

# Bulletin

Spring 2018

## China in the time of trade crisis

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# Close encounters with China

A strong delegation from the FOA Board spent a week in China mid-September and had a first-hand experience of the tensions of a growing and protracted trade showdown with the United States.

**China has a US\$50 to \$60 billion wood export trade with the US. That represents a third of its export total and 40 percent of its furniture exports.**

The delegation was attending the 8th China Global Wood Trade Conference, which had a strong New Zealand focus.

Forestry Minister Shane Jones' address to the Conference included these key messages;

- New Zealand's openness to doing business with China and that we were always looking for innovative partners for mutual benefit.
- New Zealand was more than just dairy, and that China was the no 1. destination for wood from New Zealand.
- Before you have trade you must have forest investment that adds value to New Zealand. Chinese investment was welcome. He also affirmed New Zealand's commitment to international trade rules and dismissed any intention of log export restrictions.
- 2018 was a particularly important year because the PM (also Foreign Minister) has overseen a simplification of rules for forestry investment.

The US trade tensions brought a stronger than usual interest in Shane Jones' remarks on finding new investment and trade opportunities.

There are significant constraints on the wood resource in China – growth, management, roading network and replanting plus other limitations. China is aiming to plant 20 million hectares by 2035 and Chinese officials are optimistic that supply and demand can be balanced by 2020.

US log producers will absorb the tariffs from China and thus it is not expected to



“The possibility of China placing tariffs on US forestry products may favour New Zealand exports” MPI

affect supply. This is because they currently achieve a premium for export over what they receive domestically.

Timber market changes have been brought about by the 'Belt and Road' initiative. Chengdu (not far from the conference) is a major hub in the significantly expanded railroad network that now incorporates 3,000 rail lines stretching from China to Finland. China and Europe have developed a timber customisation train line.

The point was also made that while there has been significant offshore investment by China in 151 countries, wood and wood product investment is so far a small proportion of this. Yet investing off-shore could help China to avoid trade barriers and achieve stable supply.

Chinese investment in processing is a fit with current value-added investment and can take advantage of wood supply that is under-utilised.

South America, and in particular Uruguay, was frequently cited as the key competing destination for Chinese investment. There are few, if any, restrictions on foreign investment, full repatriation of profits, no local partner requirements and tax free zones.

The FOA delegation took the opportunity to meet with the China Entry-Exit Inspection and Quarantine Association. This is an influential body in China that shares some

common goals, including the reduction of methyl bromide use. The progress that New Zealand has made on reduction and alternatives are of strong interest to China and there is an opportunity for mutual benefit in continuing to openly share research and other information.

The FOA delegation was also provided with a tour of the Xinminzhou Port Industrial Park described as “China's timber imports first port”. The park area itself covers over 300 ha including the 5-berth shipping port, 60 plus sawmills and an area where fumigation facilities will be installed. The plan includes construction of an 'ecological industrial city' of around 30,000 people. Located 250kms up the Yangtze River from Shanghai this is the first of ten such industrial parks planned.

The river channel has an 11 m draft capable of handling 50,000 DWT ships year-round.

More than NZD\$3b has been invested over three years. Money is not a constraint.



DAVID RHODES  
CHIEF EXECUTIVE, FOA



# Forest Owners submits ETS has stalled and action needed

FOA has submitted to the Ministry for the Environment that the Emissions Trading Scheme has been stalled for years and it's urgent the government commits to a minimum greenhouse gas level reduction.

## MfE called for submissions as a review of the ETS, which was established ten years ago.

The FOA submission echoes statements made by the Parliamentary Commissioner for the Environment, Simon Upton, that the carbon fixing ability of forestry is not an alternative for the need to reduce emissions and for people to change their behaviour.

Nor can further afforestation be considered anything other than an interim step to substantial means to reduce the level of gross greenhouse gas emissions, instead of sequestering emissions which have already been created to decrease the net volumes.

Increased afforestation will not necessarily lead to greater participation in the ETS the submission warns. Participation will depend on the opportunity cost of the deforestation liability at harvest.

The suggestion that units are auctioned has led to qualified FOA support for a quarterly auction in which all New Zealand ETS account holders would be able to participate.

If not done correctly auctions will cause the ETS to become dysfunctional. For it to work, an auction system must be transparent in its settings and objectives, so as to provide certainty and liquidity.

The Zero Carbon Bill and the role of the independent Climate Change Commission add to current uncertainty.

