

Proposed National Environmental Standard for Plantation Forestry

Template for Submitters

We would like to hear your views on the proposed NES-PF.

Please feel free to use this template to prepare your submission. Once complete please email to NES-PFConsultation@mpi.govt.nz.

As stated in section 8.2 of the consultation document, your submission must include at least the following information:

- your name, postal address, phone number and, if you have one, email address
- the title of the proposed standard you are making the submission about
- whether you support or oppose the standard
- your submission, with reasons for your views
- any changes you would like made to the standard
- the decision you wish the Ministers to make.

When commenting on specific draft rules, please be as clear as possible which rule you are referring to and provide a reference e.g. to the relevant page number, heading or text.

For more information about how to make a submission, please refer to section 8 of the consultation document.

Contact details

Name:	
Carolyn Nimmo	
Postal address:	
s 9(2)(a)	
Phone number:	
s 9(2)(a)	
Email address:	
s 9(2)(a)	
Are you submitting on b	ehalf of an organisation? Yes [] No [X]
If yes, which organisatio	on are you submitting on behalf of?
If you are a forest owner	c/manager, what size of forest do you own/manage (in hectare
My brother has a 20ha f	orest on his farm

Privacy Act 1993

Where you provide personal information in this consultation MPI will collect the information and will only use it for the purposes of the consultation. Under the Privacy Act 1993 you have the right to request access and correction of any personal information you have provided or that MPI holds on you.

Official Information Act 1982

All submissions are subject to the Official Information Act 1982 and may be released (along with the personal details of the submitter) under the Act. If you have specific reasons for wanting to have your submission or personal details withheld, please set out your reasons in the submission. MPI will consider those reasons when making any assessment for the release of submissions if requested under the Official Information Act.

Please indicate below if you wish your personal details to be withheld:

- [] Please withhold my personal details where submissions are made public
- [] Please withhold my personal details in response to a request under the Official Information Act 1982

Questions for submitters

The questions for submitters that are included throughout the consultation document are provided below. We encourage you to provide comments to support your answers to the questions below.

1. Do you think section 2.1 and 2.2 of the consultation document accurately describe the problem facing plantation forestry?

Please provide comments to support your views.

I have not had time to read the full consultation document, only the summary and overview of the proposal.

I understand that forestry companies want certainty through a national standard and to be able to act with minimal hindrance from Councils and local communities. I agree with the intent and principles of the proposed NES-PF. I believe that the costs in time and money for local Councils and communities to monitor, and manage the impact of, forestry in their areas should be minimised.

However, Councils and communities need to be assured that local conditions such as high erosion susceptability will be accurately described and taken into account in the standard. I understand that some areas, such as the Maitai Valley in Nelson (my former home), have been reclassified as lower risk. The local Council and community should be involved in such decisions, not only a central body, because the science can be assessed in different ways by different people.

2. Do you consider that the conditions for permitted activities will manage the adverse environmental effects of plantation forestry?

Please provide comments to support your views.

I do not believe the standards are strong enough in several areas to protect our indigenous plants, wildlife, habitats, ecosystems and fisheries. For example,

- Any new plantations in existing areas of indigenous vegetation and habitat should be a non-complying activity which requires resource consent.
- The modification of Significant Natural Areas (SNA) in any planting or replanting should be prohibited.
- Setbacks of at least 20 metres for streams and 30 metres around all wetlands and lakes should be required.
- There should be no large-scale clear-cuts on land with a moderate, high or very high risk erosion classification, only a patchwork of smaller cut-over areas.
- 3. Are the conditions for permitted activities clear and enforceable (see appendix 3 of the consultation document)? Can you suggest ways of making the rules clearer and more enforceable?

Please provide comments to support your views.

No comment

4. Are the matters where local authorities can retain local decision-making appropriate (summarised in Table 2 and Table 4 and provided in detail in Appendix 3 of the consultation document)?

Please provide comments to support your views.

There are no definition or examples in the consultation summary of "unwarranted variation' between Councils.

There needs to be more provision for Council decision-making. For example:

- Councils should be able to require the use of less fire prone species such as
 deciduous exotics and indigenous species on land close to homes and to
 existing and significant native forests.
- Councils should be allowed to reject an inadequate harvest plan and insist that the forestry company strengthens it in specified ways to minimise impacts such as sediment load on waterways.
- Councils should be involved in any decision to reclassify aspects of the local environment such as erosion susceptibility.

5. Will the environmental risk assessment tools (the Erosion Susceptibility Classification, the Wilding Spread Risk Calculator, and the Fish Spawning Indicator) appropriately manage environmental effects as intended (see section 3.5 of the consultation document)?

Please provide comments to support your views.

The standards should be strengthened. For example:

- The Erosion Susceptibility Classification should be upgraded to high resolution-definition mapping to ensure erosion prone land is correctly classified.
- The NES-PF should set a high and clear bottom-line on sediment loss to protect fisheries.
- A new provision should be added which requires local/regional councils to address the impacts of afforestation on water yields and water flows in low-to-moderate rainfall areas by making requirements of forestry companies for certain practices in each stage of the forestry 'lifecycle'.
- 6. Do you have any comments about any particular activity or draft rule (see appendix 3 of the consultation document)?

Please include reference to the rule you are referring to.

No comment.

7. Is the NES-PF the best option to meet the assessment criteria (in Box 13 of the consultation document)?

Please provide comments to support your views.

As noted, I agree with the intent and principles. It is in the detail that the NES-PF needs to be more robust. Therefore, I would like Ministers to approve a strengthened version of the proposed NES-PF.

8. Have the expected costs and benefits of the NES-PF been adequately identified (see section 4.3 of the consultation document)?

Please provide comments to support your views.

No comment.

9. Are there any issues that may affect the successful implementation of the NES-PF (such as decision-makers applying the permitted baseline test more frequently)?

Please provide comments to support your views.

See comments in sections above.

10. Please describe any risks or opportunities that you consider have not been identified or addressed in the proposal.

See comments in sections above.

11. Will the proposed NES-PF support regional councils to implement the NPS-FM (see section 6.1 of the consultation document)?

Please provide comments to support your views.

No comment.

12. What resources or other implementation activities would help you to prepare for and comply with the proposed NES-PF (see section 7 of the consultation document)? How should these activities be delivered (for example, training, online modules, guidance material)?

No comment.

13. Are there any other issues that you would like to raise?

No, thank you.

Richard Parker, s 9(2)(a)

6.08.2015

Submission to the Ministry for Primary Industries attention:
Stuart Miller
Spatial, Forestry and Land Management

Submitee Richard Parker s 9(2)(a)

Submission on rule changes in NES-PF section 6.4 pages 43, 64 & 82

I strongly oppose these rule changes

I am very concerned with the casual approach towards the introduction of GMO's which could have detrimental consequences for the economy.

The knowledge about the long term effects of introduction of DNA of one species into another is very, very limited, if only by virtue that the technique of DNA transfer in this manner is in it's infancy.

The risks of planting of trees with eg. Bt genes into our environment is enormous. If these GME trees do what their designers intend them to do, those trees could potentially kill all insects which eat any material of these trees: leaves, needles, bark, flowers, pollen, root material etc. Visiting bees which are essential for pollination of our orchard fruit producers, could be the victims if they would eat tree pollen or sugars which drip from tree wounds.

Would you want to be responsible for the loss or partial loss of our fruit industry and it's economic flow on effect?

After harvesting of trees, root material and other unwanted parts of the trees will need to be recycled back into the system. All parts of the tree including the roots and branches which form the debris, contain the same genetic formula to produce the insect killing chemical. As insects play a vital role in the disposal of the debris, soon they would all die.

Who would clean up the remains of such a forest, how and at what economic cost?

This modified material could get anywhere into our environment: soils, waterways and coastal waters. There are indications that the active chemicals created in the "Bt-cells" remain active for a long period and could have an effect on larger organisms as it accumulates in the food chain. Again no long term research has been or could have been done.

We should not take the risk that other species, like fish could be effected; the cost to our fisheries can not be overseen with the knowledge we have at the moment.

The potential cost to human health could be even greater.

What is your back up plan for when things go wrong?

What have we learned from other experiences? Not much going by the proposal! Rabbits, possums, stoats and ferrets, wilding Douglas Fir, Pinus Contorta, even Pinus Radiata; all introductions which now cost the tax payer millions of dollars to contain. Chemicals such as DDT, dioxine, organo-phosphates, etc are another example; have we not paid and are we not still paying dearly for the clean up and the hidden down stream damage to people's health and the health of the environment on which we depend. We cannot even measure the economical value of that damage.

Time and time again we see the state i.e. the tax payers pick up the cost after a small group of individuals have taken the profits.

This is not the right way of going about introduction of new technology or innovations.

I am also very concerned about the fact that both local and regional councils will be sidelined.

Overriding with a stroke of the pen, plans for a precautionary approach equals a total disregard for the opinions and concerns which live amongst the people in the area from Auckland to Cape Reinga and in other areas of New Zealand.

I want all wording referring to genetically modified trees and rootstock (section 6.4 p43, 64 & 82) removed from the NES for Plantation Forestry. I also want local councils to continue to have the right to prevent any experiments with GMO's or introduction of GMO's.

MPI should set a minimum standard and councils should have the right to require higher standards.

The EPA has so far rubber stamped just about every proposal it received. Considering the latest appointment to the EPA of Mr Allan Freeth and knowing his views on GMO's, I have no confidence in the EPA protecting the New Zealand environment from harm and the New Zealand economy from major loss.

Yours faithfully,

Richard Parker

Proposed National Environmental Standard for Plantation Forestry

Oppose

I manage an 8 hectare forest in Kopu. We are actively encouraging biodiversity and eliminating pests.

1. Please describe any risks or opportunities that you consider have not been identified or addressed in the proposal.

If you think about the true value of a forest, the quotient that is wood is a tiny part.

Protecting public access to forests for health and for hunting and gathering, yields more profit to a community than wholesale logging.

Add to this the benefit of natural ecosystems, unaffected by poisons, silt or industrial disturbance.

Add to this a potential for long-term small-scale hardwood projects.

Add the beauty.

Add the mana of clean water.

Add the prosperity of eco-tourism.

In Whangapoua Forest, on the north part of the Coromandel Peninsula, there is planted the biggest pinus radiata plantation of this area. It is on land of dubious ownership and, according to the kaumatua, has caused the silting-up of the harbour at Whangapoua and the resulting Mangrove swamp. It has taken away valuable ecology and food resources, both of Tane and of Tanagaroa.

The logs are harvested by a crew from Vanuata who are on temporary work visas while unemployment in the area is above 50%.

The logs are shipped to China to be milled! The last mill on the peninsula having been closed down last year.

Disgusting behaviour. So think again. Think about the business model. Look at the statistics. As subjects of Her Majesty and as members of the hapu, we deserve to have access to our local resources.

Genetically Engineered plants are dangerous, implicitly through their business model, but actually through lack of whakapapa. They are alien.

It may seem that pure economics should be an argument for permissiveness, but you must ask yourself - who is paying the ferryman? Who is providing evidence for the model and who will have to carry the burden of the hatefulness that is before you when you're gone?!

Spatial, Forestry and Land Management
Ministry for Primary Industries
PO Box 2526
Wellington 6140

Section 1	3.5		W
Stua	-6	WWEE	DOM:
SILII	ET.	EWHALL	HE:

Email: NES-PFConsultation@mpl.govt.nz

Name/Organisation Geoffrey Peel

Phone Email Dat11.8.2015

Re: Submission Proposed National Environmental Standard for Plantation Forestry (NES-PF)

Dear Minister Guy,

We oppose the Proposed Standard – NES & other relevant legislation: 6.4 - Genetically modified tree/root stock (p. 43, Appendix 3, Afforestation, p. 64 & Replanting, p. 82)

Personal comments

We live at Bombay Auckland which is a major growing area. We oppose the release of any genetically modified plant material and feel this could damage. New Zealand's clean image as well as ruin the quality of our food supply. Please do not release any GM plant material.

Submission and Reasons -

The GM clauses on p. 43, 64 & 82, in the proposed NES – PF do not meet the objectives of environmental protection for communities, nor does the standard take into account the inherent dangers and liabilities associated with novel genetic technology and its potential contamination of soils, indigenous and exotic flora & fauna, pruning debris, waterways, trophic ecosystems and waterways.

We ask that you remove all conditions and references permitting genetically modified organisms to be the sole responsibility of the Environmental Protection Authority (EPA) under the Hazardous Substances and New Organisms Act (HSNO) and allow Councils to manage Regional and District land use through their mandated planning functions' under the Resource Management Act (RMA).

Both the Environment Court and the Royal Commission on Genetic Modification (Chapter 13, Recommendation 13.1, H1, p.339) have stated the clear responsibilities and boundaries between the EPA and Council jurisdiction, there is no "duplication" between the HSNO or RMA once a GMO is released. This must not be undermined by any clause in the proposed NES-PF.

The Environment Court, Judges Thomson and Newhook, decision upheld the Councils ability, under the RMA, to place policies, rules and objectives, on the management of GMO land use activities as part of their management and planning functions in their regional and district plans [1], [2].

References:

[1] http://www.boprc.govt.nz/media/321876/environment-court-decision-18-dec-2013-env-2012-339-000041-part-one-section-17.pdf

[2] http://www.ge-free.co.nz/assets/pdf/20150512145527872.pdf

Changes we would like you to make -

- Remove all GM clauses in the proposed NES PF and references permitting genetically
 modified organisms to be the sole responsibility of the Environmental Protection Authority (EPA)
 under the Hazardous Substances and New Organisms Act (HSNO) and
- Retain and provide for Local Bodies to place more GM stringent land use rules, objectives and
 policies in their plans for the management of the natural and physical resources through their
 mandated planning functions' under the Resource Management Act (RMA).
- Protect the Local Bodies mandate and duty of care, under the RMA, to the existing foresters, primary producers and businesses in their region and districts so they can maintain their responsibilities with national and global certification bodies.
- Ensure that the Regional and District Councils have the ability, under the RMA, to create a
 much needed additional tier of local protection against the risks of outdoor release and use of
 GMOs.

The decision we would like the Minister to make

- Remove all wording in the NES-PF in 6.4 p.43, Appendix 3; Afforestation: p. 64 & Replanting:
 p. 82, referring to genetically modified trees and rootstock.
- Place an added condition in the proposed NES-PF stating that Local Bodies can set more stringent rules, objectives and policies on GMO's as part of their land use planning function, under the RMA, when addressing the economic, social and cultural wellbeing of their communities.

Please keep us informed.

Sincerely

Signature /printed name

Geoffrey Peel



Proposed National Environmental Standard for Plantation Forestry

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Contact details

Name:	
Duane Peltzer	
Postal address:	
s 9(2)(a)	
Phone number:	
s 9(2)(a)	
Email address:	
s 9(2)(a)	
Are you submitting on behalf of	an organisation? Yes [] No [x]
If yes, which organisation are yo	ou submitting on behalf of?

If you are a forest owner/manager, what size of forest do you own/manage (in hectares):

Privacy Act 1993

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Please provide comments to support your views.

Please enter your comments here ...

2. Do you consider that the conditions for permitted activities will manage the adverse environmental effects of plantation forestry?

Please provide comments to support your views.

Please enter your comments here ...



3. Are the conditions for permitted activities clear and enforceable (see appendix 3 of the consultation document)? Can you suggest ways of making the rules clearer and more enforceable?

Please provide comments to support your views.

Please enter your comments here ...

4. Are the matters where local authorities can retain local decision-making appropriate (summarised in Table 2 and Table 4 and provided in detail in Appendix 3 of the consultation document)?

Please provide comments to support your views.

Please enter your comments here ...

5. Will the environmental risk assessment tools (the Erosion Susceptibility Classification, the Wilding Spread Risk Calculator, and the Fish Spawning Indicator) appropriately manage environmental effects as intended (see section 3.5 of the consultation document)?

Please provide comments to support your views.

- A. The Wilding Spread Risk Calculator tool requires independent validation. We agree that a robust Wilding Spread Risk Calculator tool for assessing the risk of different tree species from source populations such as plantations in different environments or landscapes is needed. The current tool has been used as an indicative means of assessing environmental effects of proposed new forest plantings for a number of years. The NES-PF states that the Risk Calculator will continue to evolve and be updated (P28), and to date the risk calculator has been modified sporadically as new potential issues or information comes to light. As with any model or tool, an independent assessment or review of its accuracy and robustness is needed; this is essential to provide confidence in the predictions of the risk calculator, and any decisions that ultimately rely on it (e.g., rating the risk of an afforestation scheme objectively). An appropriate review should include evaluation of the tool itself in terms of completeness of information for the drivers of spread risk, and validation of risk predictions (i.e., ground truthing).
- B. Grazing palatability and reduced Wilding Spread Risk needs to be tested. There are several comments in the proposed NES-PF that refer to Wilding Spread Risk and grazing palatability (P28) as a means of reducing risk. To our knowledge, the palatability of different plantation conifer species and ability of different grazing animals to control their spread has not been adequately tested, but rather these ideas are based on Benecke's (1967) trials of sheep grazing on *Pinus contorta*. Additional information is needed to confirm whether these results are more generalisable among tree species and grazing animals.
- C. Apply the Wilding Spread Risk Calculator to Reforestation as well as Afforestation proposals.

