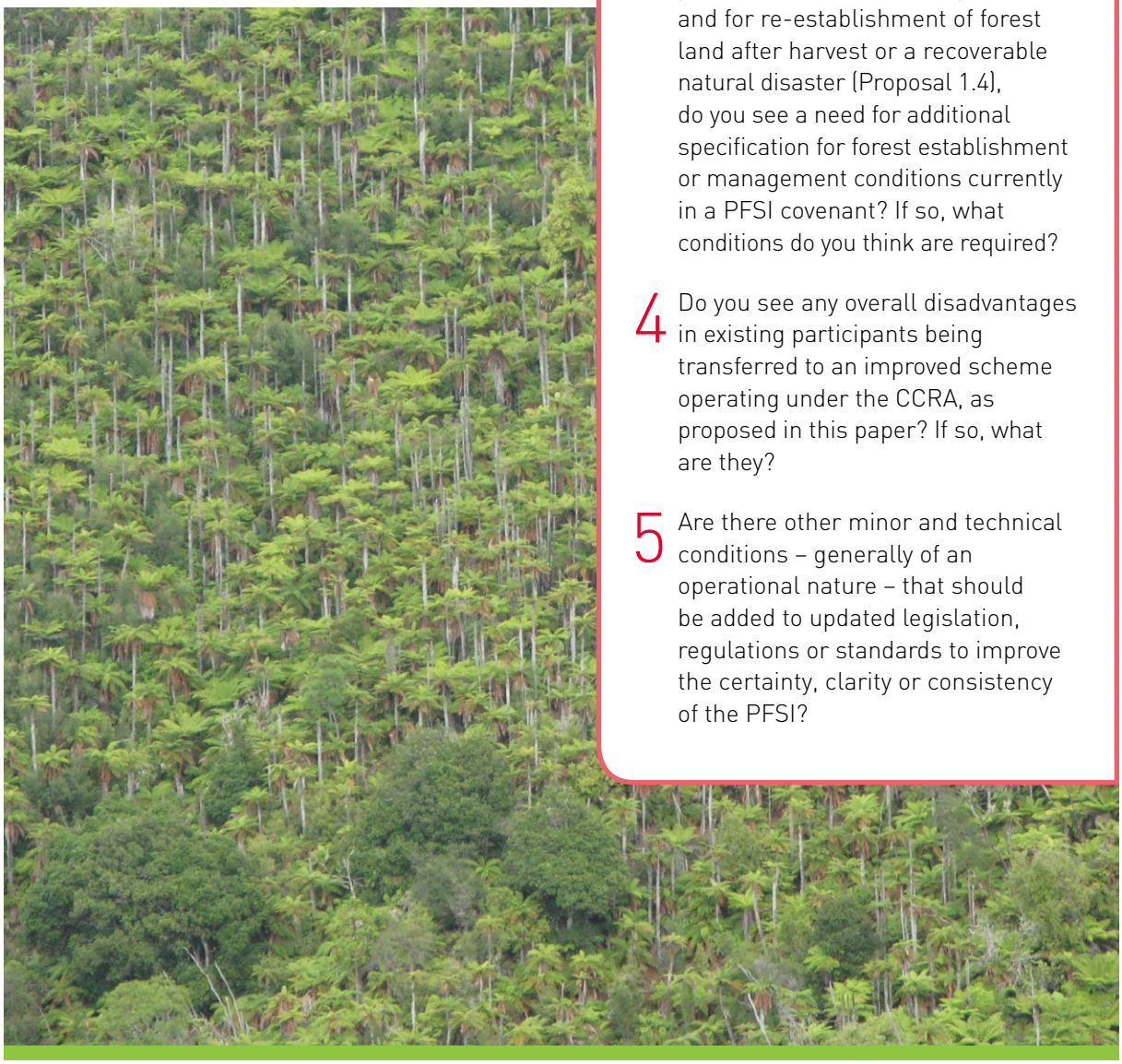
One potential disadvantage to this approach would be that it would not, unlike the existing covenant, formally recognise the intent to manage forests at a level of integrity beyond any minimum requirements in legislation, regulations or standards. However, Proposal 5.1, to establish a publicly-accessible platform to record information on PFSI forests, would provide an alternative approach to obtaining such recognition.

It is proposed that if operation under the CCRA was established, the PFSI as it exists under Part 3B of the Forest Act 1949 would be revoked, together with all existing covenants. MPI would work with existing PFSI participants to ensure that the transfer to the improved scheme occurs at minimal cost.

Transition to the new regime

Existing PFSI participants transferring to an improved scheme operating under the CCRA could be expected to benefit from:

- simpler administration;
- reduced administration costs (especially in the future, with automated emissions returns);
- enhancement of permanence as a core value proposition;
- opportunities to achieve greater recognition of wider environmental benefits; and
- reduction of the risk of liabilities from natural events through access to self-insurance, and through dispensation if the event prevents forest re-establishment.



QUESTIONS

1. Do you anticipate any problems if the PFSI was in the future administered under the CCRA?

2. Is the present PFSI covenant currently being used by participants in ways that would not be covered by the combination of proposals in this paper? If so how, and are there alternatives that could be used to cover these uses that would avoid the complexities of using a covenant?

3. If there were minimum requirements for initially establishing permanent post-1989 forest land (Proposal 2.2), and for re-establishment of forest land after harvest or a recoverable natural disaster (Proposal 1.4), do you see a need for additional specification for forest establishment or management conditions currently in a PFSI covenant? If so, what conditions do you think are required?

4. Do you see any overall disadvantages in existing participants being transferred to an improved scheme operating under the CCRA, as proposed in this paper? If so, what are they?

5. Are there other minor and technical conditions – generally of an operational nature – that should be added to updated legislation, regulations or standards to improve the certainty, clarity or consistency of the PFSI?

NEXT STEPS

Thank you for your consideration of and feedback on this discussion paper.

Completing your submission

The closing date for submissions is **14 August 2015**.

Submissions or queries should be addressed to:

PFSI Submissions
Spatial, Forestry & Land Management
Ministry for Primary Industries
PO Box 2526
Wellington 6140

Responses or queries can also be emailed to:

pfsi@mpi.govt.nz

Publishing and releasing submissions

All submissions on this document will be subject to the Official Information Act 1982. Therefore, if you consider that all or any part of your submission is commercially sensitive or should be treated as confidential, please state this clearly along with your reasons when making your submission.

After the submission closing date

After consultation closes MPI will evaluate all submissions received and will make recommendations to Ministers on improvements to the PFSI.

Decisions on the PFSI will be announced publicly later in 2015.

Where any recommendations require legislative change, that change is expected to commence in 2016.