


OUR LAND  
AND WATER

Toitū te Whenua,  
Toiora te Wai

*Our Land and Water*  
*Toitū te Whenua, Toiora te Wai*





# A Transformative Vision

*Catchments contain mosaics of land uses that are more resilient, healthy and prosperous than today; where all New Zealanders are proud of the state of our land and water, and share value from them*



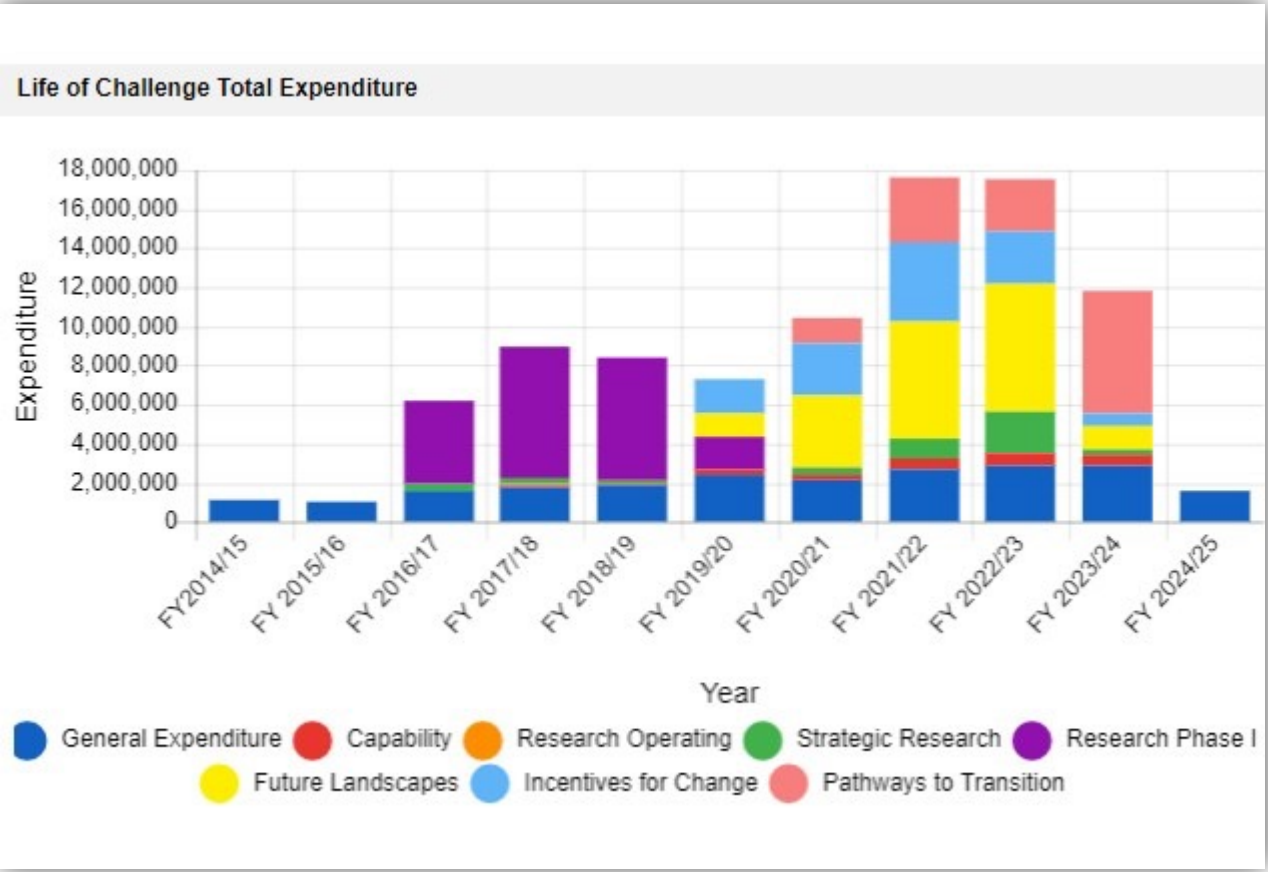
# OLW's Investment in Research

- Think Pieces
- Working Groups
- Research Programmes
- Strategic & Extension



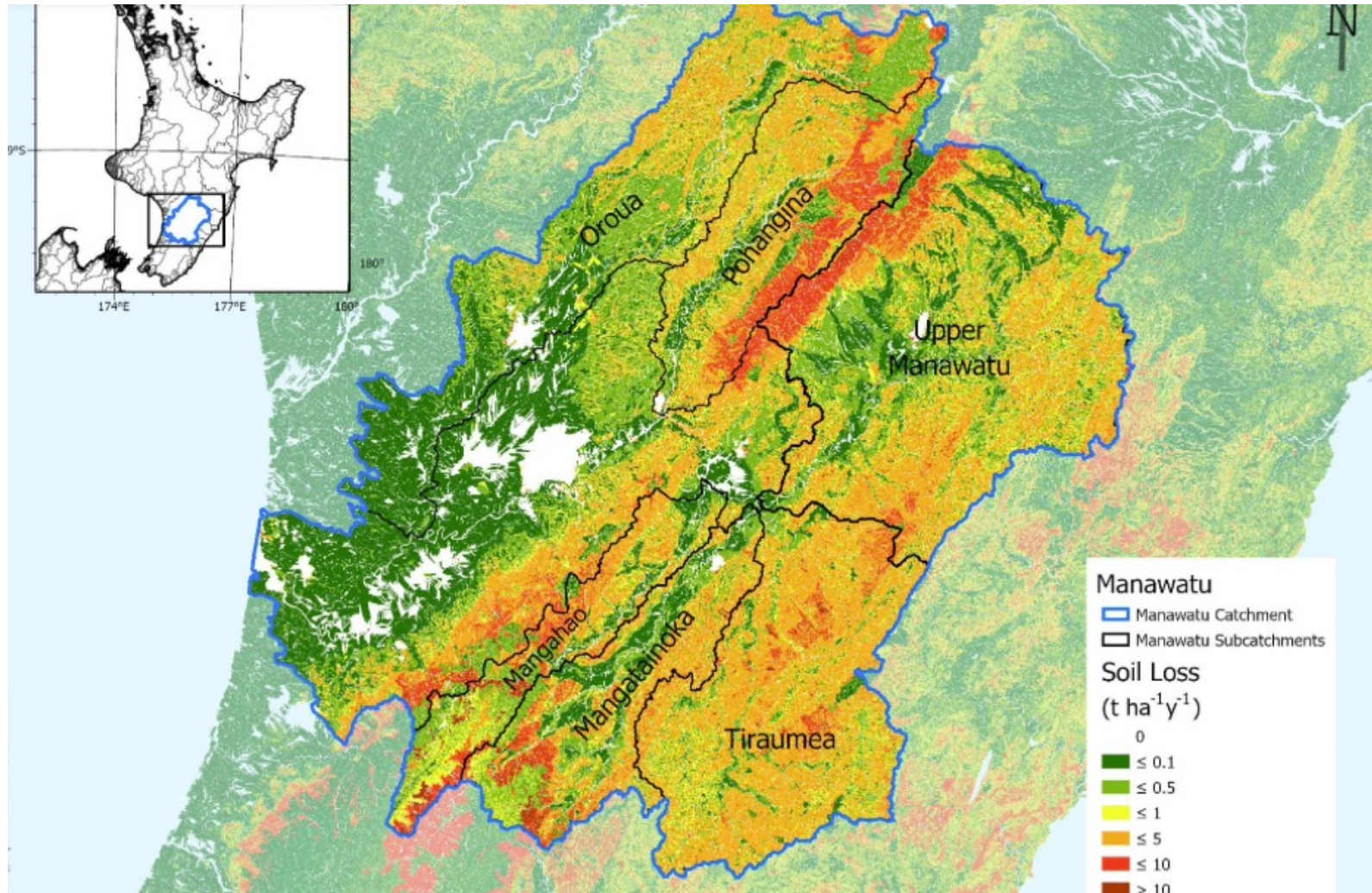
## Under 3 Themes:

- **Future landscapes**
- **Incentives for Change**
- **Pathways to Transition**





# Future Landscapes - Maps, tools, information ...





FUTURE LANDSCAPES

## Market-Led Trials of Specialty Grains and Pulses in Canterbury

Buckwheat, soybeans and quinoa trials were undertaken in Canterbury this year, comprising three of the six 'star' specialty grains and pulses identified by Our Land and Water research as having high potential for New Zealand farmers



FUTURE LANDSCAPES

## Beef and Buckwheat: The 6 Grain and Legume Crops with High Potential for New Zealand Farmers

Post-Covid-19 lockdown, New Zealanders are thinking about food security and actively seeking locally grown foods. The Specialty Grains & Pulses Report identifies opportunities to expand the grain and pulse crops grown in New Zealand

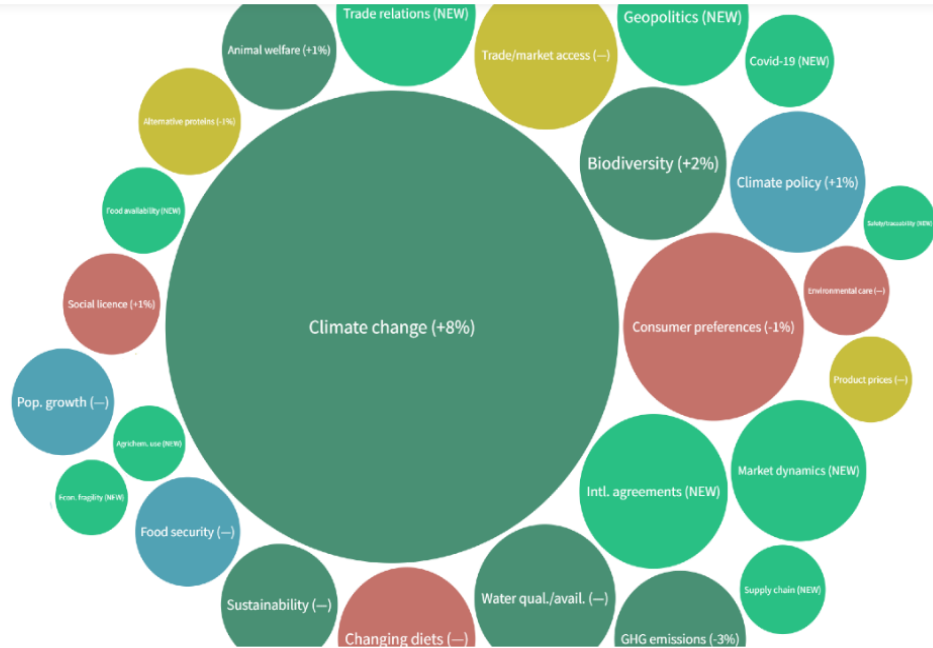


# Incentives for Change

**INCENTIVES FOR CHANGE**

## What Will Change Farming in New Zealand? Agrifood Experts Rank the Issues, with Climate Change on Top

A new report updates the 35 key trends and challenges likely to impact land use in New Zealand, prioritised by primary sector experts for 2022. It compiles current, reliable sources of evidence, and the latest international consumer surveys.