The Wilding Spread Risk Calculator should also be applied to reforestation applications. Conditions such as adjacent land-use (e.g. retired from grazing) or different planted species can change through time and thus alter the potential environmental risk. This is completely consistent with the recent MPI national strategy for the management of wilding conifers as well, that emphases the importance of managing wilding conifers among different land uses or ownership. In addition, as the risk calculator is refined to include new knowledge and information, this may alter the assessed risk of reforestation activities compared to original afforestation.

6. Do you have any comments about any particular activity or draft rule (see appendix 3 of the consultation document)?

Please include reference to the rule you are referring to.

Rule: Afforestation

'The draft rules require councils and land owners to apply the calculator to a site when considering afforestation' (and we recommend also reforestation).

The use of the Wilding Spread Risk Calculator should be strengthened.

The proposed 'low risk' for Wilding Spread Risk Calculator score of 11 or less requires validation.

In addition, where Wilding Spread Risk Calculator scores >11 are obtained, the requirement of '• *Mitigation action to restrict wilding tree spread*' appear to be weak. Rather, more clearly defined guidelines about the outcome of mitigation activities are needed. The simplest refinement could be that the Wilding Spread Risk Calculator scores are divided into three classes; a low risk score reduced from 11 to a lower value, a medium risk score that requires - *Mitigation action to restrict wilding tree spread*, and a high risk score that requires - *Mitigation action that will stop wilding tree spread onto neighbouring properties*. Again, validation of model predictions and mitigations used will be required to ensure appropriate outcomes are achieved.

7. Is the NES-PF the best option to meet the assessment criteria (in Box 13 of the consultation document)?

Please provide comments to support your views.

Please enter your comments here ...

8. Have the expected costs and benefits of the NES-PF been adequately identified (see section 4.3 of the consultation document)?

Please provide comments to support your views.

Please enter your comments here ...

9. Are there any issues that may affect the successful implementation of the NES-PF (such as decision-makers applying the permitted baseline test more frequently)?

Please provide comments to support your views.

Please enter your comments here ...

10. Please describe any risks or opportunities that you consider have not been identified or addressed in the proposal.

Please enter your comments here ...

11. Will the proposed NES-PF support regional councils to implement the NPS-FM (see section 6.1 of the consultation document)?

Please provide comments to support your views.

Please enter your comments here ...

12. What resources or other implementation activities would help you to prepare for and comply with the proposed NES-PF (see section 7 of the consultation document)? How should these activities be delivered (for example, training, online modules, guidance material)?

Please enter your comments here ...

13. Are there any other issues that you would like to raise?

Please enter your comments here ...

Spatial, Forestry and Land Management Ministry for Primary Industries PO Box 2526 Wellington 6140

Stuart	Miller
Email:	NES-PFConsultation@mpi.govt.nz

Name/ Carolyn Penk
Postal

Phone Email Date 11 August

Re: Submission Proposed National Environmental Standard for Plantation Forestry (NES-PF)

Dear Minister Guy,

We oppose the Proposed Standard – NES & other relevant legislation: 6.4 - Genetically modified tree/root stock (p. 43, Appendix 3, Afforestation, p. 64 & Replanting, p. 82)

Personal comments

I oppose genetically modified anything

Submission and Reasons -

The GM clauses on p. 43, 64 & 82, in the proposed NES – PF do not meet the objectives of environmental protection for communities, nor does the standard take into account the inherent dangers and liabilities associated with novel genetic technology and its potential contamination of soils, indigenous and exotic flora & fauna, pruning debris, waterways, trophic ecosystems and waterways.

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The Environment Court, Judges Thomson and Newhook, decision upheld the Councils ability, under the RMA, to place policies, rules and objectives, on the management of GMO land use activities as part of their management and planning functions in their regional and district plans [1], [2].

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Please keep us informed.

Sincerely

Signature /printed name

Carolyn Penk

Proposed National Environmental Standard for Plantation Forestry

Spatial, Forestry and Land Management Ministry for Primary Industries PO Box 2526 Wellington 6140

Stuart Miller

Email: <u>NES-PFConsultation@mpi.govt.nz</u>

June Pe	enn		
Phone:			
Email:			

Re: Submission Proposed National Environmental Standard for Plantation Forestry

Personal comments

It is imperative that NZ remains GE / GMO free. PLEASE don't allow any modified organisms nor species into our environments. To do so would be an <u>irreversible mistake</u>. Ordinary New Zealanders are passionate about our beautiful forests – allowing genetic modification into our environment will have unknown long term impacts that we will live to regret. For the sake of future generations, please don't let this happen.

Submission

I oppose the Proposed Standard – NES & other relevant legislation: 6.4 - Genetically modified tree/root stock (p. 43, Appendix 3, Afforestation, p. 64 & Replanting, p. 82)

Submission and Reasons

The GM clauses on p. 43, 64 & 82, in the proposed NES – PF do not meet the objectives of environmental protection for communities, nor does the standard take into account the inherent dangers and liabilities associated with novel genetic technology and its potential contamination of - soils, indigenous and exotic flora & fauna, pruning debris, waterways, trophic ecosystems and waterways.

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Both the Environment Court and the Royal Commission on Genetic Modification (Chapter 13, 6) have stated the clear responsibilities and boundaries between the EPA and Council jurisdiction, there is no "duplication" between the HSNO or RMA once a GMO is released. This must not be undermined by any clause in the proposed NES-PF.

The Environment Court, Judges Thomson and Newhook, decision upheld the Councils ability, under the RMA, to place policies, rules and objectives, on the management of

GMO land use activities as part of their management and planning functions in their regional and district plans [1], [2].

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- Ensure that the Regional and District Councils have the ability, under the RMA, to create a much needed additional tier of local protection against the risks of outdoor release and use of GMOs.

The decision we would like the Minister to make

- 1. All wording in the NES-PF in **6.4 p.43, Appendix 3; Afforestation: p. 64 & Replanting: p. 82,** referring to genetically modified trees and rootstock must be removed from the NES-PF.
- 2. To place an added condition in the proposed NES-PF stating that Local Bodies can set more stringent rules, objectives and policies on GMO's as part of their land use planning function, under the RMA, when addressing the economic, social and cultural wellbeing of their communities.

In addition, please improve the standards to ensure:

- Indigenous vegetation and habitats are protected from being over-planted with exotic trees;
- Clear cut size limited to reduce erosion and sediment loss;
- The use of overseas best practice by introducing larger riparian buffer zones and setbacks along rivers and around lakes and wetlands to protect their natural character and water quality;
- My Council be able to prevent the release of GE material and introduce stronger controls to prevent erosion, control wildings and protect the environment;
- Incentives to plant more diverse tree species to reduce fire risks and increase indigenous biodiversity.

I wish to be heard. Please keep us informed.

Sincerely

June Penn

From: Tracy Phua s 9(2)(a)

Sent: Tuesday, 11 August 2015 12:56 a.m.

To: NES PF Consultation

Subject: ATTN: Stuart Miller - submission re proposed national environmental standard for

plantation forestry

Proposed National Environmental Standard for Plantation Forestry

Spatial, Forestry and Land Management Ministry for Primary Industries PO Box 2526 Wellington 6140

Stuart Miller

Email: NES-PFConsultation@mpi.govt.nz

Submissions must be received by MPI before 5 pm, Tuesday 11 August 2015.

Tracy Phua

s 9(2)(a)

Re: Submission Proposed National Environmental Standard for Plantation Forestry

Submission

I oppose the Proposed Standard – NES & other relevant legislation: 6.4 - Genetically modified tree/root stock (p. 43, Appendix 3, Afforestation, p. 64 & Replanting, p. 82)

Submission and Reasons -

The GM clauses on p. 43, 64 & 82, in the proposed NES – PF do not meet the objectives of environmental protection for communities, nor does the standard take into account the inherent dangers and liabilities associated with novel genetic technology and its potential contamination of - soils, indigenous and exotic flora & fauna, pruning debris, waterways, trophic ecosystems and waterways.

We ask that you remove all conditions and references permitting genetically modified organisms to be the sole responsibility of the Environmental Protection Authority (EPA) under the Hazardous Substances and New Organisms Act (HSNO) and allow Councils to manage Regional and District land use through their mandated planning functions' under the Resource Management Act (RMA).

Both the Environment Court and the Royal Commission on Genetic Modification (Chapter 13, 6) have stated the clear responsibilities and boundaries between the EPA and Council jurisdiction, there is no "duplication" between the HSNO or RMA once a GMO is released. This must not be undermined by any clause in the proposed NES-PF.

The Environment Court, Judges Thomson and Newhook, decision upheld the Councils ability, under the RMA, to place policies, rules and objectives, on the management of GMO land use activities as part of their management and planning functions in their regional and district plans [1], [2].

References:

[1] http://www.boprc.govt.nz/media/321876/environment-court-decision-18-dec-2013-env-2012-339-000041-part-one-section-17.pdf

[2] http://www.ge-free.co.nz/assets/pdf/20150512145527872.pdf

Changes we would like you to make -

- Remove all GM clauses in the proposed NES PF and references permitting genetically modified organisms to be the sole responsibility of the Environmental Protection Authority (EPA) under the Hazardous Substances and New Organisms Act (HSNO) and
- Retain and provide for Regional and District Councils to place more GM stringent land use rules, objectives and
 policies in their plans for the management of the natural and physical resources through their mandated
 planning functions' under the Resource Management Act (RMA).
- Protect the Regional and District Council mandate and duty of cares, under the RMA, to the existing foresters
 and primary producers businesses in their region and districts so they can maintain their responsibilities with
 national and global certification bodies.
- Ensure that the Regional and District Councils have the ability, under the RMA, to create a much needed additional tier of local protection against the risks of outdoor release and use of GMOs.

The decision we would like the Minister to make

- 1. All wording in the NES-PF in **6.4 p.43**, **Appendix 3**; **Afforestation**: **p. 64 & Replanting**: **p. 82**, referring to genetically modified trees and rootstock must be removed from the NES-PF.
- To place an added condition in the proposed NES-PF stating that Local Bodies can set more stringent rules, objectives and policies on GMO's as part of their land use planning function, under the RMA, when addressing the economic, social and cultural wellbeing of their communities.

I wish to be heard. Please keep me informed.

Sincerely

Tracy Phua

SUBMISSION FOR THE PROPOSED NATIONAL ENVIRONMENTAL STANDARD FOR PLANATION FORESTRY

Email: NES-PFConsulation@mpi.govt.nz

Dated: Thursday, 6 August 2015

My Name & Contact Details

Name:

s 9(2)(a)

Dr Benjamin Pittman

Postal address:

s 9(2)(a)

Phone number:

s 9(2)(a)

Email address:

I am submitting on behalf of:

Myself, as a concerned individual and also as manawhenua for NGATI HAU; TE PARAWHAU; NGATI RAHIRI MAORI KOMITI and as a member and Kaumatua of Forest & Bird, Northern Branch

OVERVIEW OF EXPECTATIONS

- 1. In response to the MPI's proposed National Environment Standard for Plantation Forestry (NES-PF), it is my/our expectation that an elected government is obligated to listen to community wants and concerns and not merely to go through a pretended and sham process of 'consultation' where feedback, provided in good faith is totally ignored and discounted.
- 2. The plantation forestry sector must be sustainable and developed and managed in ways which impact minimally on our total environment. Already, it has a sad and toxic history to our environment and presents the often ugly side of capitalist exploitation of resources where people and the environment are simply co-lateral damage as part of a handful of inter-connected corporates and government-connected people making profits.
- 3. Soil degradation, erosion, affective runoff, sedimentation, and visual pollution post-harvest are of great concern and need to be addressed. So, this is at least one part of the package which is fine. My point is that it is all designed to dress-up the

- real poison pill, section 6.4 on pp.43, 64, 82 as they appear in the electronic version of the consultation document. (The hard copy version has the details on pp.41, 62, 80).
- 4. Plantation forests must have no negative effect on native forest and habitats and must, at the very least, enhance them by providing allied food and living habitats for native birds. The thought of toxic, sterile environments through government policy and manipulation is truly alarming along with overriding corporate interests being given a free ticket, stamped with permits for unknown intentions intentions and toxic consequences. Today I drove past a part of Puhipuhi State Forest which has been milled. It is an utter mess; visual pollution on a large scale and an example of how badly things have been managed and how much the land has been assaulted and damaged. With GE trees the potential consequences are totally unknown. How will bees and other insects and wildlife be affected? What will the effects be on people and the total environment - soils, waterways, air quality, harbours, oceans? Will GE trees with herbicide and pesticide tolerance be an excuse for wholesale aerial spraying and even worse consequences for people and the total environment? What are the effects arising from decay of vegetation, branch fall and roots? This is wanton risk-taking on an unprecendented scale and, totally arrogant and irresponsible on the part of MPI and the National government.
- 5. The MPI must take a responsible precautionary approach the any outdoor use of Genetically Modified Organisms (GMOs) by not allowing the planting of Genetically Engineered (GE) trees, whether in field trials or plant releases. The risks are far too great and worse than anything we have ever had to face to date with "well-intended experiments" which have already gone wrong wilding pines; exotic pest plants; possums; feral cats; stoats; ferrets; weasels; rabbits; swans all costing billions to manage. The thought of yet another but far worse composite raft of risks is truly alarming.
- 6. I record my opposition to any GE experimentation related to any native trees in Aotearoa and certainly object to any excuse such as Kauri dieback disease being used as justification. These taonga must not be touched in any such way.
- 7. I am totally opposed to any diminuition of the powers within local communities and local government to control and have sensible and rightful precautionary measures in place within local plans in relation to GMOs/GE of any kind, GE trees included.
- 8. I again make specific reference as a major matter of concern to NES-PF 6.4, pages 43, 64 and 82 of the electronic version of the consultation document and the GE trees matter. This is the real poison pill in the entire proposal, buried as it is within a mass of words, nice photos, eye-catching graphics and surreptitious intent. This is the real intent of the entire package. It is downright insulting and sneaky, treating us all with utter contempt.

- 9. I have major concerns about the unknown effects of GE trees on native and non-planation trees around, which together constitute a dynamic part of the total environment
- 10. I am totally opposed to the over-arching Big Brother of these proposals: the TPPA which would permit everything in the name of exploitation of resources, by the favoured few, for the favoured few. We, having to live in the communities and environment left behind would have to survive in and manage the terrible, exploitative and rangatiratanga-destructive consequences.

THE KEY ELEMENTS

This entire proposal is a total dressing up of dangerous and totally anti-democratic, dictatorial policy in an effort to make it sound palatable and justified. It is called 'smoke and mirrors' and 'spin'. The real agenda here - GE trees - is buried. The Minister does not have the numbers to get this through parliament on any merit or community interest: there is none, despite the hype and fantasy and flawed underpinning assumptions and claims and use of loaded language implying or claiming things like 'unwarranted' variation around Aotearoa. This is truly worrying: do National ministers and their underlings charged with selling the toxic, untested, unknown and unsellable really think that there is no climatic or geographic variation in Aotearoa which render this one-sizefits-all approach dangerous? Therefore, this is a back-door attempt in the interests of National's corporate mates to use 'regulation via ministerial and cabinet decision' to get something past scrutiny and to silence pesky hapu, iwi, community and local body interests, farmers, foresters, horticulturalists and their precautionary and tikanga measures. GE free status is something respected and valued and not something to be tossed aside as being of no consequence. We are concerned about our local environments and health and which most shockingly, the National government ignores, totally. It is patronising, insulting and arrogant as well as ignorant. It is also a National Party 'testing of the waters' so they can then try it on with and for others of their corporate stable mates and sponsors with agendas much bigger than this and part of the much larger TPPA agenda being pushed by National. It is hard not to conclude that this is all about National ministers and their MPI minions setting themselves up for a future after politics when their corporate mates and sponsors will finally reward them with their grateful largesse for getting this collective and future-destroying and environment-destructive crap through. It is worse than a total sellout and is utter treason.

When LGNZ recently wrote to Minister Groser seeking clarity on likely implications for local government under the TPPA, Groser's response was an assurance that "negotiators will not sign an agreement in conflict with New Zealand's interests, and provides an assurance that the TPPA will protect all existing local government activity in relation to regulation and service provision." The MPI proposals related to the NES-PF gives the immediate lie to this hollow assurance

Did his ministerial colleagues not tell him about this NES-PF and its agendas? Also, resolutions by 11 city and regional Councils which actively call upon the Government to

conclude TPPA negotiations fairly, suggest that our councils do not trust the word of government either.