The prospects of the government adding an unspecified number of units into the system, including international units, provokes 'significant concerns' of creating a 'hidden price cap'.

Instead, the volume of units for the subsequent five years should be set annually, with a cap on the number of those units, and with the decision 'constrained by an independent advisory body' to hold the government of the day to account.

The FOA has no reason in principle to oppose allowing the use of international units alongside standard units. But the cost and complexity of this access mitigates against such use. The effects of these units would moreover be negated to zero by the government's need for maintenance of a five-year limit.

The FOA expressed concern that MfE has not provided enough information in its proposals to be able to give unqualified support for MfE's preferences for ETS reform.

## Log clean-up at Tolaga Bay led by local forest companies gives beach back to the community

The log debris on the beach at Tolaga Bay after the debris floods in early June attracted intense media attention at the time and much speculation on what could or should be done to clean the beach up.

There are no obvious alternative locations to dump or bury the logs and they are too damp to conventionally burn without excessive smoke and other emissions.

Now, using fan forced incineration, local forest companies, Hikurangi Forest Farms and Ernslaw One,

and forest managers PF Olsen are burning off the wood on the beach during the next 6-8 weeks. HFF is leading the clean-up, which follows meetings between forest owners and the local community who participated in the planning process. Fan forced incineration is where air is pumped into the base of the fires to ensure they burn cleanly even if the wood moisture is high. The clean-up started at the two most popular places for beach users – by the wharf and at the surf club, and will work outwards from there.



Fine weather, forced air, and a few trials on the best way to stack the logs, the clean-up is under way Photo: A Waru, Uawanui



# Carbon goal through returning New Zealand to forests

Implementing the Productivity Commission’s proposal to plant up to an extra 2.8 m hectares of trees would transform our landscape.

The programme to pull carbon out of the atmosphere would reforest New Zealand on a scale never seen before.

Forestry Minister Shane Jones’ Billion Trees only requires a new area planting rate of 50,000 ha a year.

The Productivity Commission’s goal would be not only to achieve the exceptional highest ever 100,000 ha of new plantings in 1994, but to sustain that expansion, year in year out, for three decades.

In other words, the planting rate per year of the billion trees would be doubled, and the planting period tripled.

A critical factor in doing the carbon sequestration area sums, relied on by the Commission, is the mix of pines and indigenous trees and when they are planted.

Though there are arguments that sequestration rates are higher in a managed indigenous forest than with natural regeneration, a hectare of native podocarp forest, planted next winter, would be likely to absorb 300 tonnes of carbon dioxide per hectare by 2060 – which is ten years after the carbon neutral deadline of 2050.

A hectare of pines, planted at the same time, will have locked up three times this volume, 900 tonnes. It would have moreover achieved that volume well before the 2050 deadline.

Even on a harvest rotation, an average pine age of 18 years, the representative pine hectare would sequester 600 tonnes of CO<sub>2</sub>.

These relativities mean that the greater the reliance on indigenous trees, the greater the planted area needed to meet those carbon absorption goals.



2.8 m ha would “take 20% of hill country farmland out of production”, Federated Farmers

A plant-up of the contemplated scale is difficult to comprehend using current market forces to get plantings on the marginal areas of some farmland.

An extra 2.8 million hectares needs government participation in the process to an extent not seen outside of wartime.

There are two most likely target regions to be transformed from an existing predominance of lower productivity grass and scrubland into plantation pine forests.

The first is a ‘summer dry’ strip running from Napier south through coastal Wairarapa and then as far south as Culverden in North Canterbury.

The next most suitable region to be called on to do the heavy lifting for carbon is west of the Ruahines through to Whanganui and north to Taumarunui.

The envisaged future for forests in the rest of the South Island is a more complex mix of exotics, natives and high value timbers comprising a belt running down inland South Canterbury, right throughout Otago and in central Southland.

Were forest planting to be fuelled by a gradual increase in the price of carbon, and gradual introduction into the ETS for agriculture, as the Productivity Commission anticipates, then that planting is likely to be of two types.

The first would be farm woodlots. Farmers would continue to identify the less productive areas of the farm for planting out, to both offset their carbon obligations and spread the risk of a market downturn, or environmental regulatory cost, for their already marginal sheep and beef production.

On a much larger scale, whole districts would be turned over to forestry, much like parts of the Central North Island and East Coast are already. Port, processing and transport infrastructure could be developed with lead time and the confidence that there will be massive wood supply in the years to come for what would become New Zealand’s major primary industry.

