Creating a Sustainability Value Chain for NZ Primary Industry - How we can go Twice as Fast for Half the Cost

Introduction

The author of this paper is a farm and forest owner, and kiwifruit grower. The ideas presented are based upon hands-on experience and working with Catchment Groups, leading advisers and farmers.

These people are experienced practitioners, possessing extensive expertise in farm environmental planning and implementation. They have seen the success of landowner's taking ownership for and wanting to improve environmental outcomes in their catchments but are frustrated by the ongoing lack of leadership, cohesion and direction touched on in this paper. Rather than dwell upon these frustrations the focus has been to put forward grassroots-based strategies to create a "sustainability value chain" for our primary industry.

The paper also refers to and reinforces advice from leading entities including Parliamentary Commission of Environment, Our Land & Water and Primary Industry. Others concerned at the future direction of New Zealand's primary sector and land use are echoing similar thoughts to those outlined here.

Inspiration has been drawn from the book "Legacy" – what the All Blacks can teach us about the business of life, written by James Kerr. The book explains the ingredients to the All Blacks' outstanding success including how vision, leadership, culture, clear purpose, cohesion, and commitment are key to building a high-performance, world-class team.

You have been sent this paper because there is an expectation that you (along with others), can lead change by considering and hopefully encouraging the recommendations put forward to be acted upon so we can truly go twice as fast for half the cost to become the most sustainable farmers in the world.

Kia kaha John Burke

About the Author

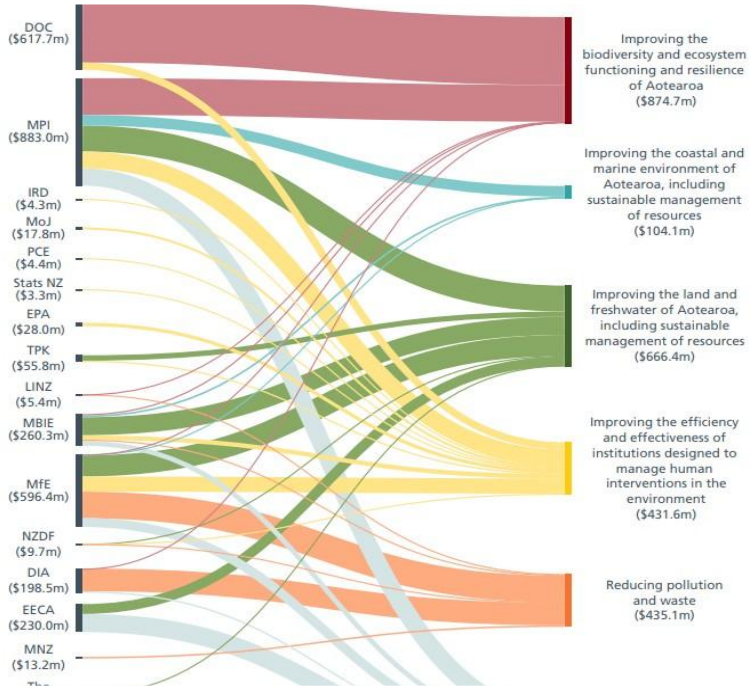
An Opportunity to Get it Right

The change in Government in 2023 has led to a pause and reconsideration of freshwater farm planning, presenting an opportunity for the Government and sector leaders to evaluate performance to date and identify improvements to optimise future outcomes.

The previous regime provided ***significant*** funding to Regional Councils, catchment communities, environmental groups, and iwi to initiate nationwide environmental restoration programs but ostensibly without a clearly defined plan and objectives.

Where Has All the Money Gone?

- PCE estimate $3.5 billion Central Government budgeted spend for 2024/25!
- What % of this went towards ground based environmental improvement (native planting, integrated environmental weed and animal pest control)?
- How many hectares of marginal land were restored into native?



The failure to follow basic planning processes appears to stem from several factors including weak leadership, confusion between public agencies and an obsession towards enforcing freshwater farm plans and meeting greenhouse gas targets.

Farmers reacted to this top-down approach, leading to the formation of groups such as Groundswell, 50 Shades of Green, Waka Adrift, Farmers for Positive Change and others whereas a collaborative government/industry initiative aligned with an overarching vision and strategic plan would have delivered far superior outcomes.

While some farmers are resistant to change, many are leading land custodians receptive to land management practice changes if implemented practically and viably. Those progressing towards completing their Land Environmental Plans (LEP) report little change or even improved business profitability, enhanced resilience to climatic events, reduction in greenhouse gas net emissions, increased aesthetic value, and personal wellbeing.

The establishment of Catchment Groups (CG) across Aotearoa has largely been driven by these farmers and is increasingly recognized by the farming community and central and local government as integral to addressing freshwater challenges.

The March 2023 Our Land & Water (OLW) funded report (PDF) Where next for catchment groups? Lifting ambition and gearing up for the long game. underscores the potential value of CG but also notes:

"The growing attention on catchment groups comes with increased pressure to deliver improved freshwater outcomes. There are many differing expectations about what catchment groups can and should do. This creates a risk of misunderstanding and ***misalignment****. If agencies do not understand catchment groups, then policy and support packages will be misdirected and will*

*not deliver expected freshwater improvements. Equally, if the expectations and activities of catchment groups, agencies, and communities are **not aligned**, the anticipated social and ecological outcomes may not be achieved. Failure to deliver expected improvements could lead to more regulation of specific farming practices (rather than outcomes) and increased tension between farmers, agencies, and communities."*

Tightening of government spending now threatens the continued existence of CG, and their loss would represent an irresponsible waste of public investment in their establishment, especially considering their recognized value in promoting practical farming system and land use changes to achieve improved environmental outcomes.

This paper argues for a strategic overhaul of environmental restoration efforts in New Zealand's primary industry. It proposes a way forward via a collaborative framework involving Industry, Catchment Groups and aligned nature positive stakeholder roles which is believed will achieve much faster implementation of Land Environmental Plans by Farmers at significantly lower taxpayer expense. In summary, the **8 recommendations** proposed are:

1. **Vision & Strategy:** Call for all primary industry sectors to agree on a unified Vision and Strategy as to how we manage the "Aotearoa Farm" going forward and sell our story to the rest of the world.
2. **Connect our "Nature Positive" Story in the Marketplace to Catchment-Based Outcomes**: Achieving alignment with all stakeholders is key to creating a sustainability value chain and dramatically improving the uptake and efficient adoption of sustainable land management.
3. **Aotearoa Farm Reforestation – Develop a Landscape Plan:** A fundamental action to inform and guide appropriate land use change across NZ.
4. **Establish Clear Role Definitions:** Essential to avoid duplication and improve efficiency.
5. **Create a "Single Funding Channel" Restoration Bank:** A specialist funding mechanism for environmental restoration would ensure much more efficient application of investment and outcome success.
6. **Fix the ETS:** Address the shortcomings of the Emissions Trading Scheme.
7. **Encourage and Support Efficient Native Reafforestation Methods:** Required to accelerate native reforestation across Aotearoa with a potential saving of over $10 billion.
8. **That Public Agencies Accept and Act Upon Measures to Support Integrated Weed & Animal Pest Control alongside Native Reforestation:** Essential to achieve successful establishment of native plantings on farmland.

