



WHY FENCE BUSH TO MAKE IT ELIGIBLE?

Joanna Grigg questions the proposed stock exclusion rule for 15+ year indigenous forest to be eligible for sequestration. He Waka Eke Noa should not have a blanket requirement for stock exclusion when some larger forest/bush, with natural boundaries, can regenerate alongside light grazing. Incentivise pest control instead, she says.

There is one very obvious problem with the proposed sequestration rules in He Waka, the requirement to exclude stock by fencing from pre-2008 forest, to make it count.

Farmers stand to lose thousands of carbon credits if this rule goes through. On many hill and high country farms, forests are a patchwork part of the landscape. Some are fenced, some large forests on large blocks are not.

A desktop study of native vegetation (Norton, Pannell 2018) showed sheep and beef farms contain 25% of the total native vegetation remaining in New Zealand - 2.8 million hectares. Half of this is woody (17% of the total native woody vegetation remaining).

In many cases, sheep graze alongside and on the fringes of large historic stands of bush and forest. This is typically at low stocking rates (under two/ha) and for set times of the year. These forest blocks are often large (25ha or more) and have natural boundaries like creeks and bluffs between established tree areas and tussock grasslands.

Under He Waka proposals none of these areas could be used by farmers to offset stock GHG emissions, simply because they are not fenced.

Practically these large bush areas on farms would be hugely expensive to fence. Kilometres of steel fences (made using fossil fuels) would have to be run over some of the hardest country

in NZ. Some fences would struggle to stay sound, with rock falls ripping through fence lines.

Far better use of resources would be rewarding farmers for sequestration, with a higher rate for fenced bush and for pest control work. This is a win-win for the environment and farmers and makes the greenhouse gas balance sheet fair. The sequestration management contract, that records blocks, could be audited as part of the NZ Farm Assurance Programme.

More research is required

In their desktop study for Beef + Lamb NZ, researchers Norton and Pannell (2018) concluded research is required to further understand the actual composition of native woody vegetation on sheep and beef farms, and the way it has changed over recent decades.

“This information is important for priority setting and to support work with sheep and beef farmers to better manage the remnants of native vegetation they have on their farms.”

In other words, there is much to learn about farms and their regenerating bush.

To be eligible, He Waka proposes planted or regenerated indigenous/native vegetation to be generally self-sustaining through self-seeding. The effect of stocking rate, timing of grazing, forest size, forest edge versus middle ratio, and forest type on self-seeding is largely unknown. He Waka as it stands makes no distinction.

“THE PROPERTY USED TO HAVE FAR MORE PASTURE ON IT, THE BUSH IS ENCROACHING EVERYWHERE, AND STOCK MAKES NO EFFECT.”

“Different grazing regimes will give different levels of pressure.

“The challenge is writing policy rules that reflect this.”

QEII doesn’t deal with scrubby regenerating manuka or regeneration via gorse/broom as it is not good enough to covenant, but it could be eligible for sequestration under He Waka. Eligible indigenous species includes manuka and/or kanuka, matagouri, mixed broadleaf/scrub such as swamp maire, five finger, coprosma, wineberry, lemonwood, cabbage trees, totara/ kahikatea, old growth cut-over or beech. It also includes gorse/broom (as a nursery crop for indigenous species if seed is present).

Coup says big trees may survive under stock grazing but new replacement saplings may not. Bush with a long-exposed edge, particularly if smaller in size, is more at risk than a square block.

Hurdles for high country

Eric and Sally Smith, Awapiri Station, Marlborough, would lose sequestration value from about 4000 hectares of indigenous forest if the fencing rule for stock came in with He Waka Eke Noa’s sequestration eligibility rules.

At even a paltry one tonne of carbon/hectare, this is 4000t of carbon sequestration a year to offset GHG emissions from their 5000 Merinos and 100 cows.

“It would be very helpful and probably make us carbon neutral,” Eric says.

Planting pine trees on freehold land to offset, instead of enhancing their existing bush, is a ludicrous option in his opinion.

Another hurdle is that there is no clear pathway for leaseholders to even claim the sequestration from regenerating bush. In November 2021 the High Country Accord Trust (representing 150 high

country leaseholders) submitted to the Ministry of the Environment on the low-emissions and climate-resilient future paper.

Covering 17% of South Island rural land, the pastoral lease estate has enormous potential to contribute to reduction of net-carbon emission. But the legislation governing pastoral leases does not provide the flexibility to realise that potential.

Planting and harvesting trees requires the consent of the Commissioner. A limited number of consents have been given in the past to leaseholders for commercial forest activities, with at least one forest registered within the ETS.

Allowances for leaseholders to claim regenerating bush for sequestration under He Waka needs to be written into legislation. Pastoral leases were created as an instrument by which the Crown could continue to influence environmental outcomes. The Accord said these outcomes do not include climate change.

It’s calling for a pause to the Crown Pastoral Land Reform Bill and changes to the Crown Pastoral Land Act 1998 and Climate Change Response Act 2002 to include climate change objectives and facilitate participation by pastoral leases.

The Smiths’ 7000ha Awatere station is a classic extensive farm with 50% effective area and the balance in bluffs, shingle faces and high-biodiversity-value forest. Only 350ha is freehold.

“It’s a mix of kanuka, manuka, beech, broadleaf and totara – and the totara is really spreading fast, especially up high,” Eric says.

In December the Smiths send about 1300 mixed age Merino wethers to graze one of the most forested blocks, the Swale. They stay there until May, grazing the sunny grass and tussock faces which makes up about 450ha.

Eric says at three stock units per effective hectare,

Right: Eric Smith, Awatere high country farmer, sees no reason why this 4000 hectare pastoral lease bush shouldn’t be counted for carbon sequestration. He Waka Eke Noa proposals and pastoral lease legislation could see it excluded.

- Rewards farmers that have maintained pre-2008 indigenous bush, and protected biodiversity.
- Money goes into pest management rather than expensive, impractical fencing of large bush/indigenous blocks.
- Fits with 2050 Pest Free policy.
- Fencing targeted at smaller, vulnerable forest that can’t regenerate with stock grazing.





Pests don't respect fences. A win-win would be to reward farmers for increasing carbon sequestration from larger stands of unfenced bush and provide extra rewards for proven pest control.

there is no reduction effect on forest regeneration, Vegetation is covering more area each year.

"Sheep always comfortably have enough pasture and don't go deep into the bush."

It would take 20 kilometres of fencing through rocky steep country to even make a start of excluding stock and Eric sees absolutely no purpose with it. From July to October 600 Merinos are set-stocked at the Swale at 0.5su/ha.

"The property used to have far more pasture on it, the bush is encroaching everywhere, and stock makes no effect."

He says if they had to fence the Swale to get sequestration approved, they couldn't do it from a practical point of view. The natural boundaries help keep stock in set pasture areas anyway.

"The total area is really rocketing on the highest country – I wouldn't believe it unless I saw it."

Eric says they control goats on the fringes of the forest and took about 1000 off this block last year.

"That is what affects the bush health." 🗨️

Read more about He Waka Eke Noa:
keithwoodford.wordpress.com/2022/03/11/he-waka-eke-noa-caught-in-crosswinds/#more-2597

Shape the future of food and fibre in Aotearoa

21-22 June
Christchurch and Virtual

In Person and Virtual
tickets available now



ETIPU

The Boma
Agri Summit



 etipu.boma.global