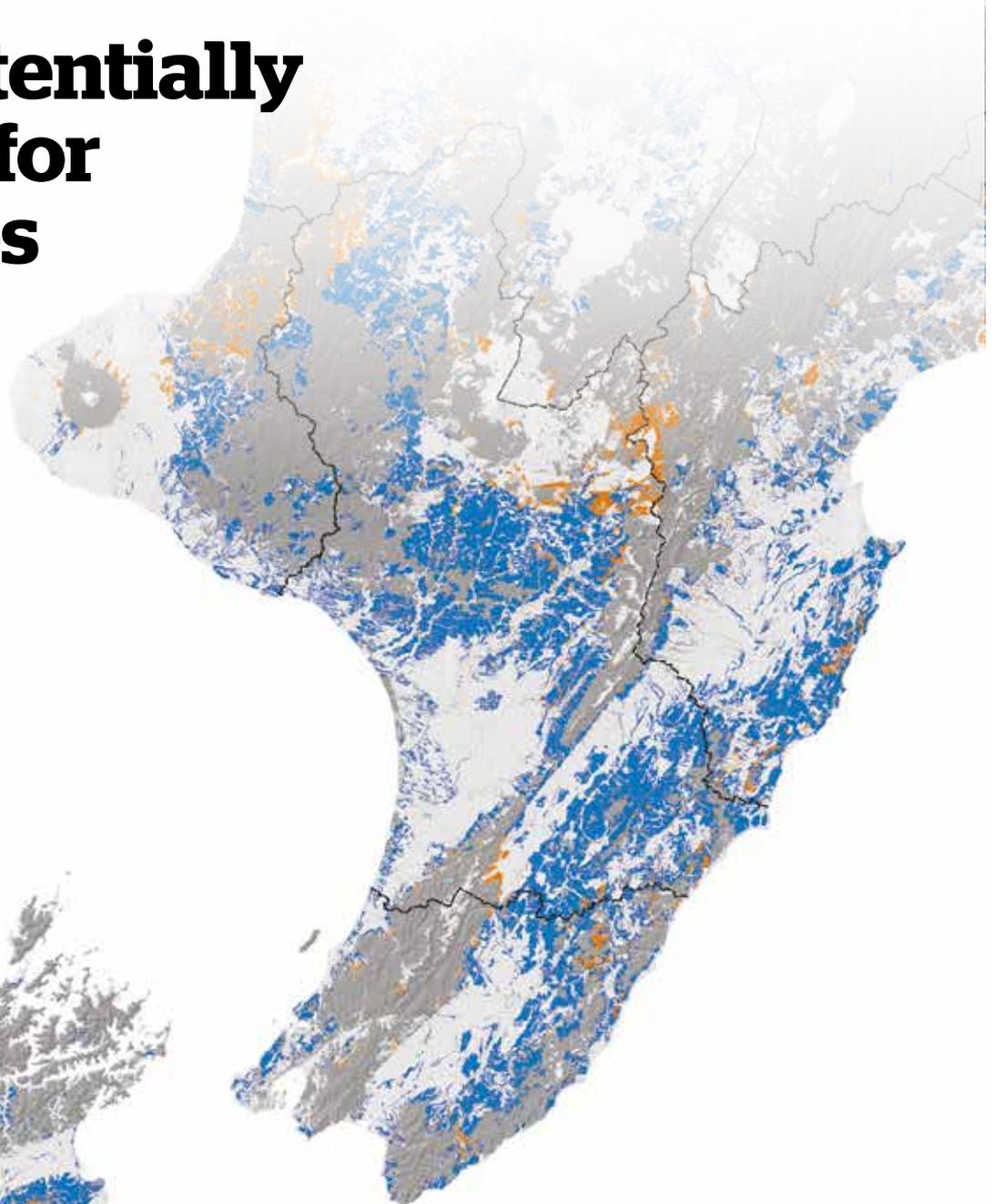
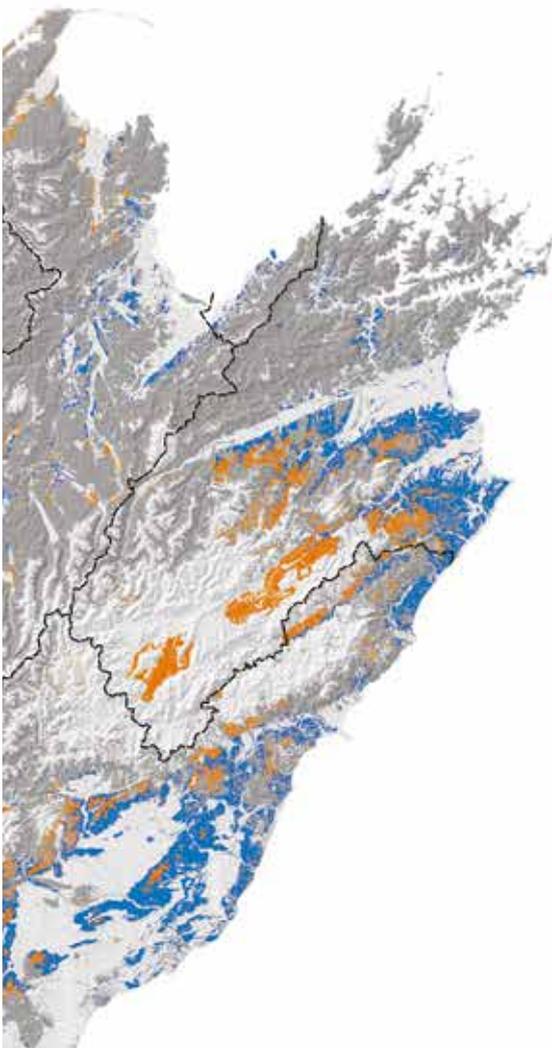
**600** TONNES