The recommendations are detailed as follows:

1. Vision & Strategy - Get the Fundamentals Right First

A first step must be for all industry sectors (including Forestry & Fishing) to sign off on a Vison and Strategy for our Primary Industry. The need for this has been expressed by industry leaders

for some time e.g. https://www.stuff.co.nz/business/farming/100473042/New-food-wave-demands-primary-sector-unity

That report quotes respected meat industry leader Tony Egan who says a collaborative vision could be embraced by all Kiwis.

"If we can all land on a common vision, we could then sell it with confidence first to the people of New Zealand and then to our customers offshore – a vision that not just we believe in but everyone believes in so it becomes part of the understanding of what it means to be a Kiwi and proud of our primary industries."

He also refers to a central idea to emerge from an MPI-hosted working group involving around 50 industry leaders that the vision could include New Zealand's natural capital – its water, soil, environmental impacts, climate change, oceans and biodiversity. It could include the country's human and cultural capital - its people, entrepreneurial mindset, and its reputation for premium production.

Ignoring the fundamental principle of having a vision (and game plan) is inviting continued conflict and suboptimal performance within and by the primary sector team reflected in the Japanese Whakatauki from the inspirational James Kerr book "Legacy":

"A Vision without Action is a Dream"

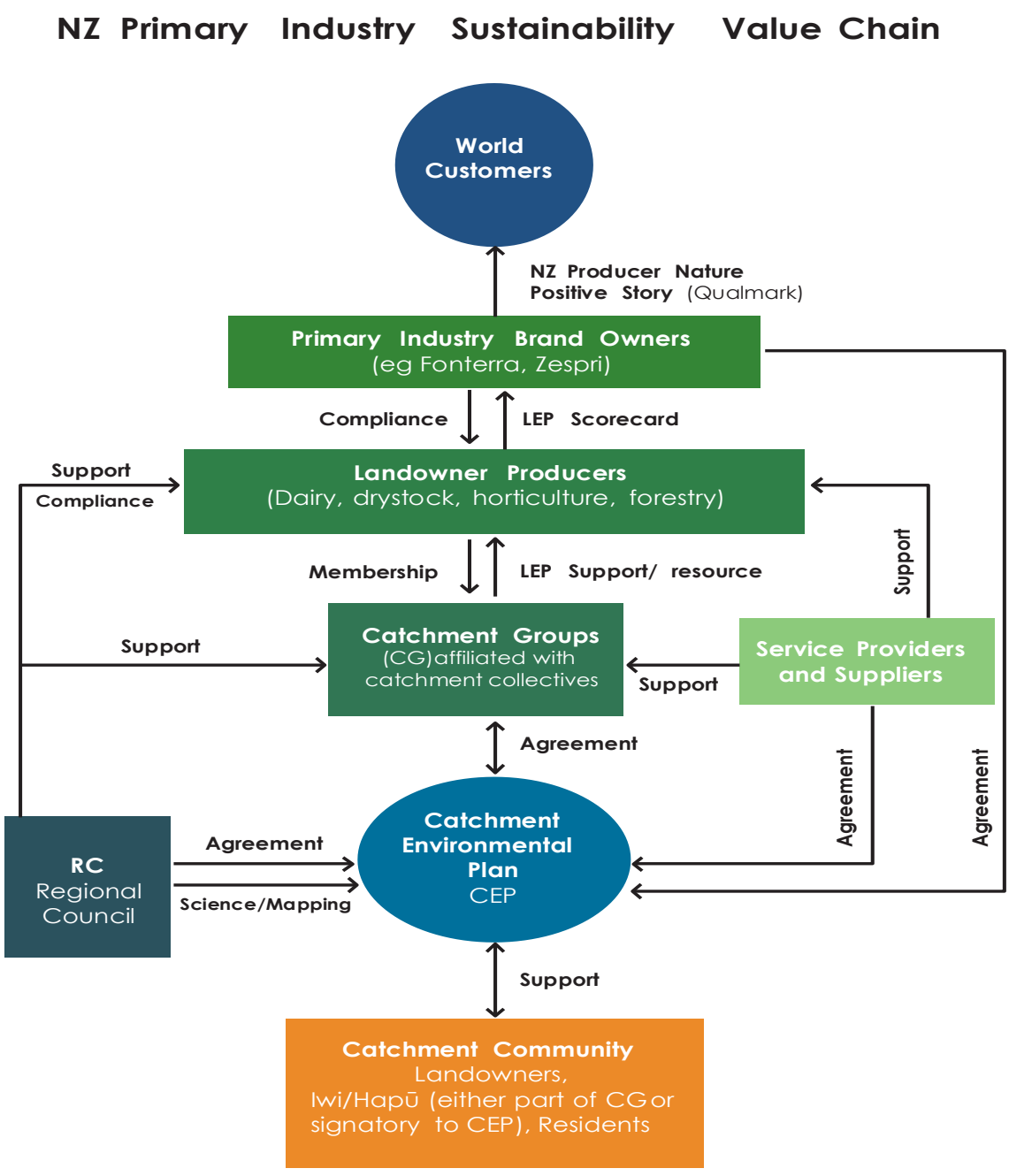
"Action without A Vision (and Plan) is a Nightmare" ..... *we are currently the latter!*

The "Fit for a Better World" (FFBW) initiative developed by the Primary Industry Council and launched in December 2019 is a potential starting point for this process. Whatever is developed should be a long-term (30+ year) pan-industry vision and strategy which remains free from political interference but retains necessary government support to achieve its objectives through MPI.

2. Connect our "Nature Positive" Story to Catchment Based Outcomes

One of the FFBW 3-Pillars is "sustainability". Defining what sustainability or ***"Nature Positive"*** means in terms of sustainable land management in Aotearoa is extremely important to underpin brand integrity, ensure unity of action and measure success.

Connection of our primary sector ***"Nature Positive"*** story in the marketplace to planned, catchment-based outcomes will achieve ***alignment*** with all stakeholders - government agencies, regional councils, procurement companies, service providers and most important of all – landowners. This is **key** to establishing an effective sustainability value chain and dramatically improving the uptake and efficient adoption of sustainable land management.



Targeting environmental remediation outcomes at catchment level would mean the same LEP (Land Environmental Plan) process would apply to all land users within that catchment, irrespective of land use and enterprise mix.

An environmental scorecard (already in use in some catchments) would provide quantification of "Nature Positive" performance for landowners, procurement companies and their customers.

By using this approach there is the opportunity to develop an overarching environmental Qualmark [Taste Pure Nature?] to sit alongside branded products and form the basis for financially rewarding landowner suppliers according to levels (bronze/silver/platinum) of achievement.

Procurement companies (brand owners) such as Fonterra, Silver Fern Farms and Zespri would become a compliance resource for Regional Councils by auditing of their supplier's (landowner's) nature positive performance and in turn would be audited by their customers.

Regional Councils would provide a backstop role by external monitoring and auditing of procurement companies and their supplying landowners, including dealing with the laggards who fail to meet agreed bottom line standards.

3. Aotearoa Farm Reforestation – Develop a Landscape Plan

Various reports refer to the (approximate) one million plus hectares of highly erodible pastoral land in NZ that should be planted into either native or exotic trees but seemingly without detailed mapping as where these plantings should occur.

Regional Council landscape mapping of desired reforestation to meet desired long term (30+ year) environmental outcomes is fundamental to inform and guide land use change at farm scale. Detailed mapping guidance should be prepared at catchment level which aggregated to regional and national level would provide a future landscape plan for the Aotearoa Farm.