**INCENTIVES FOR CHANGE**

## Are Overseas Customers Truly Willing To Pay More For 'Sustainable' Food?

Evidence gathered by four separate Our Land and Water research programmes has found that food shoppers in New Zealand's key export markets do value attributes produced by responsible farming. A new plain-language Research Findings Brief summarises this research

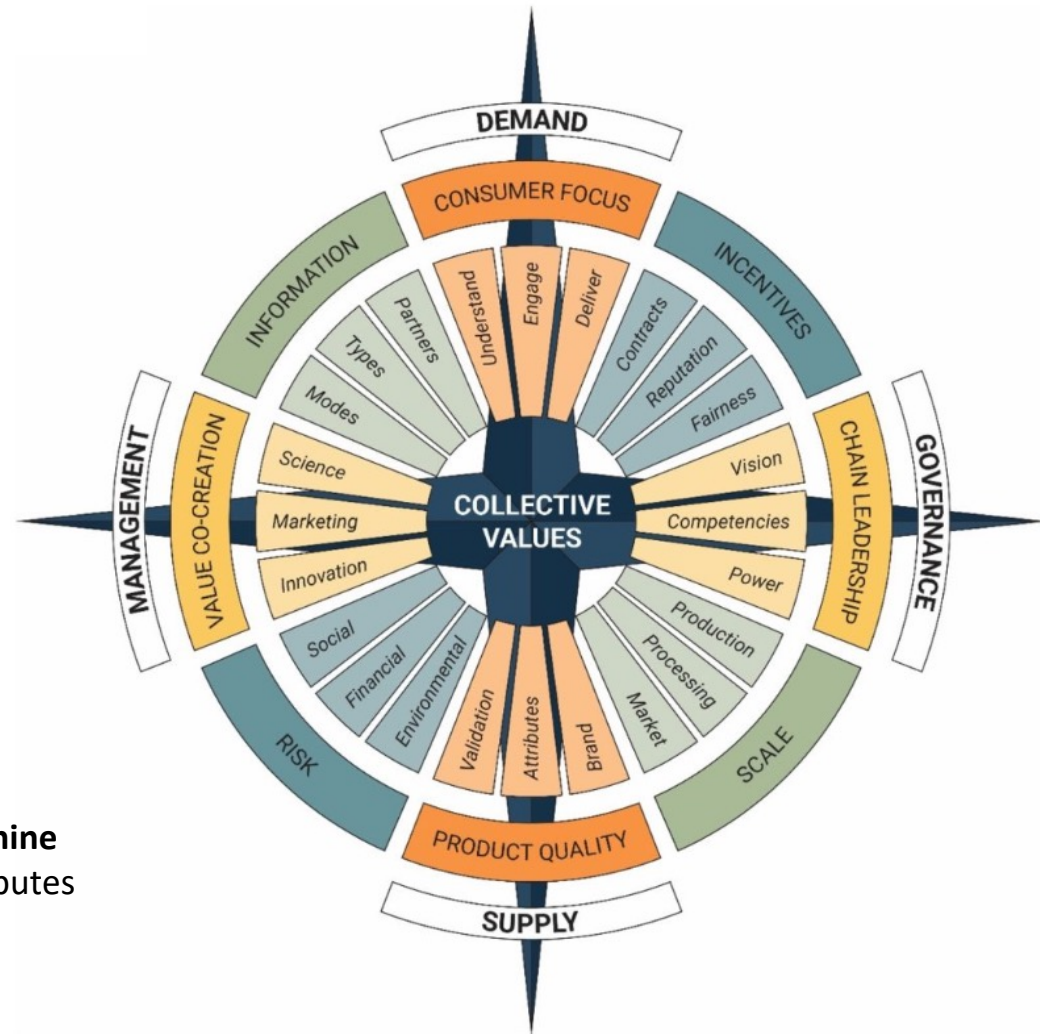




## INCENTIVES FOR CHANGE

Why are some companies better than others at capturing value for their sustainably sourced products?

*Rewarding Sustainable Practices* research reveals **nine attributes of successful supply chains**. These attributes could provide a template for success.