With the NES-PF, planned and permitted activities are all very well but again, this is all part of the window dressing and spin and nothing but a PR exercise. Plantation forests are destructive of the soil and environment period but as is so common with corporates and their government and ministerial sponsors and mates, the focus is always on dollars and other nice, much vaunted, promotable 'benefits' like job creation and export dollars which merely end up in the pockets of others. It is full of pictures masking it all to look so wonderful and, weasel words designed to lull those incapable of critical thought into an even greater torpor.

It is also highly offensive to note that during "consultation" meetings, MPI staff were promoting totally false views that all was supported by Forest & Bird, Fish & Game and the Farm Foresty Association. While these august bodies might have been "consulted" in early phases, the GE provisions snuck in, were not brought to their attention for comment. So, this is another example of MPI sleight of hand.

LOCAL COMMUNITIES & AUTHORITIES

These proposals are a total insult to local authorities and the communities they represent. Local authorities represent communities - however well or poorly - and, local communities are those people who have to live with events and consequences of cynical, self-centred, self-seeking myopic agendas like this. This is about local communities and choice they have the right to make. The reality here, as skilled and sophisticated as the deception might be, this is about over-riding central government control and dictatorship with a few crumbs of meaningless and illusionary local powers.

The consulatation and allied documents are all designed to mask the bitter and toxic pill of reality. It is detail overload designed by ministerial and departmental spin agents to encourage people to look at pictures and coloured charts with a warm and fuzzy feeling but miss the critical message entirely. It is a masterstroke lesson: how to screw the population without most realising it until it is too late.

THE SELF-INTEREST FACTOR

Lurking in the shadows there is an interconnected band of the National government's allies and appointees: Dr William Rolleston, Federated Farmers - the question must be asked, who he "represents" in terms of farmer numbers which is believed to be a small percentage; Allan Freeth, EPA, with his GE background and interests. It is like setting the thief free in the shop and then appointing him judge and jury to pass judgment on himself and then decide on a penalty for his theft.

THE LIABILITY FACTOR

With whom lies responsibility here, in the event of a major catastrophic event related to GE trees? The government? Companies? Both? There must be "make good", reparations and penalties provisions inbuilt to any proposals. If the National Government is so certain

about claimed benefits, it should have no fear about accepting liability for anything that goes wrong along with the profit-seeking corporates involved.

RANGATIRATANGA

Various iterations of the so-called "NEW ZEALAND GOVERNMENT" and its other titles and claimed capacities to act continue the myth of capacity to do so, contemptuously trampling upon the provisions and convenants of He Wakaputanga and Te Tiriti o Waitangi which asserted Ngapuhi and Maori sovereignty and excluded Maori from being subject to pakeha law.

Many of us as mana whenua and tangatawhenua; as kaitiaki and as inheritors of all that tupuna such as my great-great grandfather, Patuone, handed on, are truly alarmed at what the National Government is up to now. Since their friends and allies in Federated Farmers lost their case in the Environment Court when they attempted to obtain a ruling on the capacity of councils to impose precautionary and prohibitive measures related to GMOs under the RMA, they have been actively searching for ways to circumvent parliament since they know they do not have the numbers through conventional parliamentary process about which we have a long history of suspicion anyway.

We have a huge concern about the National Party Minister Nathan Guy/MPI proposal to allow GE trees in Aotearoa and to use ministerial/cabinet edict by regulation to override the excellent and highly necessary precautionary and prohibitive GE rules and provisions in local council plans.

As active members of local iwi and hapu, we oppose the National Party's moves to weaken the Hazardous Substances and New Organisms (HSNO) Act (through proposed regulations for outdoor use of Genetically Modified Organisms); to get Aotearoa to become a signatory to the TPPA; to undermine key environmental protections in the RMA, and to force GE trees upon local communities and councils by changing the regulations around Plantation Forestry. We also see the TPPA which as the catch-all for disaster, including GMOs/GE; a total breach of Te Tiriti o Waitangi and which could leave Aotearoa vulnerable to foreign corporate will.

So, Tai Tokerau mana whenua strongly oppose the National government push to allow GE trees and override local councils' current precautionary and prohibitive GE rules/provisions in local plans. These are important for local communities and manawhenua, are excellent protections and are much needed.

OTHER CONCERNS

MPI have conducted hui around the country and provided an opportunity for submissions. However, we were also alerted that MPI, SCION and the Forest Owners Association (FOA) are holding parallel secret hui to avoid the outrage of the general public about the proposal to allow GE trees. There are also grave concerns over the lack of meaningful consultation to date, especially with key stakeholders like the NZ Farm Foresters Association and Forest & Bird, regarding the specific proposal to allow GE trees in the new NES-PF. These have not been mentioned in previous consultation hui with key stakeholders like Forest & Bird and the NZ Farm Forestry Association and yet

MPI are wrongly claiming their support as if in an attempt to make all more palatable to the public. The proposed GE tree provisions by MPI would override any Council precautionary GE rules or provisions placed in local plans. This is truly outrageous as there is pakeha case law stating that local councils do have the capacity to declare such rules and provisions.

The National government's unhelpful and irrational desire to allow risky GE experiments and releases in Aotearoa, I suggest, needs to be strongly condemned. The MPI-sponsored claims that there is 'unwarranted' variation around the country ignore the facts of huge local and regional variety and difference in climatic and geographic characteristics, for example. This is all about central government control trampling upon local communities and rights in the interests of commercial and corporate entities to whom they are answerable.

I also note that GE trees are prohibited by both global certification bodies for truly sustainable forestry - the Forest Stewardship Council (FSC) and The Programme for the Endorsement of Forest Certification (PEFC).

Allowing GE trees in our environment would put at risk Aotearoa/NZ's biosecurity, its unique biodiversity, its existing non GM primary producers (conventional, IPM and organic) including foresters, and their access to FSC and PEFC certification, Key markets and premiums will be affected, as will our loner-term economy, and quality GE free primary production.

Dr. Kerry Grundy, Team Leader Futures Planning Whangarei District Council and Convenor of the Auckland/ Northland ICWP on GMOs attended the 7th July 2015 hui in Whangarei and pointed out to MPI that there is recent case law (ENV-2014-329-000004) affirming local councils right to use the RMA to create a much needed additional tier of local protection against the risks of outdoor use of GMOs, given serious deficiencies in the HSNO Act and the failure of central government to act - despite being constructively lobbied by Local Government NZ, the ICWP on GMOs and various other councils in Aotearoa since at least 2003).

Local Councils must be able to retain local decision-making on GM activities. The NES-PF must note that councils have the ability to make more stringent conditions in relation to the land use of GM tree stock in their regions. The RMA allows local bodies to manage any potential use of GMOs as part of their land use (resource management) planning functions.

Dr. Grundy said he was concerned that what MPI is doing is *ultra vires* and asked the MPI staff if MPI had obtained legal advice on what they are proposing in trying to allow GE trees and override local councils. They did not know. So much for bothering to do any real and meaningful homework. They gave a good impression of merely going through the "consultation" motions.

Really in sum, this is about the National government looking after its corporate mates and sponsors. They could not care less about our people and our whenua and the toxic

heritage they are wanting to foist on us all while post-government they all run off to get their real rewards from their big fish corporate mates overseas.

We note especially:

- 1. There is nothing in the regulatory impact statement(s) contained in the MPI proposed new NES-PF document regarding GE trees, no analysis done by MPI, a collective insult to our local councils, Northland Conservation Board, Tai Tokerau mana whenua and other forestry/ farming families). In other words, MPI has done no analysis to justify their outrageous proposal to override/undermine our local councils hard work over the last 12 years at least, to create a much needed additional tier of local protection under the risks of outdoor use of GMOs. Above all we fear for our regional food and fibre industries and the existing valuable GE free status that protects our biosecurity/unique biodiversity/conventional, IPM and organic primary producers and gives us access to key markets and premiums.
- 2. MPI staff who presented at the MPI hui at Whangarei's Forum North (Tuesday, 7 July) misrepresented the position of NZFFA and Forest and Bird (and who were sternly told that this was incorrect and to desist immediately) proceeded to then (as reported by reliable attendees) make the same inaccurate/misleading statements at the Kawakawa MPI hui later that afternoon (7 July, NuFlo centre, Kawakawa).

This is unacceptable and nothing but political and disingenuous spin.

- 3. Lack of consultation with Tai Tokerau mana whenua (as expressed by Ngati Wai, Ngati Whatua, Ngati Hau and other Iwi and hapu at the Whangarei MPI hui) especially given the fact that all Tai Tokerau Iwi authorities have strong precautionary and prohibitive GE policies for their respective rohe (Bombay Hills to Reinga) in accordance with tikanga and rights under Te Tiriti o Waitangi to be consulted as equals.
- 4. The proposal by National Party Minister Nathan Guy/MPI to allow GE trees in the new NES-PF puts at risk Forest Stewardship Council certified forestry blocks in NZ. The FSC and PEFC, two international certification bodies for truly sustainable forestry, prohibit the use of GE trees/ GMOs in FSC and PEFC certified forests.

An Example: Forest Stewardship Council, New Zealand Standard

"Indicator 6.8.4

Field use of **genetically modified organisms** by the **forest manager** shall be prohibited."

The MPI proposals are, in our view, a dishonest attempt to get GE trees over the gate through ministerial/cabinet (so-called, 'executive' power processes), as a regulation and thereby, bypassing the fullest scrutiny of Parliament.

The National government knows it would never get this through otherwise as they do not have the political or public support.

We want truly sustainable, sound environmental forestry standards (NES-PF) in NZ that ensure we can continue accessing key markets and premiums for our valuable food and fibre, from forests that provide safe habitat and nourishing food for native species and bird life/wildlife in general.

We stand against this blatant, arrogant, ignorant and cynical attempt at government by ministerial and cabinet "Executive Override of the People".

I/we wish to be consulted about this matter and to be kept informed.

Dr Benjamin Pittman PhD(UTS), MFA(Hons) Auck., MHPEd(UNSW), BFA(Auck), DipTchg(NZ), DipSecTchg(ASTC), DipAPC(CISyd)

Key Affiliations:

Ngati Hao Te Popoto, Te Parawhau o Whangarei, Ngati Hau, Patuharakeke

Kev Memberships:

Member, Akerama Marae Committee
Ngati Hau Trust Board
MHK for Ngati Hau, TIMA
Te Pouwhenua o Tiakiririri Kukupa - Te Parawhau
Chairman, Ngati Rahiri Maori Komiti
Associate, Whangarei Maori Executive Committee
Treasurer, Te Tai Tokerau District Maori Council & Delegate, NZ Maori Council
Forest & Bird Northern Branch

Submission on:

PROPOSED NATIONAL ENVIRONMENTAL STANDARD for PLANTATION FORESTRY

Joanna Plows

s 9(2)(a)

I support a National Environmental Standard for Plantation Forestry that has strong environmental standards and encourages the long-term sustainability of the industry.

This sustainability must protect our indigenous vegetation and habitats, protect our soils from erosion and our waterways and estuaries from siltation.

It must also protect our fisheries which depend on these waterways.

We need a precautionary approach to GE tree stocks and local environmental contamination. And we must retain the acceptance of local community input on forestry practices.

Sedimentation Prevention:

A crucial concern is erosion especially from logging on steep land.

For slopes steeper than 10 degrees, there needs to be measures in place so that no sediment gets into the waterways.

There also needs to be larger riparian buffer zones beside rivers and around lakes and wetlands to stop sediment entering these waterways and protect their natural character.

Also, eventually protecting the sea as there is no mention of this in the proposed standard and the sedimentation effects on the saltwater environment and species.

I support the planting of more diverse tree species and this would also act as fire risk reduction and increase indigenous biodiversity.

But I would not like to see overplanting of exotic trees encroaching on indigenous vegetation and habitats.

Also, a limit on the size of clear cut areas to again reduce erosion and stop loss of sediment.

Local Councils retaining Decision-making:

I strongly support local councils (and that is local communities and Iwi) retaining their rights of say in forestry decisions affecting their regions.

In particular to prevent the release of GE material especially as more councils are now taking a precautionary approach to GE in their local plans as a response to GE concerns from local growers and communities.

GE trees:

Not mentioned but I wish to support GE being removed from any proposed forestry standards and a moratorium on further development, field trialling or release of GE trees in NZ.

We do not have an assessment of the full extent of the social and ecological risks of GE plantings.

Climate Change:

There is also no mention of Climate Change and while planting and growing trees is good to decrease this, it is the way (best practice) of the forestry industry that will be crucial to all our futures.

With obvious stronger climate storms and especially heavy rainfall events, there needs to be mention of the potential of not only loss of vegetation but our precious top soil that supports it and resulting sedimentation.

An architect friend alluded to the strong restrictions on building sites of effects of sedimentation in waterways so surely, we must expect the same of forestry practices as well.

The document also implies sedimentation only from forestry roading but this must be extended to include the effects of clear-felling and heavy rainfall events especially the taking of top soil.

Also the effects of forestry and the more frequent storm events on neighbouring properties and people especially with forestry debris being deposited on them by these events.

Consultation Meeting:

At your consultation meeting in Nelson, you stressed that this is still only a draft document and was still in progress and possible to change.

So I look forward to viewing the final document with these concerns mentioned and/or strengthened.

Thank you, Joanna Plows From: Jos Polman

Sent: Monday, 3 August 2015 3:43 p.m.

To: NES PF Consultation Subject: NES-PF 6.4, p43, 64 & 82

Submission to the Ministry for Primary Industries attention:

Stuart Miller

Spatial, Forestry and Land Management

name of submitter Jos Polman

submission on rule changes in NES-PF section 6.4 pages 43, 64 & 82

I strongly oppose these rule changes

I am very concerned with the casual approach towards the introduction of GMO's which could have detrimental consequences for the economy.

The knowledge about the long term effects of introduction of DNA of one species into another is very, very limited, if only by virtue that the technique of DNA transfer in this manner is in it's infancy.

The risks of planting of trees with eg Bt genes into our environment is enormous. If these GME trees do what their designers intend them to do, those trees could potentially kill all insects which eat any material of these trees: leaves, needles, bark, flowers, pollen, root material etc. Visiting bees which are essential for pollination of our orchard fruit producers, could be the victims if they would eat tree pollen or sugars which drip from tree wounds.

Would you want to be responsible for the loss or partial loss of our fruit industry and it's economic flow on effect?

After harvesting of trees root material and other unwanted parts of the trees will need to be recycled back into the system. All parts of the tree including the roots and branches which form the debris contain the same genetical formula to produce the insect killing chemical.

As insects play a vital role in the disposal of the debris, soon they would all die.

Who would clean up the remains of such a forest, how and at what economic cost?

This modified material could get anywhere into our environment: soils, waterways and coastal waters. There are indications that the active chemicals created in the "Bt-cells" remain active for a long period and could have an effect on larger organisms as it accumulates in the food chain. Again no long term research has been or could have been done.

We should not take the risk that other species, like fish could be effected; the cost to our fisheries can not be overseen with the knowledge we have at the moment.

The potential cost to human health could be even greater.

What is your back up plan for when things go wrong?

What have we learned from other experiences? Not much going by the proposal!

Rabbits, possums, stoats and ferrets, wilding Douglas Fir, Pinus Contorta, even Pinus Radiata; all introductions which now cost the tax payer millions of dollars to contain.

Chemicals such as DDT, dioxine, organo-phosphates, etc are another example; have we not paid and are we not still paying dearly for the clean up and the hidden down stream damage to people's health and the health of the environment on which we depend. We cannot even measure the economical value of that damage.

Time and time again we see the state i.e. the tax payers pick up the cost after a small group of individuals have taken the profits.

This is not the right way of going about introduction of new technology or innovations.

I am also very concerned about the fact that both local and regional councils will be sidelined.

Overriding with a stroke of the pen, plans for a precautionary approach equals a total disregard for the opinions and concerns which live amongst the people in the area from Auckland to Cape Reinga and in other areas of New Zealand.

I want all wording referring to genetically modified trees and rootstock (section 6.4 p43, 64 & 82) removed from the NES for Plantation Forestry. I also want local councils to continue to have the right to prevent any experiments with GMO's or introduction of GMO's.

MPI should set a minimum standard and councils should have the right to require higher standards.

EPA has so far rubber stamped just about every proposal it received. Considering the latest appointment to the EPA of Mr Allan Freeth and knowing his views on GMO's, I have no confidence in the EPA protecting the New Zealand environment from harm and the New Zealand economy from major loss.

regards

jos Polman

Submission to the National Environmental Standard for Plantation Forestry

lan Price		
Ph		
Email		

Thank you for the opportunity to comment in relation to the Consultation Document for the National Environment Standard for Plantation Forestry (NES-PF)

While understanding the intentions behind the consultation document, the benefits to the Forestry Industry as proposed will negatively impact on the natural environment and the objectivity of the selective science provided by both Landcare and Scion as the basis for forming this document is open to challenge.