Such plans need to consider environmental challenges of climate change, biodiversity loss and water quality whilst protecting best use pastoral land (particularly suitable steep land for sheep) and looking after the economic, social and cultural life of our communities. The recent PCE report Going with the grain: Changing land uses to fit a changing landscape | Parliamentary Commissioner of Environment (pce.parliament.nz) reinforces this approach.

Cyclone Gabriel provided NZ with a $16 billion lesson on the need for appropriate land use to build climatic resilience into our landscapes - planting right tree right place is essential to achieve this including "no go areas" for exotics considering:

- Geological and windthrow risk
- Ecology – seed source, bird corridors
- Riparian setbacks
- Wetland setbacks
- Slash run-off protection
- Fire break protection
- Preservation of productive pastoral land
- Iwi/Community considerations

Economic Imperative to Relandscape the Hawkes Bay Farm

- Gabrielle cost $16B+ (water, sediment & slash)
- 250,000ha highly erodible pastoral land
- Say … $3B to plant into native ($12,000 per ha)
- **20%+ IRR investment return (excl Carbon)** if $4.4B damage mitigation in 30yrs
- It's not that we can't afford to do it …… **WE CAN'T AFFORD NOT TO DO IT!**

Planning needs to consider prioritsation of catchment mitigations. The logical starting point is to start at the top of the catchment and work downwards with the aim of reducing peak hydrological flows, sediment and slash during severe storm events. Note: This basic principle seems to be lost on some Regional Councils with some preferring to divert $ millions towards bottom of catchment projects such as treatment wetlands.

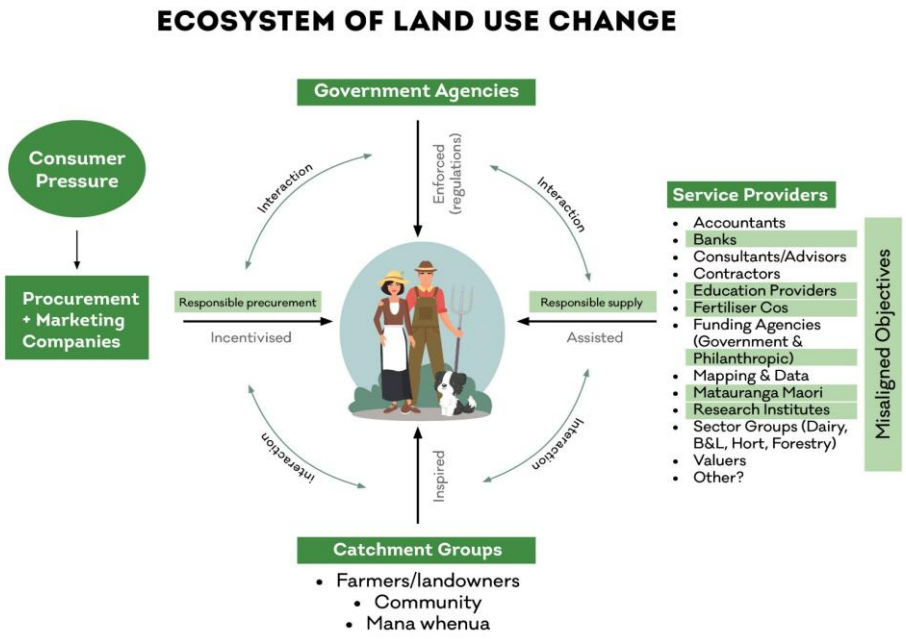
Biodiversity, water quality and catchment reslience to climatic events should underpin our reforestation plan ahead of random planting of unmanaged pine plantations to meet carbon committments.

Planting of pine trees (and other exotics) should instead be focussed on developing/expanding sustainably managed production forestry in suitable growing locations integrating economies of scale, value-add processing hubs, labour & resources, available logistics and transhipment points.

4. Establish Clear Role Definitions

The last 4 years focus on freshwater protection fuelled by public funding support has resulted in a significant increase in personnel employed across central and local government, Landcare, sector, iwi and catchment groups, to support projects across Aotearoa without a plan and clear definition of each party's roles and responsibilities. This situation has led to confusion,

duplication, patch protection and excessive cost.



Significant gains in efficiency and can be achieved if all primary sector stakeholders (including forestry) have an ***aligned*** "Nature Positive" story (as per 2) and the roles and responsibilities of each party are clearly defined.

This story would be linked to landowners through Catchment specific Environmental Plans (CEP) signed off by CG representing those landowners and all associated stakeholders including Regional Councils, Iwi, procurement companies, and key service providers (e.g. fertiliser companies, sector groups & forestry). Rather than mandating regulation-based "Plan Changes", the CEP uses a softer approach, encouraging voluntary participation by catchment communities to restore the environment collaboratively. From experience, "want to" participation may start a little slower but gathers momentum and is destined to achieve the same or better outcomes over time. An outline of each party's roles in this process is proposed as follows:

<u>Landowners – at the Centre:</u>

ALL LANDOWNERS* (farmers, growers, foresters, hapu, life stylers, residential, local government, government agencies – road, rail, parks) within a catchment would be informed by a CEP as to what long term (30+ year) changes in the future management and land use is required to assist achieving a "healthy state". CEP would serve as a living document as the community progresses towards achieving targeted short, medium and long-term outcomes.

For commercial farmers, growers and foresters this will require the preparation of a Land Environmental Plan (LEP) that aligns with the CEP time bound outcomes. Note - the word "Land" is preferred to "Farm" as environmental custodianship should apply to all land within a property boundary irrespective of its use.

Landowners at the Center ……..

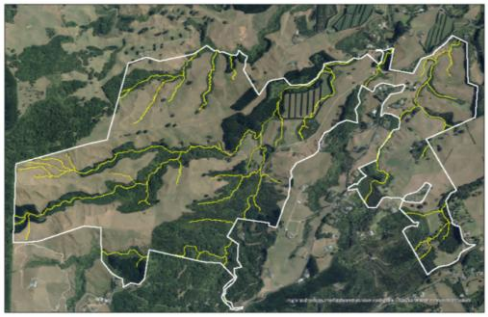
Undertake improvements in the way they manage and use their land to assist meeting long term catchment scale environmental objectives to achieve a "healthy state":

- Undertake and implement LEP e.g. as per Ten Step process below
- Evaluation, prioritisation and financing become embodied into a works plan
- Longterm **30+ year process**
- Periodic **scorecard** reassessment will determine rate of progress and level of achievement towards a potential ***platinum nature positive ranking***

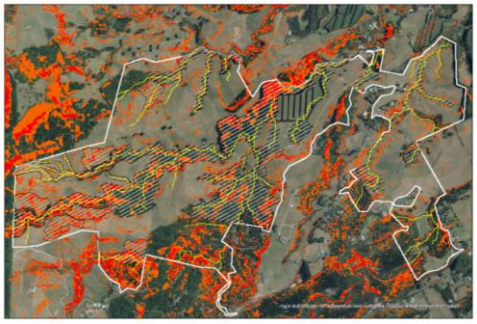
Note: Just singling out just farmers and growers to undertake improvement environmental management is ill-conceived. The practical reality is that enduring nature positive outcomes can only be achieved through integrated, strategic, landscape scale change involving* ***all* *land users.*

The Regional Council would provide complimentary farm scale mapping of steep erodible slopes, water overland flow paths & critical source areas and guidelines for native planting zones and exotics to inform future land use change.