ON A HARVEST ROTATION OF ROUGHLY 18 YEARS A HECTARE OF PINE WOULD SEQUEST 600 TONNES OF CO<sub>2</sub>.

# Land potentially suitable for new trees

## Regional council boundaries

-  Potential for all tree species
-  Potential for all tree species except production exotics
-  Existing forest



North Island	Area (ha)
Potential area for all tree species	~1,320,000
Potential area for tree species except production exotics	~330,000
<b>North Island total</b>	<b>~1,650,000</b>
South Island	Area (ha)
Potential area for all tree species	~740,000
Potential area for tree species except production exotics	~980,000
<b>South Island total</b>	<b>~1,720,000</b>
<b>Total for New Zealand</b>	<b>~3,370,000</b>

This map uses data sourced from DoC, Manaaki Whenua – Landcare Research, LINZ, NIWA, Stats NZ and Geographx.

# Forest Growers conference looks to science support for forest development

If the government's aims of boosting forest productivity and carbon sequestration are to be realised, then forest science is an integral part of achieving these goals.

**This year's annual Forest Growers conference in Tauranga focused on the science produced through the Forest Growers Levy, as a recognition of how vital that levy has become for the development of New Zealand's forest science.**

Two thirds of the levy, now grown to about \$9 million per year, is invested in research and development.

This year 120 people from large and small forest growers, government agencies, regional councils, researchers and advisers attended the two-day conference with 85 participating in the field trip to the Port of Tauranga and the Welcome Bay forestry property of Andy and Gabrielle Walton.

They heard Forest Growers Levy Trust Chair, Geoff Thompson's overview of the Trust and its workings and the extensive engagement with industry people on the planning and implementation of levy funded programmes. Trust board members and FOA/FFA chairs provided highlights of the achievements in biosecurity, training and careers, health and safety, small forest grower interests, environment and road transport.

Along with funding from government sources, other industry and Scion aligned funding, the overall research programme investment exceeds \$20 million dollars annually. The annual report to the industry is therefore an important event in the forestry calendar.

Intense storms in February and June highlighted the risks of harvesting forests on steep highly erodible soils. The resulting mobilisation of slopes carrying woody debris has caused considerable community concerns and put forestry in the spotlight.

Much of the industry response to reduce the future risk is science dependent. Forest engineering, harvest management and alternative species are all integral to reducing that risk and they all require an investment in science and technology. An exhortation simply to do better in the future will not suffice.

A conference highlight was a presentation on the flagship research programme, the Growing Confidence in Forestry's Future (GCFF). Now in its final year this programme, the largest of its type in the world, has delivered new understanding and techniques for raising forest productivity and forest value that are being picked up and applied by forest owners. A legacy of the programme will be a new series of highly promising growth accelerator trials which are testing new treatments to enhance productivity.

Genetics has been identified as a technology that has much to offer productive and resilient forests and where some catching up to other countries and our own primary sectors is needed.