I do not support the Consultation document in its current form.

I first register my real concern in the regular use of phrases throughout the document "as far as is practicable", "if unavoidable", "except where unsafe or impracticable to do so" Such phrases would enable forestry companies/owners so much "wriggle" room, magnified when supported by a lawyer that the integrity of the principles of this draft document, even in its present form would have to be questioned, the potential for litigation is high and any costs incurred would fall on local government and their rate payers.

<u>Relief sought:</u> The use of language in the document should be more definite/defined.

Erosion Susceptibility Classification (ESC)

MPI acknowledge, page 22(Box 11) the ESC "may not accurately reflect the risk of erosion for land covered by plantation forestry". It is my understanding the data base used to produce the ESC map which forms the framework for the NES –PF rules came from the Land Resource Information dataset which was originally developed in the 1960-70's and was used to determine whether land could support pasture. It is questionable as to whether this dated data set is appropriate as a basis for determining Erosion Susceptibility for forestry earthworks and harvesting. I think not, compounding this issue, the proposed classification for risk of erosion on land is too generic and does not take into account local or regional geological variants.

This is very much evident in the Nelson region, especially the Maitai catchment where forestry dominates, the ESC classification for this catchment has been downgraded to medium/low despite having areas over 25 degrees and repeatedly been identified in scientific and monitoring reports as being a significant source of sediments to the Maitai River, Whakapuaka and Waimea Estuaries.

MPI acknowledge the ESC lacks an agreed process for "reassessing, refining, or creating new LUC units and assigning potential erosion classification to these" (Box 12 pg24)

MPI contracted Landcare to update the ESC and this has resulted in "some" changes (pg24) this statement is disingenuous nearly 70% of land has been downgraded by a central government controlled agency; the science behind these changes is questionable.

<u>Relief sought:</u> As the practical implications of this document are so significant, revisit the science behind the forming of the ESC classification, or at the very least allow local councils the opportunity to have input into developing the ESC local ranking.

Mandatory requirement for Harvest plans to be provided to local authorities by Forestry Companies/Managers well before harvesting commences for comment. (Legal authority mandated to local authorities to insist on changes to harvest plans where statutory requirements have not been met).

Setbacks and Riparian Buffers

MPI states (pg11) "Ecosystem services and habitats will be disrupted during the harvest phase until a replanted crop establishes a new canopy, which can be up to eight years from the time of replanting". It goes on to state the soil-stabilising capacity by way of the newly planted forest establishing root reinforcement can take up to 8-10 years.

Here lies the fundamental base line issue that should be the priority lead in establishing standards, in conjunction with this, consideration must be given to our changing climate and issues surrounding extreme weather events (weather bombs) as experienced at Tapawera (May 2010) and Pohara (Dec 2011) Nelson/ Golden Bay, where forestry land use had a catastrophic impact on the environment and surrounding residents due to weather bombs.

If we are committed to "minimising"/preventing "negative environmental impacts" from Plantation Forestry, then mitigating the impact from such events must be the bench mark in establishing national environmental standards.

(Pg 61) Defines setback conditions for afforestation and earthworks from Perennial river or stream less than <3 m in width of 5 m and 10 m for those > then 3 m. Such setbacks will not maintain all of the ecological functions that support healthy freshwater ecosystem processes. Such setbacks at the time of harvesting and for the period (8-10years) of forest growth will offer minimal environmental protection of water ways and NO protection in the case of extreme weather events as described above.

<u>Relief sought</u>: A 10 m setback from all water ways 3m or less and 30 meters for those greater than 3 m. Riparian plantings must be given the highest protective status, enforced

with financial penalties for any damage, where any tree felling will damage riparian planting then the trees MUST not be felled.

Riparian Disturbance (pg 70)

I must challenge the rationale behind this provision. The purpose of riparian planting is to give some integrity to the purpose of protecting waterways from the negative environmental impact from plantation forestry.

MPI wording in this draft rule "limit riparian disturbance during harvesting, fell away from the water body or riparian zone, EXCEPT where unsafe or impractical to do so. If unavoidable, fell trees directly across the water body......",

When I read this, frankly I ask myself what agenda is at work here, is this whole process a PR spin exercise and forestry companies have been given the wink and nod from ministers in Government.

If it is "unsafe or impractical" to fell or remove trees without damaging the riparian zone, then leave the tree/s standing, preferably this should have been identified before planting and left in native trees!!.

<u>Relief sought:</u> This draft rule MUST be removed and replaced with Riparian plantings must be given the highest protective status, enforced with financial penalties for any damage, where any tree felling will damage riparian planting then the trees MUST not be felled.

Earthworks:

The setbacks for earthworks at a Perennial river or stream which is < 3 m width is 5 m and where it is > than 5 m it is 10 m.

<u>Relief sought:</u> A 10 m setback from all water ways 3m or less and 30 meters for those greater than 3 m. Riparian plantings must be given the highest protective status, enforced with financial penalties for any damage, where any tree felling will damage riparian planting then the trees MUST not be felled.

Mechanical Land Preparation:

The setbacks for Mechanical Land Preparation at a Perennial river or stream which is < 3 m width is 5 m and where it is > than 5 m it is 10 m.

<u>Relief sought:</u> A 10 m setback from all water ways 3m or less and 30 meters for those greater than 3 m. Riparian plantings must be given the highest protective status, enforced with financial penalties for any damage, where any tree felling will damage riparian planting then the trees MUST not be felled.

Replanting:

The setbacks for Replanting at a Perennial river or stream which is < 3 m width is 5 m and where it is > than 5 m it is 10 m.

<u>Relief sought:</u> A 10 m setback from all water ways 3m or less and 30 meters for those greater than 3 m. Riparian plantings must be given the highest protective status, enforced with financial penalties for any damage, where any tree felling will damage riparian planting then the trees MUST not be felled.

Fish Spawning:

At a public meeting I attended it was highlighted from the floor the research behind the fish spawning indicator was based upon old research and outdated records and failed to include many endangered and at risk fresh water species. It was also highlighted, dates defined in the general conditions in the Nelson region when Rivers could not be disturbed due to spawning fish were factually wrong......another example of sloppy research or outdated science.

Non Migratory Fish species:

The draft rules in allowing minimal Riparian protection by way of native plant protection and permission to damage this zone when it is 'unsafe or impractical", if allowed, will mean native non migratory galaxiids along with kokopu and koaro which spend most of their lives in rivers and stream will be afforded no protection.

<u>Relief sought:</u> A 10 m setback from all water ways 3m or less and 30 meters for those greater than 3 m. Riparian plantings must be given the highest protective status, enforced with financial penalties for any damage, where any tree felling will damage riparian planting then the trees MUST not be felled.

Administrative and Monitoring Costs

Through the (NES-PF) consultation document I was unable to get clarity as to where the burden for Administrative/Compliance and Monitoring cost would lie.

<u>Relief:</u> Under the present Government economic philosophy all administrative costs associated with Compliance and Monitoring should lie with the forestry companies as a cost incurred in running their business.

<u>Summary</u>

I have real concerns as to the philosophy behind this draft standard, the focus appears to be to free up harvesting constraints for the benefit of forestry companies and at the expense of our natural environment. If the draft document is implemented as drafted the negative

impact to our waterways and estuaries through erosion and sedimentation will magnify the destruction to an already degraded ecology.

Riparian protection must be given the highest priority when drafting and implementing "A National Environmental standard for Plantation Forestry".

Yours Sincerely

Ian Price

SUBMISSION TO THE MINISTRY FOR PRIMARY INDUSTRIES RE NATIONAL ENVIRONMENTAL STANDARDS FOR PLANTATION FORESTRY

THE ISSUES AS I SEE THEM ACCORDING TO YOUR DOCUMENT
THE ISSUES AS YOU SEE THEM ACCORDING TO THE DOCUMENT
ECONOMICS OF NORTHLAND
ENVIRONMENT
TE TIRITI O WAITANGI
HEALTH AND SAFETY
DEMOCRACY
CLEANING UP
CONCLUSION

THE ISSUES AS I SEE THEM

- -Genetic modification (or genetic engineering to give it its preferred name) is the introduction of a foreign substance which is genetically unrelated and which would not occur naturally.
- -The population MUST be kept informed about changes to their environment as drastic as this, but I would strongly censure M P.I. for not only keeping this quiet, but not even mentioning it in the document. This give the impression you have deliberately kept it quiet and tried to introduce it by stealth, in a country which has prided itself on being G.E. free , and built an export market on that policy.
- -Is this because the Northland Regional, Far North district, and Whangarei District Councils along with the population have recently won a case in the Environment Court, which has been against G.E. crops being planted in Northland.?

This really is disgraceful to override the legal status of Northland like this It is underhand. And at the recent M.P.I. meeting in Whangarei the mood in the audience was very angry. At the beginning of the meeting we were asked what our issues were, at the end of the meeting they were marked off as "met". But they weren't .They were not addressed at all. It was not satisfactory Your approach to this whole scenario has been arbitrary, and dictatorial with no regards whatsoever for the local population, Te Tiriti O Waitangi, and the local organic industry which is very large and brings in may millions of export dollars.

- You mention "low risk", but fail to say how you came to that conclusion. If you are right then we must ask. Why should there be any risk at all, when our current crop of trees has NO risk?. It surely makes sense to stay with the NO risk model.
- G. E can totally destroy the natural eco system and bio diversity. Once we have G.E. trees or any other crop in our environment it is for ever, there is no going back. This is a huge step you are taking in wanting to change nature so that succeeding generations will never know what the New Zealand eco system was once like.
- .- Can you prove that our natural forest life will therefore remain the same as it is now, or what exactly are you envisaging it will look like.?
- -Can you prove that it will even survive.?
- G.E. crops have spread uncontrollably into other crops in other countries, how do you propose to manage that with the forests? .(While living at Kihikihi we had pollen from Tokoroa on our roof. That is many, many kilometres away)
- G.E. trees have not proved they are superior to the natural product, so what is your reason for change?. It suggests that it is overseas global companies pushing for change, i.e. bullying, that we are not prepared to stand up to ,but are prepared to lie down and be trampled on instead. If this is not true, then please stand up and say so, loudly.

THE ISSUES ACCORDING TO THE DOCUMENT

You want a National plan

- You say "local decision making" but you also say you will "replace council's existing plans". You can't have it both ways.
- -You want to "improve environmental outcomes" What is wrong with local

people (elected councils) who know the environment better than Wellingtonians do? To tell Northlanders that you can "improve" our environment when we live here is really a bit cheeky. And the environment court did uphold our right to have no G.M. up here at all.

-You want to . "improve certainties about environmental outcomes" and on p.9. "assess Northland's environmental impact" but you don't prove anywhere that the current certainties are not environmentally assessed already, and how do you think G.E. trees will "improve" the environment. That is rather presumptuous, Since when did Scion know more about Northland's environment than the locals do.

It is because Northlanders and the local District, Regional and F.N.D. Councils have already "assessed Northland's environment" that they went to court to keep Northland GE FREE, AND THEY WON THE CASE. We are aware that the environmental impact of G.E. up here would be devastating.

- -"remove unwarranted variation". This appears to be double talk to say that you want to introduce G.E. trees without mentioning it and without actually saying so in the document, because you are aware that it is controversial. The "variation" you do mention appears to be in the processing, and maintenance, not of the trees, therefore why change the nature of the trees. Who decides what is "warranted" and "unwarranted"? Does it really matter if there is a variation between regions? Your explanation doesn't sound plausible. How can G. E. suddenly become "warranted"?
- -p. 5 "cultural factors" if this refers to Te Tiriti O Waitangi , then that is a whole exercise in itself. Maori are deeply hurt and resentful when others tamper with their cultural factors. G. E. is not part of Maori culture and never will be. And so much of our forest system is planted on Maori land. To plant their land with G. E. crops is an abomination to them. They have been here for many generations, and 100's of years, and do not need to be patronised by a government department t. They have had enough of that P9." "Managing a unique local environment "Unique local environments do not need G.E. trees planted within 10.s of kilometres of them They would be forever destroyed if managed by M.P.I and G.E. contamination occurred, The local councils , who are local people and who know the local history and geography and are themselves part of the environment are better at

managing strategic sites that are "unique and local"

- P.9. "Benefits of the proposed scheme" It seems to me that all the listed so called benefits can be achieved without having G.E. trees. The only benefits I can think of are to the shareholders of the trees who are overseas investors who in all probability have G.E. financial interests.
- p. 4 "wilding trees" Wilding GE trees? You must be joking. Wilding trees have yet to be managed 100%. Until that can happen G.E. species must be kept out of the environment altogether. You gave no explanation as to how you would manage them.
- P. 4 "erosion and sedimentation" from G.E. trees? No way. No preventative explanation given . Is there one? And if the water run off is contaminated by G.E what hen for our fish, and shellfish industries, They are destroyed.
- p. 4 "flooding" —spreading of G.E. debris. The north is prone to flooding. Once again no explanation given as to how it will be managed .
- p. 4 "mechanical land preparation" earthworks, river crossings, harvesting, replanting, erosion, etc. etc. All have the same risk factors for G.E. spreading.

The truth is that it is impossible to give concrete preventative measures for all these things. They happen even with the best laid plans, nature is very good at cutting across human plans. But the difference is that our current trees are not contaminated with G. E.

THE ECONOMY OF NORTHLAND'

The economic advantage of G.E. goods escapes me. The market for non modified, conventional and organic foodstuffs is limitless, both locally in New Zealand and overseas Many countries have banned the importation of GE crops. New Zealand has a world wide good reputation for growing food, why would we ever consider changing it to use a system that has nowhere proved to be 100%. Any G.E. O's released into our environment would have a catastrophic effect on the economics of our community, and of course the labour force as well. There are still too many unknowns surrounding G.E. and only very recently, there was an open letter from many American scientists advising us to keep G.E. out of our environment and admitting America made a mistake, but of course it is too late now to rectify it.

AGRICULTJURE AND HORTICUTLURE

Agriculture is our country's most "sacred cow" The north's economy is mainly based on land products. It is vital to keep it operation at a viable, strong, successful level. The 2012/2013 drought was managed far more successfully by those farmers who were farming organically than those who weren't. The organic farmers work with nature, they were better prepared with their use of water and water conservation. They grew different kinds of grasses that were more drought resistant, grew more shelter belts, so that paddocks didn't dry out so quickly and their stock didn't get so stressed etc. The crop growers also kept their produce coming, and they still do. There is an overseas demand for these products that adds many millions of dollars to the National coffers. The potential for this industry to become contaminated by G.E. Organisms would cause a huge economic disaster. And frighteningly, it would be permanent. The marketing advantage is gone, never to return.

According to a new study analysing the financial performance of 55 different crops and being either conventional or organic, and published in the Proceeding's Of The National Academy of Sciences, they concluded organic farming is more financially lucrative than conventional farming. This was drawn from international data including from Australia and New Zealand (source New Zealand herald Element magazine 29th June 2015) The authors concluded that the market had considerable room to expand globally. The proposed G.E. pine trees pose an enormous threat to this industry in Northland.

We believe that clean air, water, soil and food, are a basic human right, not a figment of some historical dreamtime. The global reality is that local food production is essential to our society and we want that left as it is.

There is a strong and growing interest in New Zealand for Farmers markets. Hundreds of thousands of dollars go through these markets every week, including in Whangarei, its environs and further north. The bulk of this produce is organic, it is all locally produced, and many of these growers are exporting to Europe, Asia and beyond. This includes, flowers, seeds, fruit, vegetables and honey cosmetics, toiletries, wine, as well as meat and milk products, and fish and shellfish. These markets (local and overseas) are driven by consumer demand. Northland is well placed to become a significant player in this scene. It could be totally wiped with the introduction of G.E. trees. Our markets would

be gone forever if they became contaminated. And who will tell our bees not to go near the forests.

ENVIRONMENT

Once G.E. O's are released they can never be contained. Our environment that has taken billions of years to evolve, will be changed for ever.

As a country we have made some disastrous mistakes when we have imported various other species, e.g. rabbits, deer, possums, gorse, rodents, insects, plants. We were so wrong with many of these, let's not do it again. Too late then. Our Regional Council distributes leaflets asking us to destroy various introduced "toxic" plants and weeds, all invariably introduced. G.E. organisms cannot be destroyed in the same way. Too late,. Once here, here for keeps.

We have a fantastic natural environment (good for tourism as well as food) why would we want to destroy it. Keep it as it is.