Map Water Overland Flow-paths & CSA

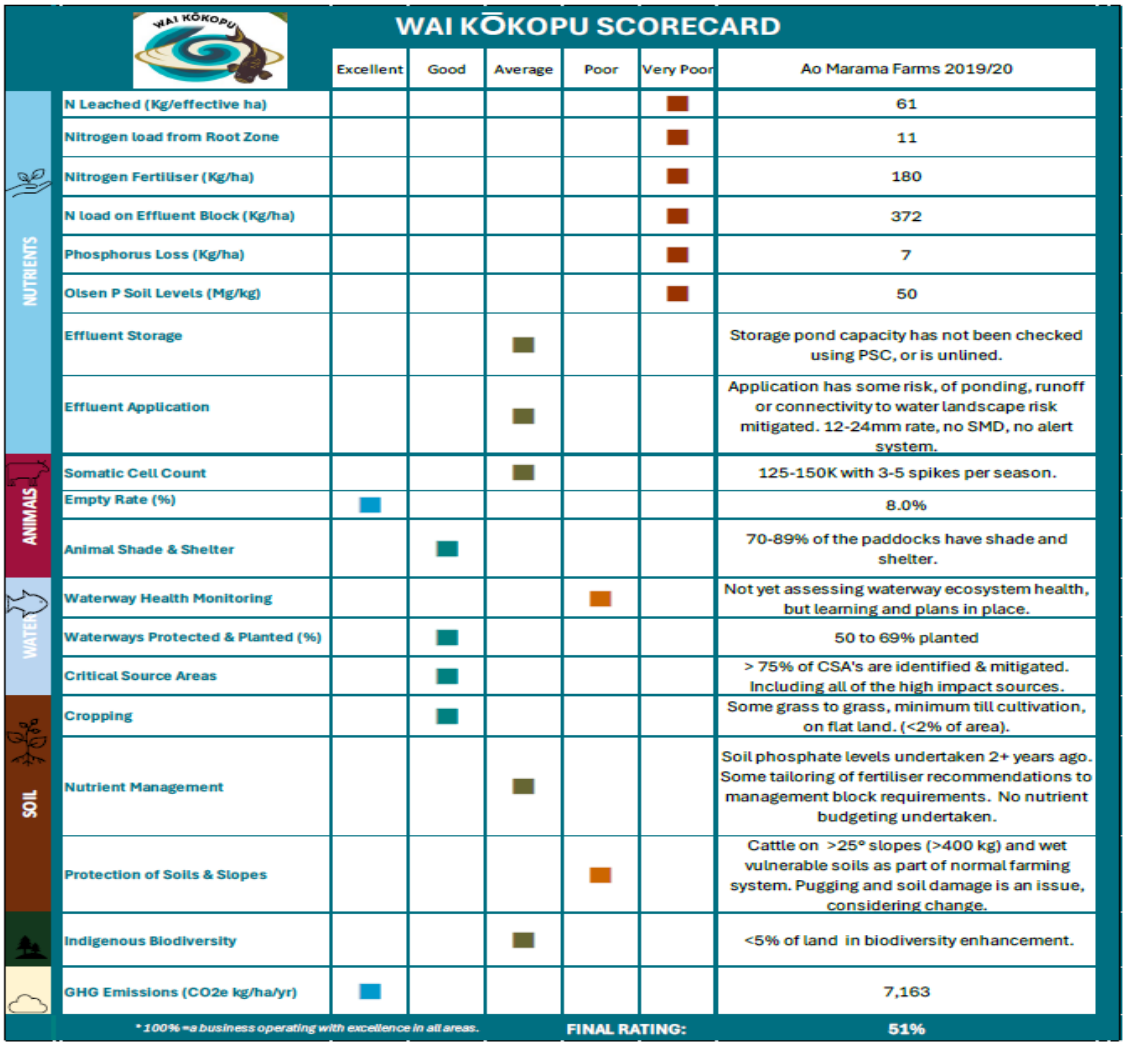


Map Steep Erosion Prone Slopes



A starting point in the farm LEP process would be to conduct an initial environmental scorecard assessment.