While not levy funded, the Radiata Pine Breeding Company presented an update on recent breeding developments and progress being made to refresh the breeding company strategy. With the support of the levy, Scion has been able to assess long-term silvicultural breeds trials at rotation end and these show valuable benefits to growers of a long-term breeding programme and long-term trials of this type.

Red needle cast (RNC), caused by airborne *Phytophthora*, has been a worry for forest growers but the results of a large research effort now means the industry has recommendations on spraying to control the disease. Researchers are close to completing a model that will help forest owners make decisions on when to undertake control measures. The research has also shown the variation in disease resistance across genotypes offering promise of genetic selection for increased disease tolerance.

Technology is changing rapidly and updates were presented on the trends in mechanisation and automation in harvesting.

There is exciting new technology now being refined to detect and target new insect pests

in an early enough stage of an incursion to be able to effectively eliminate it without extensive spraying of especially urban areas and so provoking a public backlash.

This technology includes the almost science fiction of using a "wired up" captive male moth to pilot a flying device to detect female moths.

UAVs also are gathering hugely valuable information on forests. They can gather data on tree growth, soil conditions, temperature and canopy condition, enabling the forest manager to monitor in real time what is happening in the forest.

They are also able to easily assess vast forest areas and select the very best performing trees for potential breeding to a level which has been impossible before.

The conference also reviewed research projects focused on assisting small forest owners. All of the projects benefit forest owners large and small, but some projects, such as the research on specialty species – redwoods, cypresses, and eucalypts – is often of greater interest to smaller growers.

A project to develop a small forest inventory system that will provide more cost effective inventory for small owners was presented and an update was provided on a hydraulic quick coupler that will allow a quick change from a log processor head to a loading grapple on an excavator machine. The aim of this work is to enable one excavator to undertake both functions in lower productivity small forests to reduce harvesting costs.

A Forest Growers' conference overlooking the Port of Tauranga would not be complete without updates on technology to recapture methyl bromide from log fumigation treatments, progress with obtaining approvals for an alternative fumigant EDN and new technology for scanning log loads.

# Forest research awards - from moths to mycorrhiza

The vast and diverse scope of science in forestry was exemplified at the 2018 Forest Science Awards presented during the Forest Research Conference in Tauranga.



## Research Award for Communication and Sector Engagement

The Drylands Forest Initiative manager, Paul Millen, received this award for his progress in selecting eucalypts for exceptionally ground-durable timber.

Paul is working with the University of Canterbury, Proceed in North Canterbury, the Marlborough Research Centre and farmers who have offered Paul trial plots.

Some vineyard owners are concerned about the reputation CCA treated posts have for leaching arsenic, or their inability to burn such treated posts at their end of the posts' working life.

Paul has sourced seed from overseas to select and cross breed the most promising from almost 1,000 ha of trial plantings. There is a supporting research programme selecting for durability, growth and insect browsing tolerance.

**See a feature on Paul's work with dryland eucalypts in Episode 6 of Forest Call\***



## Research Award for Innovation that Enhances Sector Value

Scion's Simeon Smaill planted trial plots of low-dose fungicide and fertiliser treatments eight years ago, to test if the standard high-dose applications on pine seedlings had an inhibiting effect on the beneficial soil mycorrhiza.

The low-dose improved the tree growth which is still occurring nearly a decade later, prompting more trial plots in different parts of New Zealand to see how well those results are replicated in other environments, leading also to potential genetic selections for different locations.

Simeon has also championed the development of the nutrient balance model, NuBaLM, which delivers information on soil nutrient flows and tree usage. The NuBaLM model is designed to integrate in particular into the Overseer model being used in the pastoral industries.

**See a feature on Simeon's work with mycorrhiza in Episode 10 of Forest Call\***



## Research Award for Science of International Quality

The Scion team of Jessica Kerr, Brooke O'Connor and Steve Pawson are developing pest-moth pheromone detection by wiring the antennae of a male moth into a cyborg.

The researchers are now working on how to get the moth to 'fly' the cyborg to locate the pest incursion.

This pioneering work of marrying biology with electronics will speed up pest detection so an incursion is much more likely to be found and destroyed early before the incursion becomes more widespread and difficult to control.

**See a feature on the team's work in Episode 9 of Forest Call\***



## Research Award for a Young Scientist

PhD student at the University of Canterbury Electric Power Engineering Centre, Nurzhan Nursultanov received this award for his developments in joule heating, which has potential to be used to fumigate export logs.