At Lincoln university with G.E. brassicas, Rotorua with G.E pines, Kerikeri with G.E fruit, Ruakura with G.E animals, there have been problems with seed head flowering, or contaminated soil not being cleaned up, animals not disposed of properly, and straight out management incompetence. Why should we have confidence in Scion with trees in Northland. We live in a windy country. Therefore contamination by wind drift, birds or human sloppiness is inevitable in the long run.

We need to give priority to ecological long term sustainability rather than short term doubtful economic gains.

SPIRITUAL

. For Christians, and those who believe in God, or a Divine Being, who created our environment, with its water for life, its food systems to sustain us, forests for heating, housing, shelter, and pharmaceuticals, it is blasphemous to suggest that humans can "improve " what already is. I enjoy picking fruit off my fruit trees, and eating my vegetables straight from the garden. The same varieties I ate as a child. And they taste good Propagating with the same

species is fine, but to suggest that my potatoes would be improved because toad genes have been added to them is sickening and abhorrent. No different really from bestiality. Which is a crime or inserting cod genes into pine trees. There is an assumption Among scientists who are captivated by this science that either God doesn't exist, or else that he got it wrong. That is rather arrogant. And not all scientists agree with G.E. either.

TE TIRITI O WAITANGI

As a pakeha I am unable to submit on behalf of Tangata Whenua, but I believe that as they have a special spiritual relationship with the land, rivers and forests (which gives them their mana) they too would be upset at the thought of their flora, fauna and food supplies being tampered with. I am not sure that the introduction of G.E.O's would meet our commitments under the spirit of the Treaty. In the Treaty it is stated that "Maori have exclusive rights to their land, forests, fisheries and taonga" These promises have been broken for almost 200 to our shame. It is time to stop and respect what is written here. And Maori themselves have a saying He Tangata, He Tangata, He Tangata, It is the people, it is the people, it is the people.

P.10 says "Iwi will continue to be involved in planning processes for managing "unique local environments------wahi tapu that meet---etc. etc." Is this all? Article 2 of the Tiriti says "Her Majesty confirms and guarantees -------the full exclusive and undisturbed possession of their lands and estates, forests-----" etc. Doesn't fit with what appears to be the intents of the document. I would suggest that this document is redefining the intention of the Tiriti, by limiting the areas that Iwi will be involved in. Is this intentional?

HEALTH AND SAFETY

Studies done by scientists not associated with the genetic modification industry have not proven that Genetically engineered organisms are safe with no environmental or human costs involved. There don't appear to be any studies that have conclusively proven they are safe for human consumption.. It will be 2-3 generations at least before any ill effects can/cannot be proved, and done by scientists who are not employed by the industry. Using viruses is not fail safe, and has the potential to create and release new viruses in the community. This is scary stuff. The knowledge of the effects of these viruses is

not yet known. Because of wind, bees, soil, pollen and climatic events ,e.g. storms, slips , flooding ,etc. it is only a matter of time before the countryside , and our rivers are contaminated.

Nowhere in the document is there any mention of the safety of neighbouring crops, and land owned by local people. Contamination will be assured as under normal circumstances it has so far proven to be impossible to avoid it. What remedies are there for M .P.I. to refrain from neighbourhood contamination?

Also, no mention of how to compensate the neighbours for contamination, and the inevitable destruction of their livelihood, and their lives with enormous financial, emotional, health, and housing costs (as they would have to move).

SOIL CONTAMINATION

With the widespread application of the necessary chemicals the soil eventually becomes contaminated and also devoid of the essential micro organisms that give it life. Dead soil grows nothing. A healthy soil is full of micro organisms that are nourished by micro nutrients. These are destroyed by repeated chemical applications.

Asbestos soil contamination, toxic waste from disused timber mills, lead in old paint, DDT and other poisons leaching from old rubbish tips, and eventually into our waterways, toxins in our shellfish—where will it end?

Time was when de Reskze cigarettes were advertised as being "good for us" and they could "cure a sore throat". Tobacco is now known to be another toxin and is being discouraged in a big way. At least our environment hasn 't been permanentally damaged with cigarettes, but will be with G.E. orgaisms.

Thalidomide used to be the drug of choice for pregnant women-we know the disastrous results of that experiment.

The rest of the world is grappling with mercury in the fish stock, corrosive battery acid contamination, Chernobyl and other nuclear accident sites, nuclear waste dumping, B P. oil accidents in the ocean, acid rain etc.etc.etc.

Will it never stop? How much interference and toxicity can our environment take. It is currently at breaking point, and we are now grappling with climate change. Remember when we were proud to be "clean and green"?. Pity those days are gone. We have a beautiful country but are hell bent on destroying it as quickly as we can.

FOREST STEWARDSHIP COUNCIL CERTIFICATION

New Zealand exported timber is certified G.M. free, and therefore is in demand with an established market. This industry will be gone overnight. Amazing!. Did you know this?. Did you factor it in to your plans. It is not mentioned in the document.

Why are you prepared to completely destroy a current viable market, for one that has not yet been proved, and is of dubious viability? I am at a loss to understand the thinking here.

The F.S.C. will not, and indeed can not change their criteria, so these established markets, will be automatically lost by the stroke of a New Zealand Government pen. It doesn't make sense.

Why are we forfeiting a trustworthy, known market for a questionable product that may/may not be sellable in 20 years time? We keep being bombarded ad nauseum about how we "must grow our exports" but here is a government department deliberately canning a current profitable market i.e. going backwards, for a dream. Why?

DEMOCRACY

I was taught it literally meant "government of the people, by the people, for the people". Sad to say it is no longer true. Genetically engineered plants, seeds, trees, animals, and anything else, are not for the people, but for foreign commercial interests simply to make a buck for their shareholders, and to hell with anything and everyone else. They are not concerned about consequences, even though consequences are unavoidable. They will happen.

M.P.I. has not only succumbed to the pressure from outside interests, but has deliberately tried to keep it quiet, so that the populace would not know. How shameful is that. It is deceitful and undemocratic. New Zealanders want to

remain G.E. free. Nothing has changed. Many councils are now looking at becoming G.E. free, because of public pressure, and some have won this by right in court. M.P.I. think they can overrule court decisions. It won't be an easy ride. Democracy is still officially enshrined in our law.

CONCLUSION

Nuclear waste has a half life of thousands of years. G.E. is forever.

The influence of vested interests is warping our country away from what is needed to proudly stand out and maintain our clean ,green , G.E. free, ethical and sustainable brand, which has served us well up to date.

There is growing scientific evidence over the last decade that G.E. release overseas was a mistake, on many levels. At best premature, and in many cases highly detrimental to the environment and to farmers, bearing in mind there are farms surrounding our forests. Our G.E. free status is a huge benefit to our farmers and exporters and is a powerful marketing point of difference in our markets. G.E. free adds value and is a part of lifting New Zealand products above commodity status.

We must not be part of the problem, but part of the solution.

John and Pamela Raggett

29th July 2015



Maori Justice System 2015

OPPOSING SUBMISSION AGAINST CROWN: A NATIONAL ENVIRONMENTAL STANDARD FOR PLANTATION FORESTRY PLANS

Name: RangiMarie, also Janine RangiMarie Bosma nee Robson

Postal Address:
Phone Number:
Email Address:

Occupation: Te Arawa Independent Navigational Researcher of Investigative Studies – A Tohunga (Judge & Priest combined) Pattern Reader.

DECLARATION OF OPPOSITION AGAINST CROWN MINISTRY OF ENVIRONMENT & MINISTRY PRIMARY INDUSTRIES PLANS

I, RangiMarie above mentioned completely oppose the plans presentation by the crowns strategic Adjudicators instructing its false ministries of environment and primary industries as instructed according to Queen Elizabeth's Coat of Arms symbol logo represented alongside (see your own MPI logo!).

I completely oppose crown science experimenting - in all its endeavour plans of forestry test experiments.

INVESTIGATE INTELLECTUAL SCIENCE ALTOGETHER & ITS FUTURE PURPOSE IN NEW ZEALAND

I oppose your intellectual minded thinking which developments your plans – fully understanding your history here of racial prejudice and blood shed for land gain, selfish adult behaviour threatening our native, natural environment.

I oppose your Genetic Modified (artificial) Pine Trees being planted at all in the future and I will challenge calling for a PUBLIC complete BAN OF PINE PLANTINGS altogether.

BAN: PINE TREE FORESTS ALTOGETHER in future New Zealand plantings 2015 onwards

As, I promote Maori Indigenous Native tree (rakau) plantings in a FULL RETURN to Indigenous forests especially my Ancestors stolen land of Kaingaroa(Kaeroa) Forest (central north island).

PROMOTE: MAORI INDIGNEOUS NATIVE TREE PLANTINGS AND REFORESTATION OVER DEFORESTION

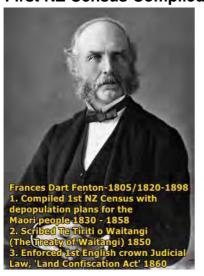
INTRODUCTION:

I would like to express that I, COMPLETELY OPPOSE this forestry planting submission plan which gives too much power to crown scientists. My *fact based evidence* gathered report, opposing submission has developed through attending the recent Consultation meetings held at Howard Morrison Convention Centre, Rotorua in early July 2015, to have a better UNDERSTANDING (maramatanga).

HISTORY TRACK RECORD OF CROWN CONTROL OVER FORESTRY INDUSTRY NEW ZEALAND - A LEGISLATED INSTUCTION

HISTORY OF EVENTS:

First NZ Census Compiled 1858 - English Australian Settler arrives in New



Zealand 1850s, Judicial Legislator – Frances D Fenton compiled the first NZ Census 1858 (see copy at local library). A census compiled which he along with missionaries gathered data collection from Maori settlements. His Census included plans to depopulate the Aboriginal Indigenous Maori of New Zealand, through Generational Holocaust plans introduced as 'schemes'. This behaviour as a result of this racially prejudice, arrogant, deceitful adjudicator legislator pakeha, has laid the foundations for the WHOLE NZ Judicial System of legislation 'Acts', instructing your science forestry plans now presented in 2015.

Treaty of Waitangi scribed & signed up to 1850 - Fenton scribes Queen Victoria's Treaty of Waitangi on behalf of her crown, to be strategically signed up

North in Ngapuhi territory. Its recorded that William Hobson(military) hastily drew

the Treaty, however after reading Francis Fentons books, '*Important Judgments delivered in the Compensation Court & Native land court 1866-1879'*, and also '*Observations on the state of Aboriginal Inhabitants of New Zealand 1855'*. It confirms and there is no doubt the hand that scribed the Treaty of Waitangi was an intellectual, judicial legislator hand. Even, the hand of Francis Dart Fenton - drew up the Treaty of Waitangi document for signing up North. With a strategy purpose planned. After its distance signing it was Acted upon, by the crowns religious, intellectual Adjudicators instructed their military troops to attack,

Land Confiscations Act 1860: Following the arranged treaty signing, Fenton then enforces legislation, 'Land Confiscation Act' a military instruction to mass raid Maori settlements murdering innocent Maori Indigenous men, woman, children while they openly raped the young women, especially i-n central north island areas of New Zealand. A mass bloodshed of injustice all to gain ownership of the Maori land for crown land use (how they want the Maori land used for crown profits) for its Industries of Agriculture plantings of Forestry, Farming, Mining etc. From 1860 to 1953 nearly over 100 years history has been all focused on England's plans of colonizing Maori, using this history of facts based EVIDENCE gathered. Introducing its buildings of religious endeavors churches, state schools, state governance authority bodies, industries, what is worse is Maori pledging allegiance to the crown siding with england plans to work against its own original unique, Cultural Governance Leadership of the Ranks of the Chiefs Tohunga (Judge & Priest combined) Ariki as 1st in Authority and the Rangatira as 2nd in Authority.

Queen Elizabeths Coat of Arms symbol (1953 – present) 'Instructing **Land Use'**: see picture Shield guarded by a Maori Warrior and a Pakeha Wahine are the administers, representatives of English Adjudicator families hiding out of public view instructing their strategy plans for New Zealand.

HISTORY OF SCIENCE TESTS GENETIC MODIFICATION SECRET EXPERIEMENTS - supported by judicial Acts passed

I report from the Judicial laid foundation by Australian english colonizing Fenton above, that ever since these crown scientists have been doing whatever they want here, and this I challenge today and now. Your time of wasting paper, land resources, mining incentives, pine tree experimental planting non sense and science projects on people and land, airways and water will have its end especially, because of the racial prejudice attitude towards Indigenous 1st Nation Landowner Originals! Racial prejudice history of arrogance will be this cultures downfall.

CURRENT REPORT UPDATE 2015 - DICTATING PLANS IS UNACCEPTABLE

Using Judicial legislated acts to favour science plans to control Maori land is a strategy is overdue for ABOLISHING. In a complete abolishing of historical layered legislated acts to favour arrogant Pakeha's - (English descents).

I have no confidence in the west minster systems from England, I have no confidence in its scientists secret tests artificially tampering with nature. This superiority arrogance of intellectual thinking lacks COMMON SENSE. Therefore, I

want ALL Science projects in New Zealand investigated with possible FUNDIND CUTS, even shut down their labs. They exclude and reject Maori Native plantations, and like time in the hour glass - their time of experimental non sense has passed!

UNIVERSITIES TRAINING OUTCOME QUESTIONED

I also oppose Arrogant Pakeha - english universities and there is a shift in thinking of what these universities are producing such as: scientists who work for mining companies, chemists poisoning people, animals, insects and our airways and waterways - as we have become their guinea pigs. I oppose doctors who work for chemists to poison people with artificial toxic potions moving away from healing people - excluding natural remedies. I oppose corrupt lawyers and judges in courthouses proceedings that have become nothing other than gambling dens for profit! I oppose Pakeha society of rich middle and poor classes - a pyramid society and its artificial paper mined dollar to favour its selfish adult egos.

UNDERSTANDING (MARAMATANGA):

Mining Culture (England) vs Non-Mining Culture (Maori)

First Nation Indigenous Cultures of New Zealand and around the world, I declare we are not a mining cultures. This is why the First nation peoples have been appointed to these countries as Guardians (Kaitiaki) instead of English colonizer's. Therefore, we MUST cut the ties with England and it culture completely by replacing Queen Elizabeth with the first Maori Queen for New Zealand. We must replace its Queen, replace its Coat of Arms or completely abolish it altogether and we must replace its flag. In a FULL RETURNS of Lands for Tribal Indigenous Leadership management re-asserted. The Tohunga (Judge and Priest combined) Ariki as 1st in Authority and the Rangatira status Chiefs as 2nd in Authority, as the Ordered Model of Leadership Governing was put in place 800 years ago as a strategy purpose. MOVING AWAY FROM MINING CULTURES, IN NO CONFIDENCE - IS OUR FUTURE!!

I also report that Farming is a form of mining, and farmers have reported that pine tree plantations next to neighbouring farm paddocks, leaves a yellow stain on the grass, thats described as dry. The paddocks next to pine tree forest plantations - are affecting farm paddocks for feeding stock, leaving a dryness or water evaporated look on neighbouring paddocks. This can highlight mass water evaporation caused by pine trees, draining the surrounding lands to be fed over using our water supplies. Also mass yellow coloured pollination dust effects on grass for grazing areas. Or this could be from sprays used! Lets investigate further these science crown projects! Is it toxic poison causing water evaporation - dryness?

FUTURE GOALS/PLANS NAVIGATIONAL DIRECTION STRATEGIES FOR TANGATAWHENUA GOVERNANCE - RAUKAU(TREE) WHENUA O TE ARAWA WAKA

ABOLISHING HISTORICAL LEGISLATURE 'ACTS': In a complete abolishing of historical layered legislated acts to favour arrogant pakeha English dictators, I see a complete overhaul of the Judicial family instructed Law Acts, clauses, amendments, additions. A complete transitional change out as part of saving our environment for native replanting returns to its ORIGINAL state, pre-colonization.

PAKEHA SCIENTISTS - NOT A HIGHER EDUCATION, PROJECTS FUND CUT - SHUT DOWN LABS

I confirm and report that these investigation findings are proving englands established universities here and whats produced is NOT THE HIGHER EDUCATION! And these experimenting behaviours need a funding cut, and their science labs shut down or replaced. In a new waka navigational direction and stand to SAVING our waterways and environment. I would like to express that, I COMPLETELY OPPOSE this forestry planting submission plan, which gives 'too much' power to crown scientists.