VIII. Scorecard – The Comprehensive Risk Assessment (Initial Year)

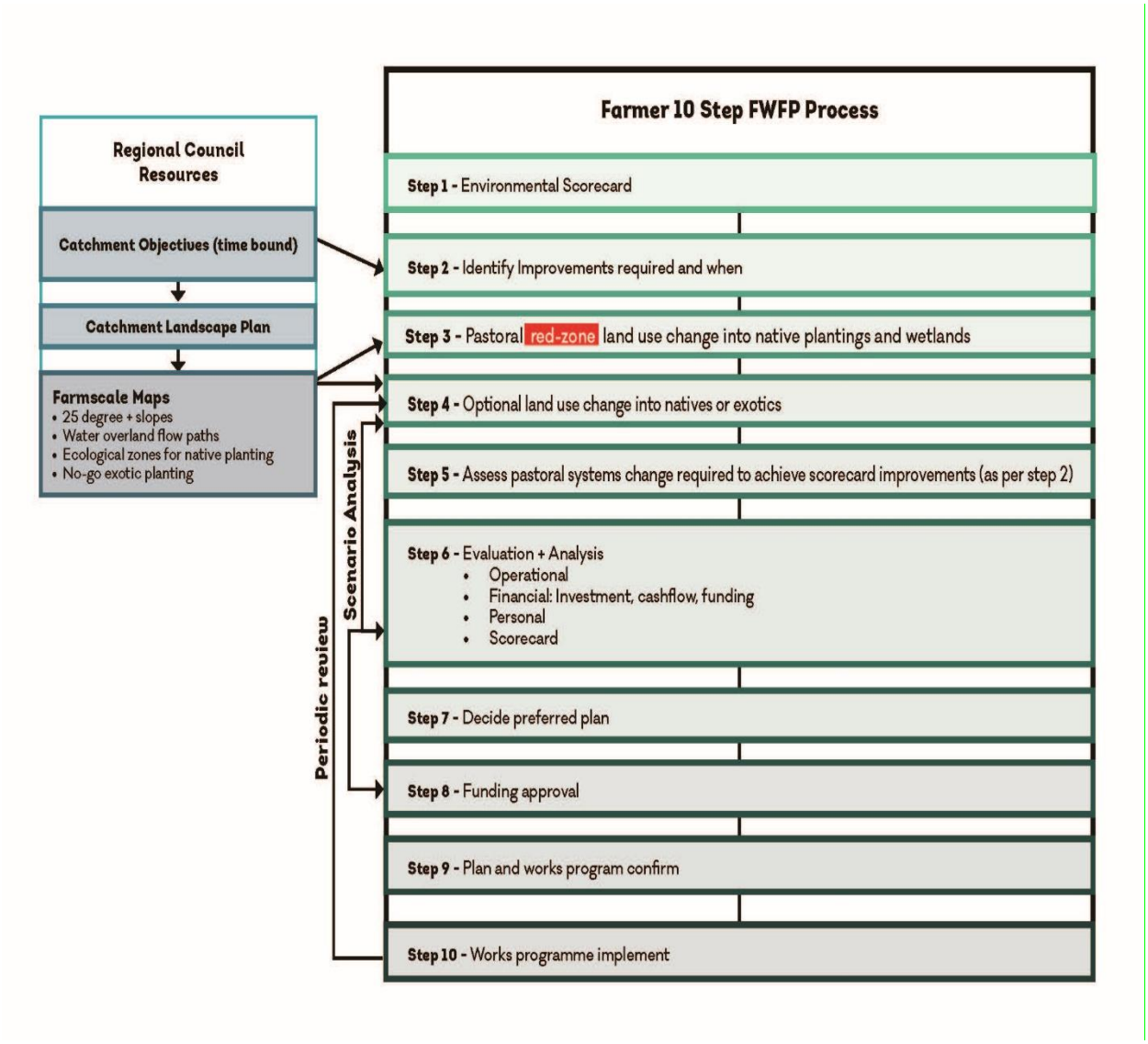


WAI KŌKOPU SCORECARD						
		Excellent	Good	Average	Poor	Very Poor	Ao Marama Farms 2019/20
NUTRIENTS	N Leached (Kg/effective ha)					■	61
	Nitrogen load from Root Zone					■	11
	Nitrogen Fertiliser (Kg/ha)					■	180
	N load on Effluent Block (Kg/ha)					■	372
	Phosphorus Loss (Kg/ha)					■	7
	Olsen P Soil Levels (Mg/kg)					■	50
	Effluent Storage			■			Storage pond capacity has not been checked using PSC, or is unlined.
	Effluent Application			■			Application has some risk, of ponding, runoff or connectivity to water landscape risk mitigated. 12-24mm rate, no SMD, no alert system.
ANIMALS	Somatic Cell Count			■			125-150K with 3-5 spikes per season.
	Empty Rate (%)	■					8.0%
	Animal Shade & Shelter		■				70-89% of the paddocks have shade and shelter.
WATER	Waterway Health Monitoring				■		Not yet assessing waterway ecosystem health, but learning and plans in place.
	Waterways Protected & Planted (%)		■				50 to 69% planted
	Critical Source Areas		■				> 75% of CSA's are identified & mitigated. Including all of the high impact sources.
SOIL	Cropping		■				Some grass to grass, minimum till cultivation, on flat land. (<2% of area).
	Nutrient Management			■			Soil phosphate levels undertaken 2+ years ago. Some tailoring of fertiliser recommendations to management block requirements. No nutrient budgeting undertaken.
	Protection of Soils & Slopes				■		Cattle on >25° slopes (>400 kg) and wet vulnerable soils as part of normal farming system. Pugging and soil damage is an issue, considering change.
	Indigenous Biodiversity			■			<5% of land in biodiversity enhancement.
	GHG Emissions (CO2e kg/ha/yr)	■					7,163
	* 100% = a business operating with excellence in all areas.				FINAL RATING:		51%

Specific improvements aligned with catchment priorities and objectives would be identified, which after evaluation are scheduled into a long-term works plan. The evaluation process may require transdisciplinary advice on highest and best land use incorporating economic assessment extrapolated into financial projections to obtain bank funding support.

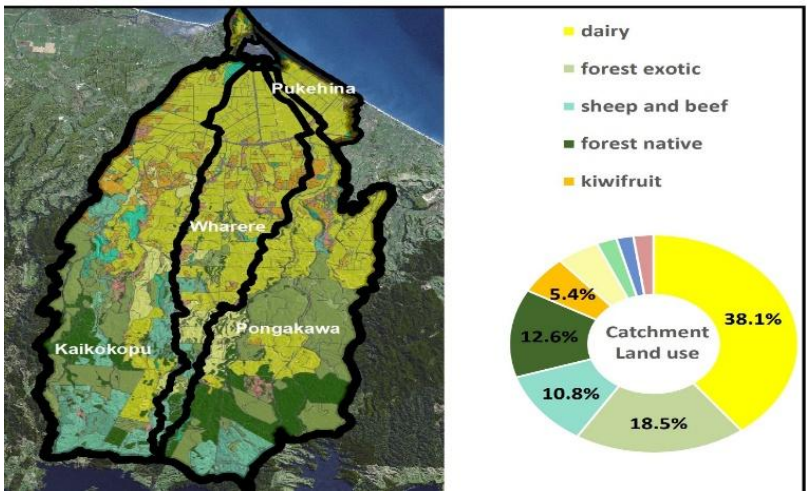
The works plan would become a living document appreciating that this will be an ongoing process which may take over 30 years. Periodic scorecard reassessment will measure progress. The level of achievement could then be used by procurement companies to quantify their supplier's (landowner) nature positive ranking.

A simple 10-Step LEP process is outlined as follows:



Community Catchment Groups (CG):

These formalised entities should represent landowner members within a catchment with the collective aim of meeting CEP objectives by encouraging and supporting individual landowners on their LEP journey.



CG are in the best position to ***lead and inspire*** practical, bottom-up "nature positive" change through their intimate connection with their community and catchment. Roles and responsibilities would include:

- Representing landowners within the catchment to develop and sign off with the Regional Council [and other stakeholders] a long-term environmental plan with targeted outcomes (CEP)
- Ensuring proper governance, management and systems are in place to support landowners and ensure efficient use of funding and resources
- Sourcing of funding to assist environmental restoration activities as per below
- Identifying and promoting local "lighthouse farmers" to lead viable farm system and land use change that will encourage others to follow
- Streamlining access, education and support to multi-disciplined, catchment specific advice for landowners in the preparation and implementation of LEP including systems change and alternate land use i.e. pastoral, forestry, ETS, horticulture
- Streamlining restoration planting for landowners in the form of advice, budgeting, specialist teams, scaled up preplant preparation, ordering of plants, planting and follow up management
- Engaging the wider community into collective focus and action e.g. environmental weed education and control
- Engaging and working collaboratively with hapu and iwi
- Working with government agencies to develop strategic, environmental weed and animal biosecurity programs to protect existing and new native plantings
- Working with primary sector entities (e.g. Fonterra, B&L, Horticulture, Forestry) and service providers (banks, advisers, fertiliser companies, education providers etc.) to align their intent, resources and support to assist meeting "Nature Positive" outcomes for the catchment
- Working with other CG and/or regional catchment collectives to ensure efficient use of resources and delivery of services.

Note: CG could be seen as the modern-day version of historical Catchment Boards

Hapu and Iwi:

An important component of catchment communities are Hapu and Iwi who can provide community context, knowledge and guidance on historical state of land and awa, taonga plants and species and matauranga Maori.

Developing a strong working relationship between CG and Hapu may take some time due to various factors including hapu agreeing on their entity and representation (particularly when a catchment covers multiple hapu boundaries). Historical and current issues such as loss of land and mahinga kai, awa modification, habitat loss and environmental deterioration may understandably affect the time it will take to build partnerships.

A way to assist building a relationship is to work with Te Ture Whenua Trust farming blocks particularly where there is an opportunity for them to become lighthouse farms.

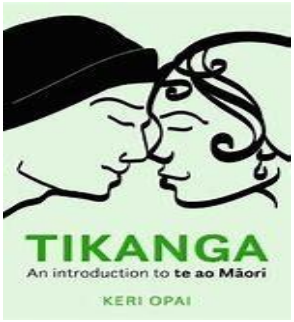
Representatives of these trusts normally have a connection with mana whenua which can be helpful to demonstrate common intent between CG and Iwi.