New Zealand's Environmental Protection Agency has determined that from 2020 the present standard pre-export fumigant, methyl bromide, cannot be released into the atmosphere.

Users of methyl bromide have therefore been seeking alternative treatments for log and horticultural produce exports and have invested several million research dollars over the past ten years.

Nurzhan's research has demonstrated that joule heating is effective and has the potential for commercialisation. The technique may also work to preheat logs for slicing and peeling in processing plants.



## Research Award for Research Participation and Implementation

Paul Adams of Rayonier Matariki Forests received this award as an active member of the technical committee for the Growing Confidence in Forestry's Future (GCFF) research programme.

With Paul's encouragement Rayonier Matariki Forests have hosted a number of trials as part of GCFF including a mid-rotation fertilisation trial and a forest accelerator trial.

Paul has initiated Scion staff working with experts in intensive forest management for Rayonier in the US.



## Research Award for Contribution to a Science Team

This award was presented to Rebecca McDougal for her contribution to supporting the forest health team at Scion with her molecular technology work to diagnose plant disease and characterise plant pathogens.

In particular, *Phytophthora* are difficult to diagnose and it is only with new molecular techniques that scientists have been able to determine the species of *Phytophthora* that are infecting our forests.

Rebecca has recently been nominated to fill a position on the US based Molecular Genetics Network (OMGN) Steering Committee.



\* To view episodes of Forest Call go to [nzfoa.org.nz/news/forest-call-series-on-facetv](https://nzfoa.org.nz/news/forest-call-series-on-facetv)



# Combating debris flows and floods a high priority

The debris floods this year at Motueka in mid-February and then at Tolaga Bay at the start of June were highly publicised.

**The images of a massive pile of woody debris up against Wigan Bridge on the Hikuwai River drove an intense nationwide media interest for the following weeks.**

While eager journalists hugely exaggerated the displaced volume of wood waste carried in this debris flood, the industry is agreed that from now every effort must be made to lessen the chances of such destruction on these erosion-prone soils in a future where climate change is likely to make high intensity storms more frequent.

An industry workshop was convened in Auckland on 2 August. This was followed on 21 August by a field trip hosted by Tasman Forest Management to inspect the damage wrought by Cyclone Gita on the separation point granite soils at Marahau near Motueka.

There is going to be more frequent intense storms, including in the regions with the most vulnerable land. Hydrology and soils expert advice is that slope failure will occur when such high amounts of rain occur in short periods. If the rain falls in enough volumes, even mature indigenous trees will succumb, as DoC will testify in the damage caused to its West Coast estate by Cyclone Fehi in early February.

Mature forests do though provide the greatest level of protection, with pastoral cover self-evidently the least capable of holding soil.

With pine plantations, a window of vulnerability opens after the roots of harvested trees have rotted and before the replacement trees have established sufficient root structure and canopy to stabilise the soil.

This is where advocates of planting redwoods point to these trees not perishing at harvest but instead they sprout back from the stump with coppice re-growth. The trouble is that redwoods,

while having this virtue, are a deep-rooted species and more likely to struggle with shallow erosion-prone soils.

The very popular and honey producing manuka is seen by some as another soil protection option, at least as a transition measure to larger permanent trees.

There must be greater effort to hold waste wood at the harvest location and prevent it ending up on neighbouring land.

In both badly hit regions the virtue of preserving and protecting riparian stands of stream-side or lower slope indigenous forest is well understood.

Smaller harvest areas also reduce the chance of a debris flow escalating across a larger harvest site and becoming a flood of debris gathering up all before it – including riparian buffers. This practice does however increase the possibility of wind-throw on harvest margins and therefore increasing the volume of waste-wood on the slope.

More sophisticated debris barrier systems, with back-up dams built to protect a whole catchment and not just the immediate harvest area, are one solution.

Development of machines which more gently harvest the tree, yet operate on the steep slopes, are a potential means to break fewer trees when they are felled.

Removing wood from water and the steeper mid slopes is sometimes a challenge, but securing this waste on the skid site or constructed benching considerably reduces the risk of them riding a land-slip to the river.

In some areas the waste is burnt off. But again, this measure is a potential double-edged sword. The wood is most combustible at the same time of the year as the standing forest is also at its most susceptible to fire. The consequence of burning on the vulnerable soils may also outweigh the advantage of removing the debris cover.