UNIVERSITY EXPERTS PROTECTING ITS OWN DEGGREE PEOPLE

I also highlight to report a society cycle of behaviour of doctors, scientists, chemists, politicians, lawyers, judges etc - PROTECTING each other and supporting each other in the toxic poisoning of our airways, water ways and whenua....ALL TO MAKE A SELF MONETARY PROFIT and bullshit false reputation reports, for yourselves - patting yourselves on the back for all your fake work. Producing report outcomes about yourselves that are falsely manipulated. Even manipulating your own finance reports to produce false outcomes. This is why OUSTIDE independent Researchers to investigate are paramount in future society LEADERSHIP. And Maori Researchers also important for training by their own 3 categories of Indigenous cultural pattern practises to qualify: Tohunga Whakairo - Maori carvers, Tohunga Raranga (Weavers) Tohunga Korowai (Cloak Makers). This history track record of work, operating without a conscience should actually cost these people their NZ citizenship, they should be striped and classed as the 2nd degree NZ Citizens PUBLICLY, because they are so disconnected from the lands natural state, they don't belong here and are NOT part of this natural environment being urgent attention for protection! like to express that, I COMPLETELY OPPOSE this forestry planting submission plan, which gives too much power to crown scientists.

BAN: PINE TREE FORESTS ALTOGETHER in future New Zealand plantings 2015 on wards

I would like to see a complete BAN of pine tree plantings bought here by english culture, time has proven it has had its time using and abusing the land for crown profits and has FAILED in benefiting Indigenous families and general NZer's in HOUSING opportunities. Instead it is all for exports to be sent overseas - THIS IS NOT ON!!! Its is a complete failure of duty of Care towards NZ citizens in HOUSING and many remain HOMELESS!!

MAORI RESEARCHERS QUALIFIED BY MAORI TOHUNGA PRACTISE STANDARDS - NOT PAKEHA UNIVERSITY TRAINED

And Maori Researchers also important for training by their own 3 categories of Tribal area Indigenous cultural pattern practices, to qualify: Tohunga Whakairo - Maori carvers, Tohunga Raranga (Weavers) Tohunga Korowai (Cloak Makers). This is paramount important in practicing patterns as opposed to attending English universities of mass paper work to become qualified. Especially because we are not a MINING Culture cutting down the trees to produce mass amounts of paper wasted!!

PROMOTE: MAORI INDIGNEOUS NATIVE TREE PLANTINGS AND REFORESTATION OVER DEFORESTION

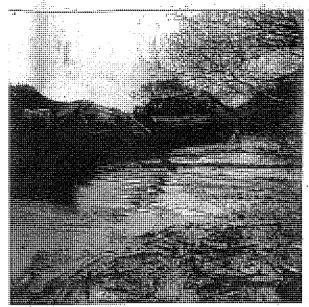
I promote Maori Indigenous Native tree (rakau) plantings in a FULL RETURN to Indigenous forests especially my Ancestors stolen land of Kaingaroa(Kaeroa) Forest (central north island).

Change the narrow minded focus to move away from pine tree planting and to return to our Ancestors Original Plans for Navigational Waka whenua Guidance - REPLANT ANCIENT NATIVE FORESTS and re-assert the OLD ORIGINAL TRIBAL area boundary lines is ahead in a complete challenge overhaul against England's colonization plans presented through the artificial ministry for environment and Ministry for primary industries.

I repeat, REFORESTATION of Native plantings, OVER DEFORESTION for Crown Greed endeavours!

Other Research Investigative Reports completed: Reading and Interpreting the Te Tiriti o Waitangi – The Treaty of Waitangi ()see YOUTUBE: The Pattern reader Series 1 - 4 which led - to other reports developing to be produced, after I completed up to 5 years practice in Tohunga Korowai (Maori Cloak Making inherited from my Family of Great Great Grandmothers from Te Arawa into the Kingitanga). Review Report Inquiry of the NZ State Schooling System, Review Report Inquiry of the NZ Mental Health System, Submissions against crown science GE modifications, opposing TeTurere (to steal) Whenua plans. Involved in local Rotorua Council Te Arawa Partnership Research of history, sending reports to United Nations Human Rights Council and now seeking outside opinion support, from International Court of Justice. etc

	Meeting Masonic Model 2 lengson 21, Napier & July 2015 11:30am
	Ministry for Primary Industries - National Environmental Standard for Plantation Forestry
7	Points
	There is a need to have NES for riparian buffer along side waterways
0	which has adequate vegetation and established trees to retain all forestry
	Blash and debre from entering waterways.
	C
	Some reasons.
	After harvesting there is a change of flood peaks.
	These increases are from 30-70% page 33:13
	Water wields should return to one-housest levels within b-8 more poor 32.12
	Water yields should return to pre-harvest levels within 6-8 years page 33.13 After harvesting runoff flows increase more than pasture 226-343 mm/year page 33.6
	Tille Interesting total thous the state was significant person and s
0	In crease of sediment after harvesting 150 T/km² year page. 33.7
	Increase of total nitrogen
	Increased 10 times over the control. T.N. load ove 6.
	Figure 33.9.
	ryune ss 1.
0	As shown in Wairen Ster 23 June 2015 Povestry harvesting has caused massive
-	amounts of forestry logging slash and debris ending up in water way.
	Request that there is a NES riparian buffer width alongside waterways which has
	adequate undistured vegetation and estabilished trees to retain all forestry slash
(1)	and debre from entering waterways.
;	
	May be a need to have limit < 100 ha to be harvested at any one time p. 33.10
	Property of the state of the st
	Recommend that more forestry is needed in catchments, which have problems with flood peaks. 7.1 Figure - because of cost of floods.
	With How peaks. 11 Figure - Decause of Cist of House
	Look forward to MPI reply.
	David W. Renout.
	10 W. Renny,





ias been working to clear the forestry slash and debris that blocked the Kopuawhara Stream last month.

Heave machinery

WYAT administrator Sarah Charteris said it was important for local children and young people to have a say.

"A lot of work has been done to date to get this exciting project started but now it's about getting it out to the community. and encouraging children and young people to share their dreams for the

playground," she said.
"We want ideas for everything from colours and themes to equipment, spaces,

history and safety.
"The final design can then be planned using the community's combined ideas, while also reflecting our local environment and heritage.

circulated to all schools in the district for students to write or draw their ideas for the Destination Playground. These need to be returned to school offices by July 3.

Flyers are also available at Wairoa i-Site and Wairoa Library and can be completed and returned to these places by July 3.

to play with Clean-up pleases

A MONTH on from heavy rain that saw forestry slash block the Kopuawhara Stream, locals are happy with the prompt clean-up.,

Tonnes of forestry waste, silt and other debris were brought down from the Whareratas, causing the stream to overflow onto roads and farmland. Residents were left furious with the forestry company involved, Juken NZ, and wanted to see

a solution as "nothing had changed". Mahanga kaumatua Bill Blake had parts of his farm flooded and littered with debris. He said diggers had been working hard to get the mess

cleared away and he said they had done "a good

He was pleased that the majority of the slash Wish-list flyers are currently being had been removed before more heavy rain arrived and was looking forward to a community hul on July 10 to discuss the issue and achieve solutions.

> Hawke's Bay Regional Council chairman Fenton Wilson said Juken NZ had willingly picked up the costs involved with the tidy-up. Once the clean-up is complete HBRC is looking forward to meeting with affected residents, together with

"It is a tricky one as the trees concerned are not actually planted in Wairoa district but we want forestry to understand the issues we are facing downstream," he said.

"No one wanted this to happen and the community has been very patient — they don't want this to happen again and I can appreciate those concerns.

Mr Wilson described the situation as a doubleedged sword with the trees helping to prevent

erosion up until this point.

When you consider the slope, etc; of where these trees are planted, we have actually been able to have good control of silt over the past 30 years - but then you have a disaster like this when forestry is removing trees and replanting," he said.

"Its about having an understanding of each other's issues and values, but also forestry take note of the consequences of harvest at our Good harvesting practice is where we want in dicussions to start.

The community hui will be held at Te Rakato Marae on Kaiwaitau Road on July 19. The powhiri begins at 9.30am.

tey Kids!

want in YOUr

Glad it's come to a vote staking of our end

THE amalgamation debate is front and centre and I'm glad the people of Wairoa want to get involved, want to engage and want more information.

I had a lot of inquiries about when Wairoa would start a petition to demand a poll. A petition had already been done and the three validated affected electors in Rangitikei triggered a regionwide referendum, so Wairoa did not have to do a petition. Many of you questioned how only three people from Rangitikei could be a true reflection of local government democracy in action.

Well, that is the law and although I am disappointed the people of the Wairoa

From the Mayor's desk

Craig Little



passion to see our community thrive. I will stand up and fight for Wairoa now and into the future. Despite the apparent concerns put out

by the group who organised the public meeting and letters to the paper I was surprised at only receiving submissions from 100 people — 1.25 percent of the population.

Chapter 7 Flow regimes

Maurice Duncan and Ross Woods

INTRODUCTION

In New Zealand you can see a wide range of types of rivers. There are boulder-filled mountain torrents, issuing from glaciers in mountains only a few kilometres from the coast; wide, braided, gravel-bedded channels; meandering silt watercourses; tree-lined urban waterways. Some that rise in the high mountains may change dramatically along their course, before discharging via a lagoon or estuary to the sea. Rivers arising in the foothills or from lowland springs tend to be more uniform.

But every river has its own unique character. What makes each one different? The answer lies in the combination of physical and climatic features that influence what we call the "flow regime" or "hydrologic regime" of a river.

WHAT IS FLOW REGIME?

The flow regime (or hydrologic regime) of a river is the unique way that its flow changes from day to day, season to season and from one year to another. Regime defines the character of a river, how liable it is to flood or to experience long periods of low flow, what it looks like; what lives in it; whether it is potentially useful. For particular management purposes, various aspects of flow regime may be significant, but in general we require information about extreme high flows, extreme low flows, average flows (equivalent to the total volume of water discharged by the river), flow variability, and the frequency or spacing of significant events, such as "flushing flows" (Chapter 43).

Differences in flow regime are best illustrated by looking at graphs of flow from different rivers. A hydrograph is a graph of the change in either a river's water level (often called stage) or its flow (discharge) over time. Two main components of river flow can be identified from a hydrograph: baseflow and flood flows (often termed

quickflow) (Fig. 7.1). The baseflow of a river is derived from seepage of ground water into the channel or from lake outflows; it may be large or small, but it tends to change slowly. Flood flows occur on top of the baseflow. They are produced from precipitation directly into the channel, from overland flow down surfaces sloping into the channel, from water that infiltrates into the soil and moves quickly to the stream channel (interflow) and from runoff from wet areas near stream channels (Chapters 4, 9). Flow regimes differ in the magnitude and frequency of high and low flows due to differences in total precipitation, as well as in their flow variability, the magnitude of high and low flows relative to base flow, and their flashiness (Snelder and Biggs 2002).

Hydrographs of floods commonly show the rise of floodwaters (termed the "rising limb") and their recession

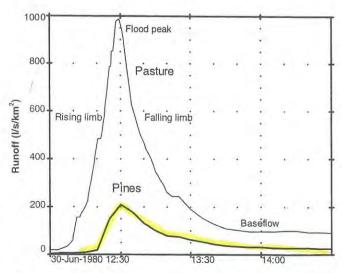


Figure 7.1 The key components of a hydrograph. The difference in regime caused by change in land use is shown by hydrographs from a pasture catchment (thin line) and a pine catchment (thick line) of similar size (approximately 7 hectares) for the same rainstorm.

suggests that differences in water use by indigenous and exotic forests should be small. Therefore the results from two studies investigating the hydrological effects of harvesting indigenous forests, one at Maimai near Reefton (Rowe and Pearce 1994), and the other at Big Bush Forest (Donald Creek) in southwest Nelson (Fahey and Jackson 1997a) should be broadly applicable to plantation forests.

Harvesting the original beech-podocarp forest at one of the Maimai experimental catchments (M5) and replacing it with pines caused a maximum increase in water yield of 550 mm (76%) the following year, compared with the water yield from the adjacent control catchment (M6). This difference diminished markedly in the ensuing years as the pines approached canopy closure and, in the eighth year, annual water yields had fallen below those of catchment M6. At Donald Creek, harvesting two catchments (DC1 with skidders and DC4 with haulers) caused a marked and sustained increase in annual water yields compared with the control catchment (DC2) left in beech-podocarp forest (Fig. 33.6). From 1981 to 1984, the difference between DC1 and DC2 averaged 312 mm (61%). Pre-treatment levels were achieved by 1989. The pattern of change at DC4 was much the same. Annual water yields for the 4 years after harvesting averaged 344 mm (68% more than for DC2), and reached pretreatment levels by 1988.

Based on an analysis of flow records from three small catchments in Glenbervie Forest, north of Whangarei, Rowe (2003a) estimated that streamflow increased by more than 600 mm or 75% in a wet year after pine harvesting, and by 30 to 40% in years with normal rainfall. Data in Rowe (2003a) also show a 290 mm (35%) increase in mean annual streamflow for the Waiwhiu Stream near Wellsford after harvesting. At Moutere, forest harvesting did not immediately increase water yield. However, in the second year after harvest, increases of 220–280 mm/y and 80 mm/y occurred compared to flows under original cover, on former gorse and pasture catchments. The lack of

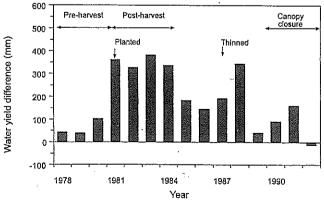


Figure 33.6 Differences in annual water yield between the control catchment in beech-podocarp forest (DC2) and the harvested catchment (DC1), Big Bush experimental catchments, southwest Nelson, 1978–1992.

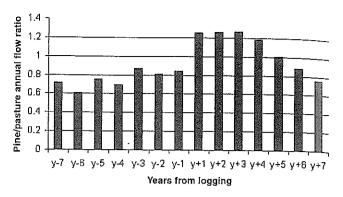


Figure 33.7 Effects of logging and replanting a small pine catchment at Purukohukohu, central North Island, on annual water yield relative to an adjacent pasture stream (from Quinn 2004 in press).

immediate response was attributed to the very low soil moisture levels, which took four months to be replenished. Once moisture levels were replenished, runoff rates increased to be more than those from pasture. In the first and second years after harvest, flows increased 0–60 mm/y and 226–343 mm/y respectively above those expected from pines, thus yielding in the second year flows similar to those expected from pasture. Before logging, water yield from pine forest in a pumice soil catchment at Purukohukohu, Central North Island, was 70–80% of that from an adjacent pasture site. It increased to 130% for the first 3 years after logging, and then declined to 70% in the seventh year after logging (Fig. 33.7).

Floods

At Maimai, mean peak flows from catchment M5 in the 3-year post-harvesting period rose by 60% for small storms and by 30% for larger ones, compared with the adjacent control catchment (M6) (Rowe 2003a).

In the Donald Creek study there was a marked increase in the mean flow peaks after harvesting at DC1 and DC4, compared with the mean for the same storms at the control (DC2). The increase was greatest for small storms (77% and 52% for DC1 and DC4 respectively).

Sediment generation

Forest harvesting operations can not only increase water yields but they can also generate more sediment. This is normally because of accelerated erosion from surface runoff and from mass movement on slopes that have lost their protective forest cover. Most sediment is generated either at the time of vegetation clearance and roading as the forest is being established (Fig. 33.8), or at the time of harvesting. The primary sources of sediment are access roads, contour tracks, log landings, cut-over areas, and unstable channel banks along stream courses. The amount of sediment produced on-site by surface erosion and mass movement can be much greater than that leaving the catchment as sediment yield, especially in large catchments.

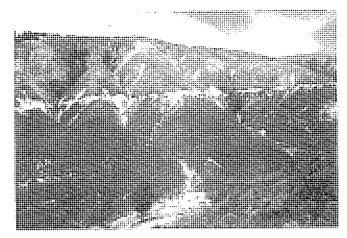


Figure 33.8 Sediment mobilised during the land prepararion phase of forestry in erodible granite terrain, west of Motueka.

Photo: Landcare Research

Sediment production

Forest-wide rates of sediment production from roads in highly erodible granites underlying sections of Golden Downs and Motueka Forests in southwest Nelson were estimated at 37 t/km²/y (Fahey and Coker 1989), but at the time of land preparation and forest establishment, may have been 10 times higher (Table 33.1). This is srill much less than the estimated background erosion rate of 500 t/km²/y.

In Queen Charlotte Forest in the eastern Marlborough Sounds, present production rates were estimated at 60 t/km²/y (Fahey and Coker 1993) and projected rates at the time of harvesting (after road up-grading and expansion) at between 100 and 200 t/km²/y (Table 33.1).

Forest roads, with their over-steepened cutbanks and loose unstable sidecast, are very prone to slope failure. Four storms in July and August 1991, including one with a 20-year recurrence interval, triggered a series of cutbank and sidecast failures on access roads in the granite terrain of Golden Downs and Motueka Forests (Coker and Fahey 1993). A total of 2800 t/km² was mobilised over the 2-month period, although only half this amount is thought to have entered local streams, with the remainder being stored mostly on the interfluves below the sidecast. This is many times greater than that generated by one year of average surface runoff, but it must be kept in mind that mass movements of this magnitude are triggered by infrequent events, whereas surface erosion is continuous.