Some CG have taken a “twin hull waka” approach with their hapu meaning the CG (including Maori Trusts) begin their restoration journey on the expectation that the second hapu/iwi hull will be joined to join the voyage once they are ready.

Hapu & Iwi …….

- Key members of ***Catchment Group Communities***
- Single or Twin Hull Waka Approach [allows time]
- Twin Hulls joined with co-joined Vision & Objectives
- Matauranga Knowledge & Guidance
- Develop high performance Kaitiaki Teams to undertake essential on the ground Mahi

Promote & celebrate Kaitiaki Heroes!!



There is a real opportunity to build catchment based kaitiaki teams to undertake essential, on the ground mahi required for planting (including preparation and ongoing management), eco-sourcing of seed, taonga nursery management and integrated weed and animal pest control. Such work would provide year-round employment for trained youths keen on restoring the whenua – these rangitahi should be celebrated within our communities as kaitiaki heroes.

Note: Capacity building of these teams seems to have been overlooked in the recent proliferation of public funding when building of this resource and achievement of actual on the ground mahi should have been a key performance metric.

Procurement Companies (Fonterra, Zespri and others):
Should directly link their “Nature Positive” responsible procurement practices with CEP requirements.

They can incentivise change through product supply premiums based upon environmental scorecard performance. Scorecards measured against farm LEP progress should be common between procurement companies irrespective of product supplied.

Primary auditing and compliance of landowners would be undertaken by the procurement companies - who in turn would be audited by Regional Councils and their customers.

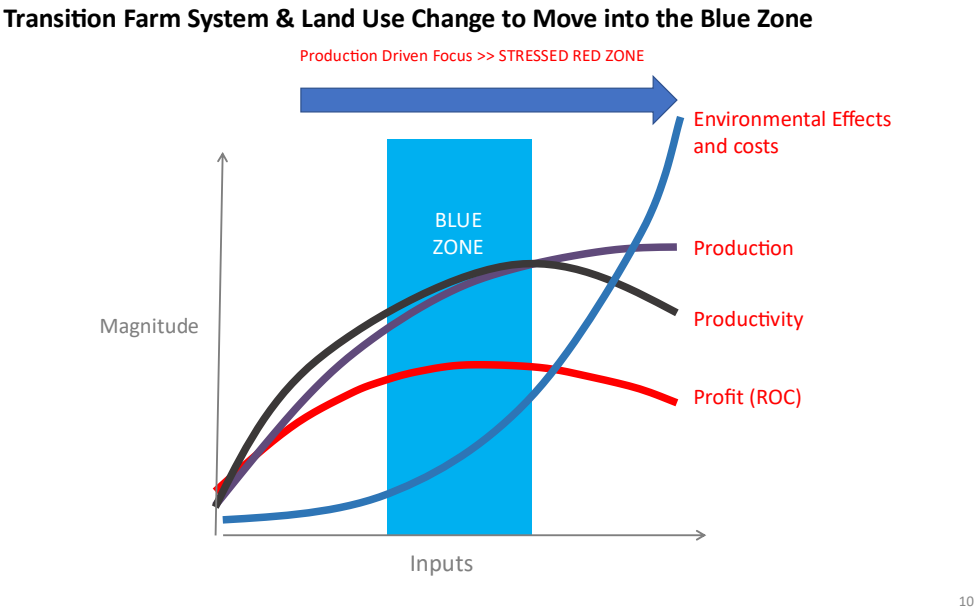
Service Provider Alignment to Assist Change is Essential:

Service providers to the primary sector include accountants, banks, consultants & advisors (across all disciplines), contractors, fertiliser companies, funding agencies (Government & Philanthropic), learning institutions, mapping & data services, research institutes and primary sector groups (e.g. Beef & Lamb NZ, DairyNZ, Farm Forestry NZ).

Service providers are an essential resource to assist farmers in systems and land use change. They will be much more effective if they are attuned to specific CEP requirements and are able to work alongside other land use disciplines (pastoral, forestry, ecological) to support, advise and incentivise (in the case of banks), landowners on their LEP journey.

Key service providers to catchments should be required to sign onto a CEP as a stakeholder and be bound to undertake the "responsible supply" of goods and services to that catchment to assist meeting CEP outcomes. An example is obtaining commitment by fertiliser companies to

assist the achievement of targeted, catchment specific N&P loss reductions such as providing baseline and ongoing fertiliser supply information and supporting initiatives such as soil health (regenerative) management programs that may reduce the reliance on synthetic fertiliser.



Note: Research and learning institutions will need to significantly improve their services to the primary sector to transition to world leading "blue zone" pastoral farming and integrated land use practices that reduce environmental impact, increase climatic resilience but maintain/increase farm business profitability. This can only be achieved by reducing the reliance on private funder apron strings whose vested interests are often misaligned with nature positive objectives.

Landcare Trust (LT) and MPI On Farm Support (MPI) fall into the service provider category but as Government funded support agencies, require specific mention:

- Landcare Trust has to date performed a valuable role in facilitating the set up and early operation of catchment groups throughout NZ. Many of these CG are now able to operate independently without ongoing LT support. Nevertheless, LT is considered to have an important ongoing role to assist the continued formation of GC and provide support to existing GC where required.

- MPI, through its On Farm Support and Te Uru Rakau Teams should be leading and promoting the strategic alignment initiatives outlined in this report. They should be the "glue" overseeing the relationships and designated roles of all stakeholders to build our "sustainability value chain" ensure that we go "Twice as Fast for Half the Cost".

Regional Councils – Regulation and Enforcement:

Regional Councils core role is to ensure sustainable environmental management by monitoring environmental health, identifying issues, and enforcing corrective actions. The fact that Central

Government is questioning their performance is not without justification and is a source of some of the frustrations mentioned in this report.

Nevertheless, they are a key resource and partner for CG including providing the science based "why" to communities as to existing environmental state and what improvements are required to achieve a "healthy state". This information is required to underpin the development of a Catchment Environmental Plan (CEP) which after consultation and input is signed off by CG and affected stakeholders. The CEP should include:

- Catchment mapping guidance of steep erodible slopes, water overland flow paths & critical source areas and guidelines for native planting zones and exotics to assist planning future land use change
- Planning should Include the potential impacts of climate change and where applicable, a strategy to address misplaced land use
- Catchment level requirements as to nutrient, E. coli and sediment loss reductions
- Effluent management status, requirements and improvements. Note – the rules regarding effluent management should be the same across all Regional Councils
- Identifying threats to successful environmental restoration e.g. environmental weeds and animal pests (refer 8). Note – the management of weed and animal pests should be strategically linked between all regions
- Targeted timebound short, medium and long-term outcomes

Note: CEP templates should be consistent across all regions

Mapping guidance should be able to be read at farm scale and be provided free of charge to landowners as a base document for undertaking LEP. Note - the best mapping tools should be shared between all Regional Councils.
Regional Councils would provide external audits of procurement companies to ensure responsible procurement from their suppliers and work together to deal with non-compliant landowners. This process should be common across all Regional Councils.

They would promote and encourage aligned, responsible supply practices by service providers (e.g. Fertiliser Co's, consultants, forestry, banks) to assist CG and landowners to meet "Nature Positive" catchment-specific outcomes. This process should be common across all Regional Councils.

They would also provide support for coordinated native planting with CG and landowners.