**Intense storms, vulnerable landscapes and logs where they shouldn't be**

Local residue processing facilities would certainly provide an incentive for companies to remove more wood material from the site as they would see a return for it, or at least a break even. It is the market which would need to provide this solution though, and transport costs escalate as the distance to a processing facility increases.

While some forestry critics naively prescribe selective harvesting as an answer to debris flows, or no harvesting at all, it is clear that for the most vulnerable landscapes the trend has to be in this direction.

Society's expectation following Cyclone Bola 30 years ago was to replace eroded grasslands with trees. Society's expectation now is that debris flows are unacceptable. The forest industry must anticipate what society's expectation will be when the trees planted now are harvested decades into the future.

# Before you light, check it's alright at [www.checkitsalright.nz](http://www.checkitsalright.nz)

Vegetation fires, including forest fires, risk lives, destroy property and devastate natural areas.

**They cost millions of dollars and take hundreds of hours to fight. Although the New Zealand landscape and climate make some regions highly susceptible to vegetation fires, human activity is the lead cause and most are preventable.**

With the El Niño weather pattern forecast in the coming months, Fire and Emergency New Zealand is particularly focused on reducing risk in rural areas of New Zealand most likely to be affected by a hot, dry summer: the summer dry eastern side of both the North and South Islands.

A combination of El Niño and climate warming has also increased the risk of high intensity fires, such as the Port Hills fire in 2017. Such fires are much more difficult to control. Work by the fire research team at Scion in Christchurch, using sophisticated computing and modelling, has given a much greater ability to predict the direction and speed of these fires, but the threats are still massive.

Given the heightened fire risk, messaging will reinforce the habit of checking to see if you need a permit before lighting an open air fire and using the most up to date weather and fire season data.

Using regional print and radio advertising, the Check It's Alright campaign will provide timely messaging about changes in weather or fire season status when risk is particularly high.



The awareness campaign this year will pay particular attention to semi-rural areas where there is the dangerous combination of a comparatively large number of people and plenty of combustible material.

FENZ has also created new information brochures and online factsheets to support the 2018/19 campaign.

Fire and Emergency's National Advisor Fire Risk Management (Rural), Rob Goldring, says the organisation is working with stakeholders such as FOA, DoC and Federated Farmers to raise awareness of the increased fire risk during the summer period.

"Controlled burning, for instance, is an inherently dangerous business. We have had six fatalities as a result of controlled burns over the past 10 years. Escaped fires account for 40 percent of all wildfires in New Zealand."

He says Fire and Emergency is developing a new permit system and plans to complete a pilot study in Canterbury early next year.



**FENZ's Check It's Alright summer risk reduction campaign**, with support by funding from the Forest Growers Levy, uses the line *Before you light, go to [checkitsalright.nz](http://checkitsalright.nz).*

Visitors to the website can find out the fire season status in all regions of the country and also apply for fire permits.

# 40%

ESCAPED FIRES ACCOUNT FOR 40 PERCENT OF ALL WILDFIRES IN NEW ZEALAND.

# Telematics cutting paperwork and increasing efficiency in logging trucks

A system monitoring a range of real time data in log truck fleets is proving a boon to their operators.

**MiX Telematics is being used to integrate fleet operations, reduce inefficiencies, deliver detailed and reliable data instantly and to future proof the fleets of the future.**

It's proving an information breakthrough at a level not experienced since the introduction of truck radio communications, and is a step up from the EROAD New Zealand developed GPS.

The essential elements are integrating GPS and vehicle performance monitoring with communications technology which can record and transmit the information real time.

According to Mark McCarthy, CE of McCarthy Transport and a member of the FOA/FFA Transport Committee, the efficiencies out of liability for and payment of road user charges alone, pay for the system.



“We can start with paying our road-user charges, our weight and measures and the benefits that gives us. So, we pay our road user daily using EROAD. It gives us truck location, truck speed, truck conformance to on and off highway, road user refunds – all essentially automatically.”

“What was two people to do our fleet full time doing our refunds is now one person for half a day a week.”

-  **Truck location**
-  **Truck speed**
-  **Truck conformance**
-  **Highway road user refunds**



Just as important is the ability of the Second to Second monitoring system to identify, locate and quantify poor or fatigued driver or vehicle performance. That flows through to giving an early warning and objective measurement of an accident risk. Driver training or vehicle repair can then be provided.