Sediment yields

At the Maimai experimental catchments near Reefton, sediment yield rates of 264 m³/km²/y for a skidder-logged catchment and 47 m³/km²/y for a hauler-logged catchment were measured (O'Loughlin *et al.* 1980). Assuming a bulk densiry of 1900 kg/m³, these values convert to 139 and 25 t/km²/y (Table 33.1.). The skidder-logged catchment

Table 33.1 Sediment production and yields for different phases of the forest rotation based on plot data from Motueka, Golden Downs, and Queen Charlorte Forests, and catchment data from Maimai and coastal Hawke's Bay. The figures in brackets are suspended-sediment yields from adjacent pasture catchments.

Location	Forest rotation	Sediment yield (t/km²/year)	
Sediment Production	Land preparation	320	
SW Nelson	Mid-rotation	37	
(Motueka and	At harvesting	160	
Golden Downs Forest)	Background rates	500	
Marlborough Sounds	Mid-rotation	62	
(Queen Charlotte	At harvesting	218	
Forest)	Background rates	300600	
Sediment Yields	At harvesting		
West Coast	(skidder)	139 (17)	
(Maimai)	At harvesting		
	(hauler)	25 (17)	
East Coast	Mature forest		
North Island	(1995–1997)	30 (67)	
(Napier)	At harvesting		
, , ,	(1998–1999)	89 (41)	
	Post-harvesting		
	(2000–2001)	150 (102)	

yielded 8 times more sediment than an adjacent control catchment. The main sediment source was a mid-to-upper slope access track that virtually encircled the small catchment, and 60% of the sediment measured came from one storm.

A comparison of suspended sediment yields from a pasture catchment and one in exotic forest in erodible hill country north of Napier showed that before harvesting, yields from the latter were less than half those from the former (Table 33.1)(Fahey and Marden 2000). After harvesting, the situation was reversed, with annual sediment yields from the logged catchment averaging twice that of the catchment retained in pasture. In the postharvesting period, suspended sediment yields began to approach those for the pasture catchment within two years, and after three years were substantially less (Fahey et al. 2003). A comparison of the 7 years of sediment yield data for both catchments suggested that suspended sediment yields from catchments in plantation forestry over a full rotation of 25 to 30 years may be less than from those catchments retained in pasture.

Nutrient yields

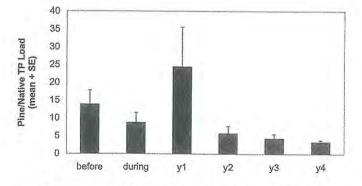
Logging can increase nitrogen and phosphorus losses to streams due to disruption of the forest nutrient cycling, and increases in particulate matter in surface runoff and in overall water yield. For example, total nitrogen yields for a harvested beech forest catchment at Big Bush in southwest Nelson increased 10 times over the control and were still 3-5 times higher 4 years after logging. The total phosphorus yields went up 2–3 times (Fahey and Jackson 1997b). However, five recent studies of the effects of pine logging and replanting indicate that increases in nutrients after logging can be minor and of short-duration, and in some cases nutrient concentrations decreased after logging.

At Purukohukohu, export of nitrogen and phosphorus increased relative to a nearby native forest site in the first year after logging and replanting of a pine plantation on pumice soils in the Central North Island. (Fig. 33.9). However, nutrient yields declined to below the pre-logging levels in years 2 to 4 after logging. This pattern appeared to be due to a rapid development of groundcover by weeds and soil microbial biomass after logging that helped to retain the nutrients on site (Parfitt et al. 2002). Logging of three Rangataiki River tributaries, in the Central North Island, produced increases in concentrations of dissolved reactive phosphorus (up to 370%) and decreases in nitrate in the first 3 months, but these returned to pre-logging levels within 6 months (Collier and Bowman 2003). Similarly, a comparison of nutrient concentrations before, and in the two years after, pine logging and replanting at three sites at Pakuratahi, coastal Hawkes Bay, and at Whatawhata, Waikato, did not show any statistically significant changes in concentrations of dissolved reactive or total phosphorus, ammonium, or total Kjeldahl nitrogen (Quinn and Kemp 2001, and Authors unpublished data, respectively). Nitrate concentrations increased at the Whatawhata site (27% increase in geometric mean), but did not change significantly after logging at Pakuratahi. Furthermore, comparison of stream nutrient levels in Coromandel Peninsula streams over a period of increasing catchment harvest/replanting did not show increases in nitrogen or phosphorus (Quinn and Kemp 2001). In fact, instream concentrations tended to decrease with increases in the percentage of the catchments that had been logged and replanted in pines.

Logging can also increase export of dissolved organic carbon (DOC), due mainly to leaching from felled plant matter on land and within the stream channel. This can give the water a brown colour, affect its taste, and increase the microbial activity that contributes to reduced levels of dissolved oxygen. Dissolved organic carbon increased from background levels of c. 0.5-1.5 g/m³ to between 4 and 9.5 g/m3 immediately after the pine logging of three Rangataiki tributaries, but dropped to within background range within a year (Collier and Bowman 2003). This effect was greatest in the tributary with the highest amount of wood submerged in the channel, where the post-logging reduction in dissolved oxygen was also greatest. The effects of logging on dissolved organic carbon may be more persistent-in a study at Maimai, North Westland, mean concentrations were up to 100% higher in streams that had been logged and replanted in pines eight years previously (Moore 1989). Abundant instream organic debris was identified as the main source of dissolved organic carbon in this study.

EFFECTS OF HARVESTING ON STREAM HABITAT AND BIOTA

Forest harvesting can disturb the stream ecosystem through its effects on catchment runoff, sediment and nutrient supply, and instream habitat changes resulting from the input of logging debris and removal of riparian vegetation. The magnitude and duration of these disturbances varies with site characteristics (e.g., climate, slope, geology and soil type), stream characteristics (e.g., size, channel morphology, streambed type, riparian vegetation), and land management (e.g., the percentage of the catchment logged over a short-time period, and techniques used for managing roading, earthworks, tree felling, extraction, replanting, and riparian areas). Whether or not large rainfall events coincide with the time soon after logging, when groundcover is minimal and the risk



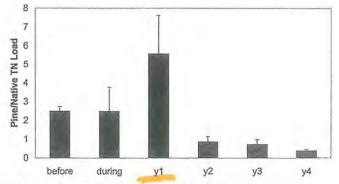


Figure 33.9 Effects of logging and replanting a pine catchment on total phosphorus and nitrogen export relative to a nearby native forest catchment at Purukohukohu, central North Island. A pulse in nutrient loads occurred in the first year after logging, but in years 2 to 4 after logging, nutrient levels dropped to below the level before logging (Quinn 2004).

of sediment mobilisation is greatest, also has a strong influence on streams and downstream aquatic ecosystems (Harding *et al.* 2000).

Figure 33.10 summarises the links between forest harvest activities, stream habitat, periphyton (attached algae) and invertebrates in Coromandel Peninsula streams and Figure 33.11 summarises how stream water quality, periphyton and invertebrates may vary after clear-cutting. Effects on water clarity generally last from the time of logging until groundcover is re-established, and are most severe when intense rain on recently cut-over forests causes landslides (Authors unpublished data). The effects of organic matter ("logging slash") deposited in streams during logging on dissolved oxygen and food supply are also short-term in Coromandel streams, because high flows

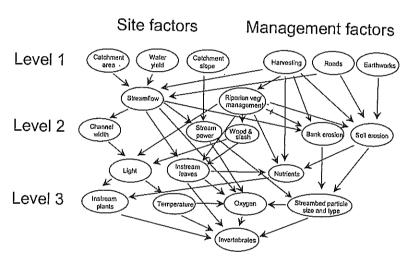


Figure 33.10 Summary of the causal pathways of influences of site factors and forest harvest management on stream water quality, habitat, periphyton and invertebrates.

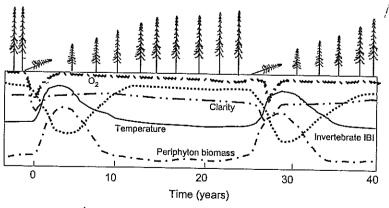


Figure 33.11 Schematic diagram of the magnitude and duration of impacts of pine plantation clearcutting and replanting on stream temperature, clarity, periphyton and invertebrate index of biotic integrity (IBI) values in second and third order Coromandel Peninsula streams.

flush this material downstream (see below). Studies in Coromandel, Central North Island, Bay of Plenty, Hawkes Bay, Nelson, and Otago, have shown that removal of riparian vegetation increases water temperature and periphyton, and typically changes invertebrate community composition to a fauna that is more tolerant and able to exploit the altered food resources (e.g., Collier et al. 1997; Harding et al. 2000; Thompson 2001; Death et al. 2003; Quinn et al. 2004). Long-term monitoring of Coromandel streams (J. Quinn unpublished data) indicates that these changes persist until regrowth of riparian vegetation restores shade sufficiently to control periphyton blooms (> c. 80% shade, Davies-Colley and Quinn 1998) and to maintain daily maximum temperatures below stressful levels (<c. 20–23°C, Quinn et al. 1994).

Harvesting can cause a large input of wood and leaf litter ("harvest slash"), particularly if trees are not pulled away from waterways and/ or logs are hauled across streams without suspension. The larger logs and branches are often removed, either mechanically or by hand ("stream cleaning"), to avoid clogging the stream and damage to downstream structures from slash movement in storms. Although stream cleaning does help to address these problems, it often removes pre-harvest wood inputs and sets back the restoration of instream wood that can play a variety of roles in stream habitat formation in plantation and natural forest streams (Baillie and Davies 2002a,b; Meleason et al. 2002). This is particularly damaging in streams on pumice and in low-gradient streams that lack other sources of stable structure. Moreover, large amounts of fine organic litter are usually left behind, smothering the streambed, and as it decays, lowering dissolved oxygen concentrations to levels that exclude many sensitive species of invertebrates and fish. For example, one month after clearcut logging of pines and stream cleaning along a small Coromandel tributary (4-m-wide channel, < 0.2 m deep), average litter cover was 4 kg dry mass/m² (75% sticks and 25% leaf litter). This was 50-fold higher than in a downstream reach that was logged leaving a narrow riparian buffer (J. Quinn and A. Wright-Stow, unpublished data). Dissolved oxygen saturation in the water column in the unbuffered reach ranged from 83% (i.e., 8.1 g $\rm O_2/m^3$ at 16°C) in the main flow to 42% in a quiescent backwater on the channel margin. Saturations from 19-52% were measured within dense

packs of sticks, needles and leaves that filled the channel to a depth of 0.2 m in parts of the reach. However, high flows reduced the litter to 0.36 kg DM/m² at 2.5 months post-logging, when dissolved oxygen was c. 100% saturated throughout the reach. Whether streams are cleaned or not, large amounts of logging slash do not tend to persist for more than about six months in Coromandel streams that are more than about 1 m wide, due to the frequency of high flows that flush deposits downstream (J. Quinn, personal observation). However, the effects of harvest debris on stream dissolved oxygen may last for greater than two years in streams with stable flows in the pumice catchments of the Central North Island (Collier and Bowman 2003).

Role of riparian buffers

The vegetation on and near the streambanks has a strong influence on the stream habitat. Protecting this area and its vegetation from damage can buffer the stream from much of the effect of logging elsewhere in the catchment. Leaving a buffer of about 10–20 metres width of undisturbed riparian vegetation on either side of the stream does three key things:

- it maintains the forest shade and stabilises the streambanks,
- it reduces the disturbance in the area closest to the stream, where eroded sediment and tree branches are most likely to make it into the stream, and
- undisturbed litter layers within the buffer can filter out sediment carried by runoff from the clear-cut area.

New Zealand studies have shown that retention of forest riparian buffers can greatly reduce the impacts of pine logging on streambank erosion, stream light levels, periphyton, invertebrate communities and native fish (Harding et al. 2000; Rowe et al. 2002; Quinn et al. 2004). Buffers are most protective when they are continuous from headwaters downstream. "Patch" buffers, downstream of unbuffered reaches provide some local benefits (e.g., bank stability, shade and litter input, runoff filtering) but leaving headwater reaches unbuffered can result in high water temperatures and sediment input.

SCALING UP RESULTS TO LARGER CATCHMENTS

The catchment information presented in the preceding sections clearly demonstrates that afforestation reduces water yields and harvesting increases them. However, the question remains as to whether the results from small catchments can be scaled up to larger catchments. Some forest management techniques may, for example, result in changes in water yield that are much less than those quoted

for small-scale experiments. Afforesting 28% of the 900 km² Tarawera catchment in the central North Island caused a 13% reduction in mean annual water yield (Dons 1986), which is comparable, proportionally, to the 30% reduction from a 67% forest cover observed at the much smaller Glendhu experimental catchments. However, forest management practices in large catchments may mean that there will be mixed planting ages, and while the effects on annual water yield may be cumulative over time, they will certainly be less than the 40 to 80% reductions quoted for small experimental catchments.

Data from Maimai and Donald Creek show that gains in water yield after harvesting quickly diminish after replanting. In large forests, only small areas (< 100 ha) may be harvested at any one time, keeping total increases in water yield to a minimum. An increase in runoff of 30% from a small-scale experimental catchment may be lower for an entire forest. For example, harvesting 100 ha in a forest with a total area of 1000 ha may cause only a 2–3% increase in annual runoff, which may be the same as the error of measuring streamflow in the parent stream.

The ecological effects of forestry are also reduced when viewed at the scale of a large catchment or forest. Individual streams within a large forest will have catchments in a range of rotation phases, and the patches of disturbed habitat will move as different areas are logged and regrown. Larger downstream reaches tend to be disturbed over longer periods, but less severely, than headwater reaches.

REGIONAL AUTHORITIES AND THE EFFECTS OF AFFORESTATION ON WATER RESOURCES

The results of studies in New Zealand suggest that forestry in general, and afforestation in particular, could have a profound and lasting effect on annual water yields and low flows. Some regional and district councils have thus considered placing restrictions on forestry as a land use. In many catchments, available water resources may be fully allocated, and in some cases even over-allocatedthis situation could be further exacerbated by afforestation. Another reason is a more pragmatic one, relating to the Resource Management Act (RMA). The Act requires Regional Councils to prepare regional plans for air, land, and water, to produce policy statements that identify the main resource management issues for the region, and to establish policies that deal with these issues. The important distinction between the RMA and the resource management legislation that preceded it is that the RMA can be implemented at the regional and district level rather than at the national level. Thus the regions can establish their own policies and regulations within the framework of the RMA. Individual councils have therefore dealt with

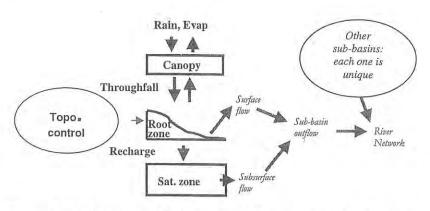


Figure 33.12 Overview of the Topnet model structure showing the canopy, root zone, saturated zone and river net-work components of the model. Arrows indicate flows of water from one model component to another.

effects of land-use change on large catchments, where patchy changes occur over long periods when climate may change. TOPNET modelled the 900 km² Tarawera catchment, which had all these ingredients. Almost 30% of the catchment changed from scrub to coniferous forests over a seventeen-year period beginning in 1964. Comparison of TOPNET results with those presented by Dons (1986) of the hydrological effects of these changes showed the model was able to accurately predict annual changes in flows (Woods and Duncan 1999).

TOPNET was also used to explore scenarios on the probable hydrological effects of changing pasture to pines in the 544 km² Shag catchment in east Otago. Calibration for 7-day low flows gave values similar to those using other methods for estimating low flows. One scenario representing a hypothetical planting in which exotic forests were expanded to cover almost 59% of the catchment, led to a predicted reduction of the mean annual flow and mean annual low flows by 49% and about 45% respectively (He and Woods 2001).

Bayesian belief network models

Bayesian Belief Networks (BBNs) are expert systems in which the cause-effect relationships between variables are defined by a causal network (e.g., Fig. 33.10), and by a set of conditional probabilities for each variable. BBNs have potential for use in forest management to protect aquatic ecosystems because they summarise the complex interrelationships involved in forest-stream interactions and can predict the effects of various combinations of land management actions that occur in forest operations. They can also be used to help infer the causes of degraded environmental conditions. Each node in the network represents a particular variable and its probabilities of being in each of its possible states (normally 3 or 4 per variable), given the state of "parent" variables. When new information about the state of a variable (e.g., the percentage of the catchment that has been harvested) is added, predictions on the states of all the other variables are updated. This mimics essential features of human reasoning, such as bi-directional (predictive and diagnostic) inference, dynamic updating of dependencies, and the ability to retract belief in a suspected cause if fresh evidence explains away earlier evidence. A BBN has been developed to relate the state of invertebrate community indicators to forestry practices and other factors, based on experience with Coromandel Peninsula streams and knowledge of their stream ecology (Jowett and Quinn 2001).