Other Recommendations:

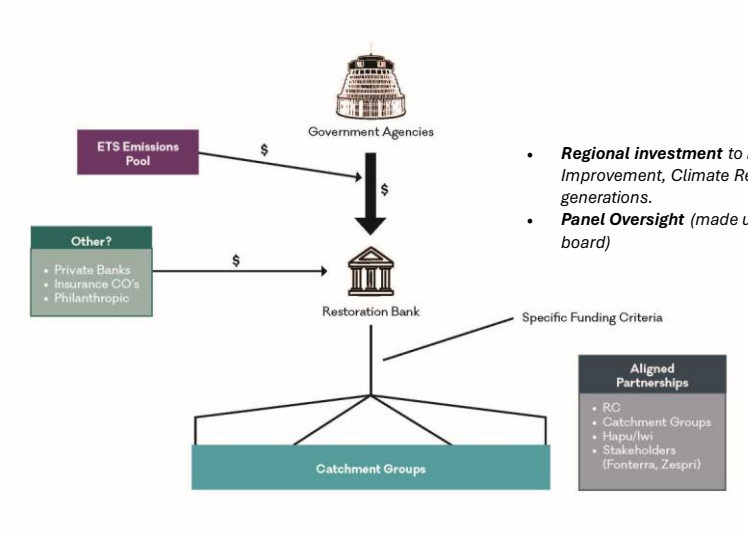
Further recommendations to encourage improved outcomes and efficiency towards achieving "Nature Positive" Aotearoa are as follows:

5. Create a "Single Funding Channel" Restoration Bank

Multiple public agency funding (MFE, MPI, Maori Agribusiness, DOC & others) of nation-wide environmental restoration programs seemingly without aligned, high-level planning and clearly defined performance outcome targets has led to a significant wastage of public money.

Other seemingly reckless practices such last-minute funding giveaways by public agencies or wasteful spend-ups by funding recipients simply to "drain the tank" to meet funding conditions have exacerbated the wastage.

Single Funding Channel > Create a Restoration Bank



Creation of a Restoration Bank would deliver much more efficient investment and focus on outcome success by providing stable, specialised funding support to CG to assist development and implementation of Nature Positive CEP - much in the way the specialist Rural Banking and Finance Corporation operated over 40 years ago. Funding would essentially be provided by Central Government but could be topped up from other sources such as a separate ETS emitters pool (refer 6), private banks, insurance companies or philanthropic sources.
Funding may be prioritised to regions/catchments where there is greatest need to effect land use change. Applications would be assessed by appropriately trained and experienced personnel with approval subject to meeting specified criteria regarding governance, planning, management systems and operational capacity to deliver outcomes in accordance with agreed Catchment Environmental Plans (CEP). Funding should be targeted towards on the ground mahi and hectares planted into native (not trees).

Disbursal of funds ideally would go directly to CG or channelled through CG collectives.

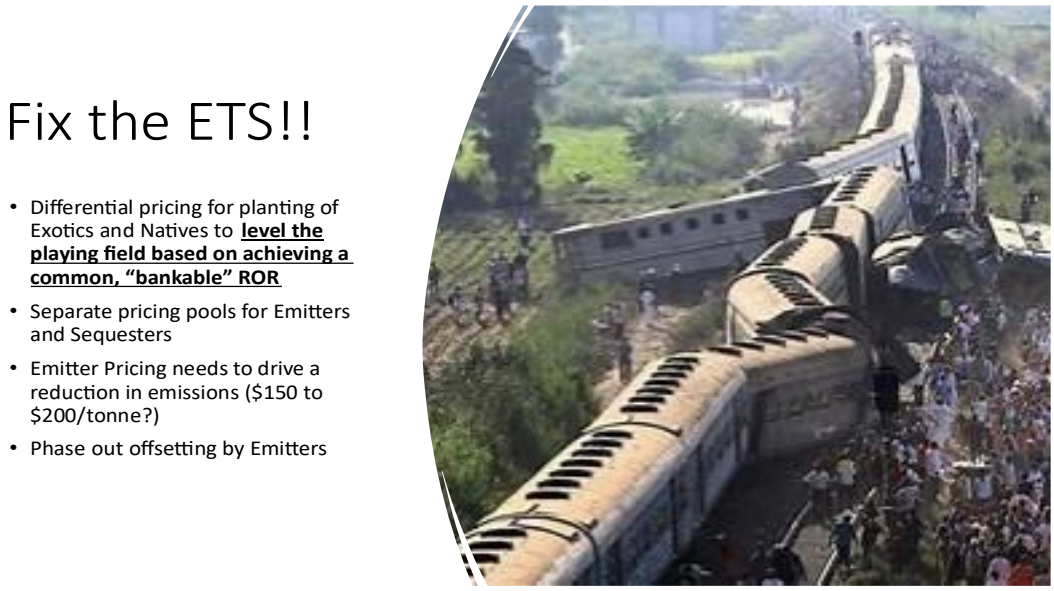
6. Fix the ETS

The current Emissions Trading Scheme is failing to:

- Encourage fast enough transition to lower emissions
- Economically incentivise the planting of native forests over pine forests

Landowners and others across Aotearoa are calling on the Government to fix the broken ETS. A recent Parliamentary Commission for the Environment (PCE) report Alt-F Reset – Examining the drivers of forestry in New Zealand | Parliamentary Commissioner of Environment warns "that New Zealand needs to take a long, hard look at our current approach and ask whether we are establishing the forests we want in the long run" and that "our policies, particularly settings under the current New Zealand Emissions Trading Scheme, are driving a wave of land use change to carbon forestry with significant environmental, economic and social risks."

The report makes some sound recommendations which the Government should not ignore.



Other ideas to consider are:

- Create a separate pricing pool for Emitters - pricing greater than $150 per tonne is required to drive a reduction in emissions