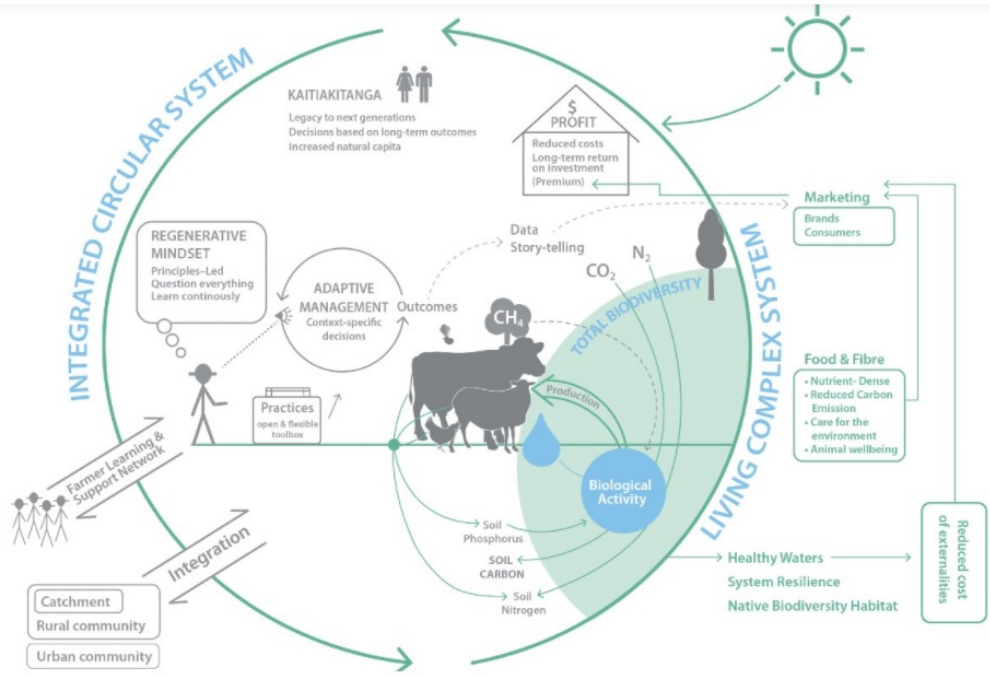


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INCENTIVES FOR CHANGE

# Regenerative Agriculture White Paper Sets Out Pressing Research Priorities

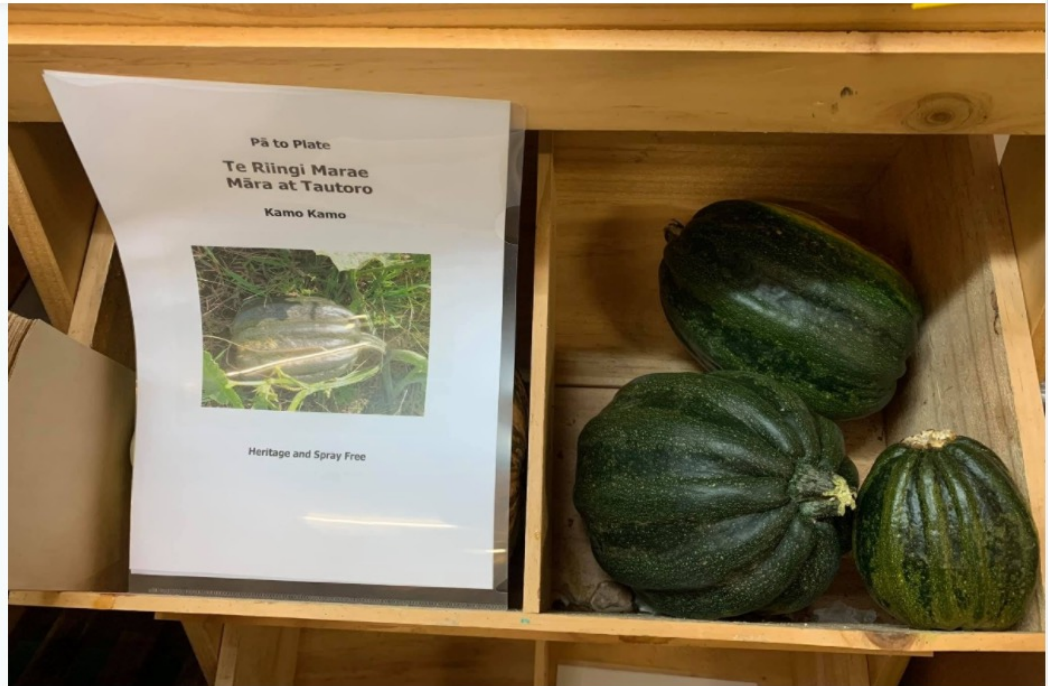
There is a pressing need for scientific testing of the anecdotal claims being made about regenerative agriculture. A new white paper sets out 17 priority research topics identified by 200+ representatives of New Zealand's agri-food system.