CONCLUSIONS

Afforesting close to 100% of small-to medium size catchments that were previously in pasture or tussock grassland may reduce annual water yields by up to 55% and low flows by at least 20%, but the full effects will not be seen until canopy closure 5-10 years after planting. Reversion of pasture to other forms of woody vegetation such as gorse, manuka or bracken will also reduce yields, but not to the same extent. In larger catchments the effects of planned afforestation on water yields and low flows are likely to be less pronounced, because plantings will be at different stages of development throughout the catchment. Excluding high water yielding areas such as riparian zones from planting, coupled with careful management practices, will also help keep reductions in water yield to a minimum. Plantation forests on land previously in pasture or tussock grassland can also reduce flood peaks by a half to a third. After harvesting, water yields may increase by as much as 70%, but if replanting is undertaken right away, yields should return to pre-harvest levels within 6-8 years. After harvest, flood peaks can be expected to increase by between 30 and 70%, with the biggest increases associated with the smaller storms. A brief but substantial increase in water yield can be expected after thinning.

Sediment production increases during forestry operations, especially in the land preparation phase. The main sediment sources are forest roads and log landings, where sediment is mobilized by both surface erosion and, less frequently, by mass movement. The latter has the greatest potential to affect stream ecosystems. Although infrequent, landslides can mobilize much more material in a single event than long periods of surface erosion. Nevertheless, the combined amounts generated by both processes are unlikely to influence the long-term natural erosion rates. Sediment yields from forested catchments at mid-rotation will be only half those from comparable catchments in pasture, but after harvesting may increase

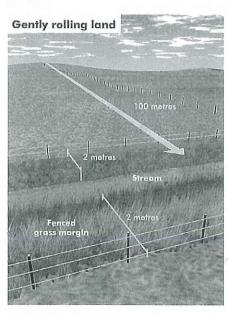
*	
	Atn: Stuart Miller
	Submission to: Ministry for Primary Industries
-	P.O. Box 2526. Wellington 61.40
	Title: National Environmental Standard for Plantation Forestry.
	From: David W. Renouf.
	Set back distances
	Request that there is an increase of setback distances for land slopes of
	10, 15, 20, 25 730 de grees.
	Because
-0-	One fixed setback distance for all land slopes does not fully avoid,
	remedy or mitigate the adverse effects of plantation forestry
	activities on the environment.
-	This set back area is an important buffer between land use activities and frequenter.
	This set path great is an interment barrer perweer land use activities and prestager.
0	The steeper and longer the slope increases the amount of
	runoff
	Sediment
	Slash
	debris
0	entering streams, vivers, wetlands, lakes and coastal marine areas.
	Reguest the following changes to the NES for Plantation Forestry
	That there is an increase setback distances for each land slope of
	10,15,20,25 7 30 degrees.
	David W. C. C.
	David W. Renouf
0	12th July 2015
-0	Attached: Clean Streams May 2004 page 19.
	There are create officiality may room page 11.

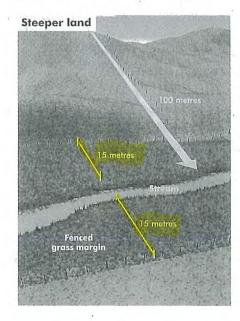
The steeper and longer the slope feeding into a waterway, the wider the grass margins needs to be to cope with the extra runoff.

Management to get the most from your margin How wide?

In general, the steeper and longer the slope is that feeds into the waterway, the wider the grass margin needs to be. The most recent NZ research¹³ recommends that for gently rolling land, widths of one to three metres per 100 metres of slope feeding into the waterway are ideal. In areas with steeper slopes and poorly draining soils, a grass margin of 10 to 15 metres per 100 metres of the adjacent slope is recommended. See Figure 4.

Figure 4: Working out how wide your grass waterway margin needs to be





Often runoff flows in defined channels across paddocks to reach waterways. It can be best value to put in wider grass margins in the areas where you know runoff is channelled into waterways during times of high rainfall and runoff (Figure 5). On hill country farms with long slopes, wide margins are most effective across these drainage channels.

May 2004 Clean Streams - dexcel, Environment Bay at Plenty Regional Council s 9(2)(a)

Proposed Standard – 6.4- Genetically modified tree /root stock (p 43, 64 & 82).

I oppose the standard

Submission and Reasons –

The Council must be able to retain local decision-making on GM activities. The proposed National Environmental Standard for Plantation Forestry (NES-PF) must allow local bodies to place more stringent conditions in relation to the land use of GM tree stock in their regions. The Environment Court has made two a rulings (Judge Thomson, Judge Newhook) regarding the interface between the responsibilities of Environmental Protection Authority (EPA) under the Hazardous Substances and New Organisms Act (HSNO) and the management of genetically modified organisms (GMO's) as part of Local Bodies under the Resource Management Act (RMA) land use management and planning functions saying there are no duplication of functions.

Changes I/we would like to make -

1. The GM clauses in the proposed NES –PF do not meet the objectives of environmental protection for communities nor does it take into account the inherent dangers and liabilities associated with GM trees through genetic contamination of the soil, flora & fauna, debris from prunings, ecosystem management and water ways. The proposed NES-PF GM tree instead treats the management dangers of GM tree stock as if they were the same as conventionally bred ones.

- 2. Local Bodies are required under the Resource
 Management Act to manage activities that may endanger
 their
 - region's environment, biosecurity, unique biodiversity, existing primary producers, economic future, Maori ancestral lands, cultural wellbeing and the public health, this should not be removed.
- 3. The EPA responsibilities (under the HSNO Act) do not have the ability, scope or expertise to rule on the long-term management activities of GM plantation activities.
- 4. The EPA (under HSNO Act) does not have the mandate to rule on the management of GE/GM land use activities after release.

The decision I/we would like the Minister to make

- 1. All wording referring to genetically modified trees and rootstock must be removed from the NES-PF.
- 2. To place an added condition in the proposed NES-PF stating that Local Bodies can set more stringent rules, objectives and policies on GMO's as part of their land use planning function, under the RMA, when addressing the economic, social and cultural wellbeing of their communities.

From: **NES PF Consultation** To: Subject: FW: G E Date: Wednesday, 12 August 2015 1:20:14 p.m. Hi all, One for you? Regards, Keegan Platten | Customer Enquiries Co-ordinator | Ministry for Primary Industries: Manatu Ahu Matua Pastoral House 25 The Terrace | PO Box 2526 | Wellington | New Zealand | www.mpi.govt.nz | Follow MPI on Twitter (@MPI_NZ) We are always looking to improve - click the following link to provide feedback on our response http://efm.jusfeedback.com/Community/se.ashx?s=705E3ED860B9F624 ----Original Message----From: Ursula J Rose Sent: Wednesday, 12 August 2015 1:06 p.m. To: Info <Info@mpi.govt.nz> Subject: Re: G E Thank you for your query. The submission is to the National Environment Standards concerning a council's ability to place GE precautions in their plan. Appreciate your email. Regards Ursula J Rose Sent from my iPad > On 12/08/2015, at 8:37 am, Info <Info@mpi.govt.nz> wrote: > HI Ursula, > So I can make sure this goes to the correct person, is this in regards to a piece of proposed legislation that is currently underway? If so, what bill? > > > Regards,

> Keegan Platten | Customer Enquiries Co-ordinator | Ministry for > Primary Industries: Manatu Ahu Matua Pastoral House 25 The Terrace |

> PO Box 2526 | Wellington | New Zealand

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> | www.mpi.govt.nz | Follow MPI on Twitter (@MPI_NZ)
> We are always looking to improve - click the following link to provide
> feedback on our response
> http://efm.jusfeedback.com/Community/se.ashx?s=705E3ED860B9F624
>
>
>
> -----Original Message-----
> From: Ursula J Rose
> Sent: Tuesday, 11 August 2015 4:59 p.m.
> To: Info <Info@mpi.govt.nz>
> Subject: G E
>
> Submission
> 1)We must have wide ranging discussions as there are many different views.
> 2)We must proceed with caution.
>
>
>
> Sent from my iPad
> This email message and any attachment(s) is intended solely for the
> addressee(s) named above. The information it contains is confidential
> and may be legally privileged. Unauthorised use of the message, or
> the information it contains, may be unlawful. If you have received
> this message by mistake please call the sender immediately on 64 4
> 8940100 or notify us by return email and erase the original message and attachments. Thank you.
> The Ministry for Primary Industries accepts no responsibility for
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> changes made to this email or to any attachments after transmission from the office.

From: Vincent Rowe

Sent: Thursday, 23 July 2015 11:08 a.m.

To: NES PF Consultation

Subject: Genetic Engineering Anywhere

Dear Minister Guy,

I oppose the Proposed Standard – **NES & other relevant legislation: 6.4 - Genetically modified tree/root stock** (p. 43, Appendix 3, Afforestation, p. 64 & Replanting, p. 82)

From what I have learnt so far, from leading scientists and researchers in their relevant fields regarding biological and environmental health matters, it is very clear to me that Genetic Engineering is a loose, loose methodology. While several pesticide and herbicide corporations may profit monetarily and continue to gain rights and supportive legislations by manipulating politicians and more influence in the corporate world, that diminish the rights, health, environmental health, freedoms, access to holistic healthcare and many other significant aspects of living healthy lives, for the majority of people and Life On Earth, including the intricate and plentiful Natural Clean resources still available (though rapidly diminishing).

The long term impacts of Genetic Engineering and the following disruptions from toxic substances ie: pesticides, herbicides etc, which have been shown to kill and alter the delicate substrata of soils, water, micro-organisms and complimentary life, are Too Great and bring unforeseen problems, which are likely to have more complex solutions.

Russia and China are not interested in Genetic Engineering, along with a growing number of European countries, for valid reasons that are graphically obvious to those with reasonable intelligence and the ability to recognize where Integrity is Absent.

Submission and Reasons -

The GM clauses on p. 43, 64 & 82, in the proposed NES – PF do not meet the objectives of environmental protection for communities, nor does the standard take into account the inherent dangers and liabilities associated with novel genetic technology and its potential contamination of - soils, indigenous and exotic flora & fauna, pruning debris, waterways, trophic ecosystems and waterways.

We ask that you remove all conditions and references permitting genetically modified organisms to be the sole responsibility of the Environmental Protection Authority (EPA) under the Hazardous Substances and New Organisms Act (HSNO) and allow Councils to manage Regional and District land use through their mandated planning functions' under the Resource Management Act (RMA).

Both the Environment Court and the Royal Commission on Genetic Modification (Chapter 13, 6) have stated the clear responsibilities and boundaries between the EPA and Council jurisdiction, there is no "duplication" between the HSNO or RMA once a GMO is released. This must not be undermined by any clause in the proposed NES-PF.

The Environment Court, Judges Thomson and Newhook, decision upheld the Councils ability, under the RMA, to place policies, rules and objectives, on the management of GMO land use activities as part of their management and planning functions in their regional and district plans [1], [2].

References:

[1] http://www.boprc.govt.nz/media/321876/environment-court-decision-18-dec-2013-env-2012-339-000041-part-one-section-17.pdf

[2] http://www.ge-free.co.nz/assets/pdf/20150512145527872.pdf

A well known spokesperson on Natural healthcare Dr Joseph Mercola of <u>MERCOLA.COM</u> says this about the history of GMO's in the US -

'GMOs are a product of genetic engineering, meaning their genetic makeup has been altered to induce a variety of "unique" traits to crops, such as making them drought-resistant or giving them "more nutrients." GMO proponents claim that genetic engineering is "safe and beneficial," and that it advances the agricultural industry. They also say that GMOs help ensure the global food supply and sustainability. But is there any truth to these claims? I believe not. For years, I've stated the belief that GMOs pose one of the greatest threats to life on the planet. Genetic engineering is NOT the safe and beneficial technology that it is touted to be.'

'The arguments for GMO safety are inherently flawed. The primary ingredients derived from GE crops for human consumption is high fructose corn syrup (HFCS)—the number one source of calories for Americans—sugar from GE sugar beets, and highly processed industrial vegetable oils from soy and cottonseed. All of these ingredients have been clearly demonstrated by science to be primary causes of disease in the US, producing obesity, heart disease, cancer, and chronic poor health.'

'So even if these crops weren't genetically modified, they would be a health disaster, but adding resistance to a toxic poison like glyphosate turns these foods into a health time-bomb. Researchers have convincingly shown that these crops absorb more glyphosate than treated non-GE crops.'

'The TPP, which appears to be nothing short of a corporate takeover of global powers, has the legal ability to thwart all future attempts at protecting the public from genetically engineered (GE) foods, and for this (and many other reasons) must be stopped.'

Sound Reasons to Not allow GMO's into or be produced in New Zealand!

Changes we would like you to make -

- Remove all GM clauses in the proposed NES PF and references permitting genetically modified organisms to be the sole responsibility of the Environmental Protection Authority (EPA) under the Hazardous Substances and New Organisms Act (HSNO) and
- Retain and provide for Regional and District Councils to place more GM stringent land use rules, objectives and
 policies in their plans for the management of the natural and physical resources through their mandated
 planning functions' under the Resource Management Act (RMA).
- Protect the Regional and District Council mandate and duty of care, under the RMA, to the existing foresters, primary producers and businesses in their region and districts so they can maintain their responsibilities with national and global certification bodies.
- Ensure that the Regional and District Councils have the ability, under the RMA, to create a much needed additional tier of local protection against the risks of outdoor release and use of GMOs.

Please also

- 1. Remove all wording in the NES-PF in **6.4 p.43**, **Appendix 3**; **Afforestation**: **p. 64 & Replanting**: **p. 82**, referring to genetically modified trees and rootstock.
- 2. Place an added condition in the proposed NES-PF stating that Local Bodies can set more stringent rules, objectives and policies on GMO's as part of their land use planning function, under the RMA, when addressing the economic, social and cultural wellbeing of their communities.

I/we wish to be heard. Please keep us informed.

Sincerely

Vincent Rowe

Proposed National Environmental Standard for Plantation Forestry

Spatial, Forestry and Land Management Ministry for Primary Industries PO Box 2526 Wellington 6140

Stuart Miller

Email: NES-PFConsultation@mpi.govt.nz

Submissions must be received by MPI before 5 pm, Tuesday 11 August 2015.

Name Frank Rowson

Postal s 9(2)(a)

Phone s 9(2)(a)

Email s 9(2)(a)

Re: Submission Proposed National Environmental Standard for Plantation Forestry

Personal comments

Submission

loppose the Proposed Standard – NES & other relevant legislation: 6.4 - Genetically modified tree/root stock (p. 43, Appendix 3, Afforestation, p. 64 & Replanting, p. 82)

Submission and Reasons -

The GM clauses on p. 43, 64 & 82, in the proposed NES – PF do not meet the objectives of environmental protection for communities, nor does the standard take into account the inherent dangers and liabilities associated with novel genetic technology and its potential contamination of - soils, indigenous and exotic flora & fauna, pruning debris, waterways, trophic ecosystems and waterways.

We ask that you remove all conditions and references permitting genetically modified organisms to be the sole responsibility of the Environmental Protection Authority (EPA) under the Hazardous Substances and New Organisms Act (HSNO) and allow Councils to manage Regional and District land use through their mandated planning functions' under the Resource Management Act (RMA).

Both the Environment Court and the Royal Commission on Genetic Modification (Chapter 13, 6) have stated the clear responsibilities and boundaries between the EPA and Council jurisdiction, there is no "duplication" between the HSNO or RMA once a GMO is released. This must not be undermined by any clause in the proposed NES-PF.

The Environment Court, Judges Thomson and Newhook, decision upheld the Councils ability, under the RMA, to place policies, rules and objectives, on the management of GMO land use activities as part of their management and planning functions in their regional and district plans [1], [2].

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- Ensure that the Regional and District Councils have the ability, under the RMA, to create a much needed additional tier of local protection against the risks of outdoor release and use of GMOs.

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- 1. All wording in the NES-PF in **6.4 p.43**, **Appendix 3**; **Afforestation**: **p. 64 & Replanting**: **p. 82**, referring to genetically modified trees and rootstock must be removed from the NES-PF.
- 2. To place an added condition in the proposed NES-PF stating that Local Bodies can set more stringent rules, objectives and policies on GMO's as part of their land use planning function, under the RMA, when addressing the economic, social and cultural wellbeing of their communities. From the history of MPI and ERMA it is obvious that they are incapable of ".... ensure any risks associated with the deployment of the tree stock are managed .." We do not want them to be managed, they must be prevented, i.e. not allowed outside the laboratory.

I/we wish to be heard. Please keep us informed.

Sincerely, Frank Rowson