- Reduce the ability by emitters to offset their emissions

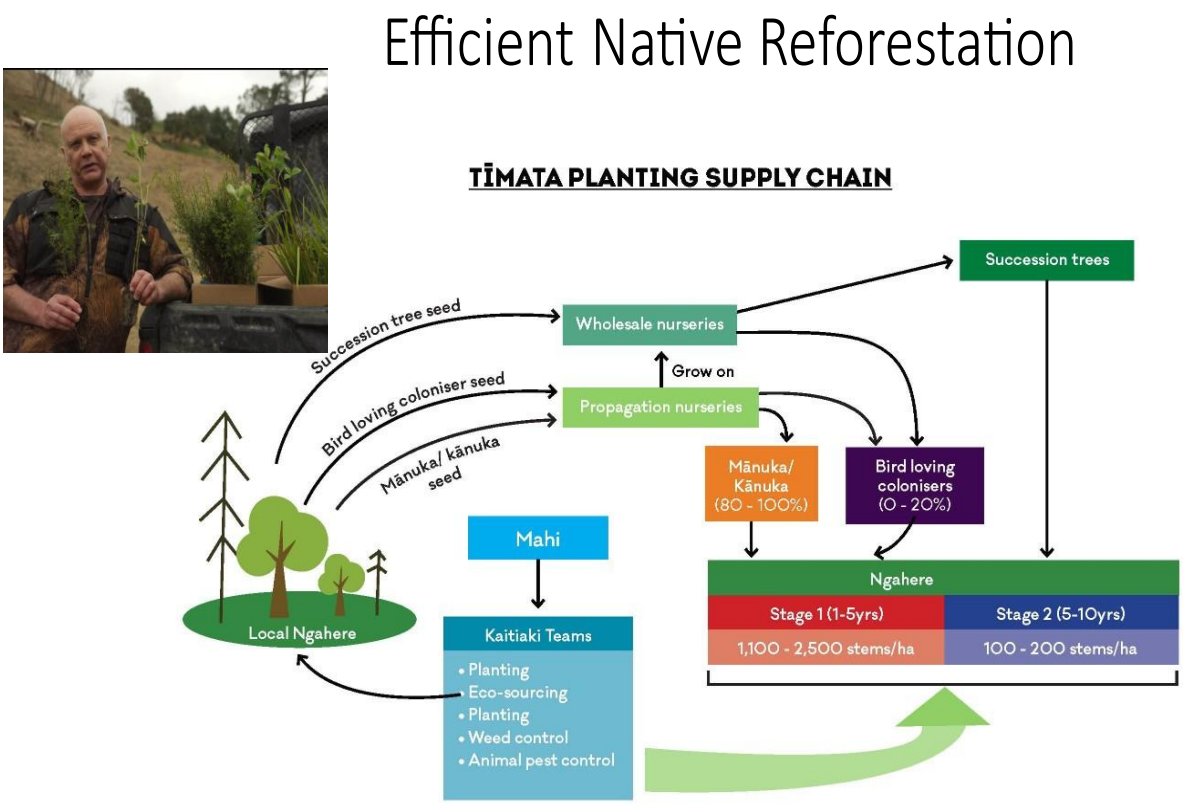
- Instead of earning carbon units, sequesters could receive tailored incentives for planting either native or exotic species to achieve a bankable IRR. This approach would equalise opportunities for both native and pine planting. Funding for native planting could be in the form of a "Climate Resilience Incentive Fund" sourced from the Emitter Pool but with the value of support justified not just from carbon but biodiversity and climate resilience

benefits. Importantly a "bankable IRR" would free up banking finance for native plantings.

7. Encourage and Support Low-Cost Native Reforestation Methods

Traditional native planting methods are costly and complex for large-scale implementation and are simply unaffordable for farmers (and government). More efficient planting methods need to be encouraged and refined according to region and sites.

Low-cost establishment methods such as the Tīmata method at $4-10,000 per ha (refer https://ourlandandwater.nz/news/the-timata-method-for-low-cost-native-forest/) provide scope for 2 to 3 times the area to be planted for the same cost and/or the savings applied towards integrated weed and animal pest management as per 8. Over 10,000 hectares have been successfully established across New Zealand using Tīmata however, recognition and uptake by CRIs, and public agencies remains slow.



The Tīmata Method: A low-cost way to retire farmland into native forest - Our Land & Water - Toitū te Whenua, Toiora te Wai

Regional Councils tend to apply expensive native planting methods, using larger, densely planted species costing $15-30,000+ per hectare supposedly to lower weed maintenance when the reality is that environmental weeds still pose a significant threat to long-term planting success irrespective of the planting regime.

It is important that we prioritise initiatives to support affordable native planting such as bridging knowledge gaps, refining plant supply chains, and investing in the training and capacity-building of local kaitiaki teams to accelerate native reforestation across Aotearoa.

8. That Public Agencies Accept and Act Upon Measures to Support Integrated Weed & Animal Pest Control alongside Native Reforestation

The environmental health of native forests in New Zealand is already being harmed by animal pests and environmental weeds (exotic plant species that pose considerable risk to the integrity of native ecosystems). If we struggle to control them now, how will we manage newly planted forests as we relandscape Aotearoa?

Regional Councils Pest Management Plans are failing due to poor strategy and inability to effectively engage the community including public landowners. Environmental weeds escape from residential areas and are dispersed along roading, rail and riparian corridors. Exotic forests become harbours for weed escapees and animal pests such as deer and goats. Failure to collectively manage these pests pose a major risk to successful establishment of native plantings on farmland.

Farmers are not going to accept a situation (as it exists at present) where they are being encouraged to fence off and plant sensitive land areas into native but are potentially attracting a future liability by having to prevent ongoing invasion of environmental weeds and pests from peripheral sources such as roadways or neighbouring properties.

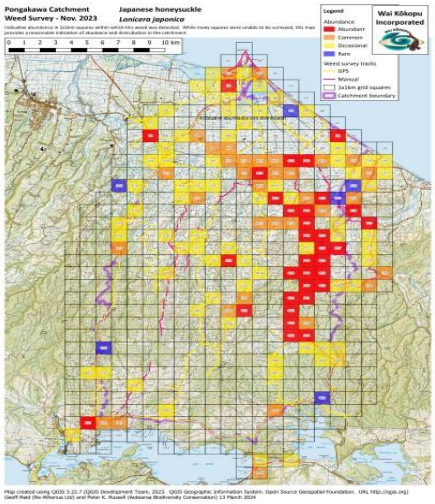
Importance of ALL LANDOWNERS Being Responsible For
Weed & Pest control (including Exotic Forestry & Dispersal Corridors)
space-invaders-report-pdf-68mb.pdf (pce.parliament.nz)

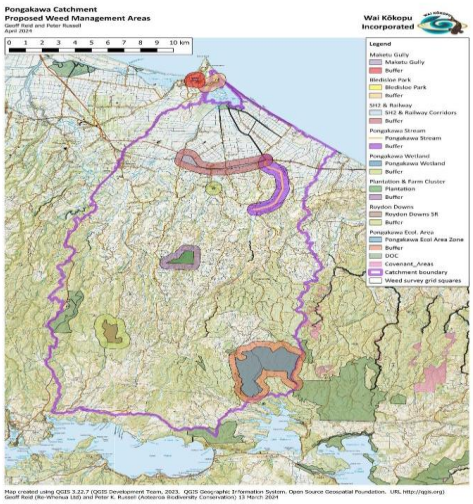
A November 2021 “Space Invaders” report by the Parliamentary Commissioner for the Environment (Space invaders – managing weeds that threaten native ecosystems | Parliamentary Commissioner of Environment) describes in depth the problems and challenges NZ is facing to control environmental weeds. The core of the report’s seven recommendations is a call for greater leadership and the need for coordinated national strategy and management of weeds across Aotearoa. This report needs to be acted upon.

A key component is the need to ensure ALL Landowners (farmers, growers, foresters, hapu, life stylers, residential, local government, government agencies – road, rail, parks) are engaged in the process.

For example, a biosecurity approach for environmental weeds would involve surveying their presence across a catchment and creating a long-term control strategy involving all landowners. The concept is that the presence of environmental weeds is addressed over time by creating “containment zones” around urban areas (where most environmental weeds are derived); “protection zones” around high value ecological areas and reduction (elimination) of weeds along dispersal corridors such as roadways, railway lines and drains.

Wai Kōkopu Catchment Weed Survey





Instead of the public agencies randomly spraying weeds along dispersal corridors they can make much better use of a limited budget by joining strategic community control projects with private landowners to create weed exclusion or containment zones which over time can significantly reduce or eliminate ongoing maintenance, freeing up funding and resources to extend future control to other areas.

Note: NZTA could significantly reduce its roadside planting budget by adopting the principles of the lower cost Tīmata method the savings of which could be applied to strategic environmental weed maintenance along its network.

CG relationships with the community provide an opportunity to lead this engagement process alongside Regional Councils by educating and harnessing the “arms & legs” of the total community to deal with the problem in a practical cost-efficient way.