It may be just as simple as spotting a leaking tyre, or overheating engine, but also to do more targeted maintenance and reduce the frequency of truck down-time through breakdowns.

Historical data analysis lets the fleet operator minimise their fuel costs, important in cutting both the amount spent on that fuel and reducing CO<sub>2</sub> emissions.

The range of vehicle performance indicators is extensive, such as, the time the engine is running, its temperature changes, kilometres travelled against fuel usage, the brake applications and the PTO engagement periods.

Daily movement reports of the fleet can be similarly studied with sophisticated software

programmes and the huge cost of waiting down time can be reduced too.

Regulatory creep across the whole transport industry is anticipated with MiX Telematics. As new compliance rules and detailed and provable data are imposed the guesswork and notebooks of the past will become increasingly irrelevant and inadequate.

It's not just the home depot management who can benefit from the system. The drivers use MyMix to get their in-cab feedback and their driving habits – good and bad.

A component called MiX Bin Wood Tracking then monitors the load on the back of the truck as well, reducing even more of the paperwork and guesswork.

According to Mark McCarthy, the results of vehicle measurements have sometimes been surprising.

“When you are doing performance recognition it gives you an unbiased viewpoint. Just because a guy's a good guy doesn't make him a good driver.”

## Find out how the forest levy supports the forest industry

Meetings of primarily small scale foresters have been held in a number of New Zealand centres over the past month to inform foresters and woodlot owners of the investment of about \$10 m per year of funding from the Forest Gowers Levy.

These meetings have discussed how the Levy is set and how the priorities are decided on the spend of the Levy by the Forest Growers Levy Trust in the interests of all foresters.

The Levy, of currently 27 cents per tonne of wood at point of first sale, is primarily allocated to research and development, with health and safety, biosecurity and advocacy of social license to operate as major items.

The biggest single programme is the Growing Confidence in Forestry's Future, which is a multidisciplinary approach to double the productivity of radiata pine.

A new Levy Order is being sought, with a vote of forest owners in March and April 2019.

A majority of both numbers of votes and the area of forest is required for a new Levy Order.

**There are still three more information and consultation meetings on the schedule;**

### Gisborne

*Friday 23 November, 11am*  
Gisborne Cosmopolitan Club  
190 Derby Street

### Rotorua

*Tuesday 27 November, 9:30am*  
Distinction Rotorua  
390 Fenton Street  
Glenhome

### Hamilton

*Tuesday 27 November, 4pm*  
Distinction Hamilton  
100 Garnett Avenue  
Te Rapa

**A webinar will also be held on 28 November.**

For more information on registering for the webinar and about the Levy and the Levy Vote in 2019 go to [www.levyvote2019.nz](http://www.levyvote2019.nz)

There is also a survey of all foresters and companies interested in participating.

**See details below.**

# HAVE YOUR SAY AS A FOREST OWNER

The New Zealand Forest Owners Association (FOA), the New Zealand Farm Forestry Association (FFA), and the Forest Growers Levy Trust (FGLT) want to understand awareness and perceptions of a commodity levy, paid by commercial forest growers on plantation timber forests. Your responses will be important in helping these organisations identify the optimal amount of the levy and how it might be used in the future.

The survey should take about 7 minutes to complete. If you have any questions please contact Glen Mackie at FOA ([glen.mackie@nzfoa.org.nz](mailto:glen.mackie@nzfoa.org.nz)) or Colmar Brunton who are conducting this survey on their behalf ([survey@colmarbrunton.co.nz](mailto:survey@colmarbrunton.co.nz)).

**FOR YOUR CHANCE TO HAVE  
YOUR SAY PLEASE COMPLETE  
THE SURVEY BY GOING TO  
THE FOLLOWING WEBSITE**

[www.fgl.org.nz](http://www.fgl.org.nz)



# GROWING

## 2.8 MILLION HECTARES

**The Productivity Commission has recommended that up to 2.8 million hectares of trees are planted to achieve New Zealand's carbon neutrality by 2050.**

Whatever species are used, this would nearly triple our planted forest estate. It represents the biggest land use change since we first lost most of our indigenous forest cover.

It would be the biggest project ever undertaken by a New Zealand government, certainly since the 1870s.

We've always grown trees for their timber.

From now, trees are also to be grown in the global battle against climate change.

The government, together with iwi, farmers and the public, will need to get this right for our very environmental and economic survival.

**The challenge is huge.**

LOVE OUR FORESTS

OUR ENVIRONMENT DOES