INCENTIVES FOR CHANGE

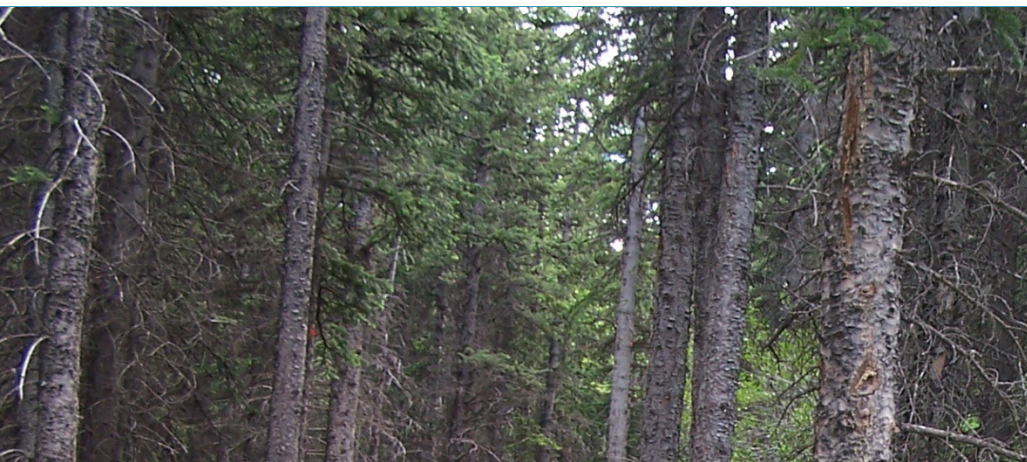
# How the Pā to Plate Project is Creating Opportunities for Northland Marae Communities

Marae communities from coast to coast in the Bay of Islands through to the Hokianga are transforming their lands into market gardens, some for the first time in decades





# Pathways to Transition



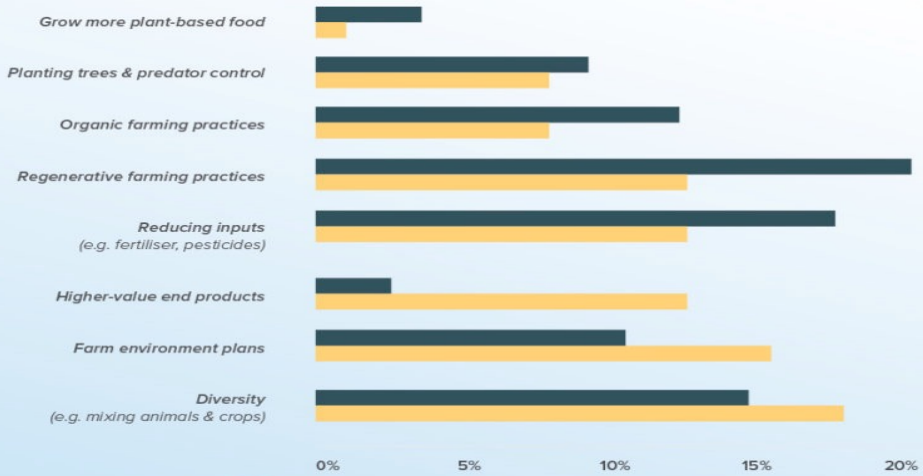
"Change is hard – messy in the middle, beautiful at the end"

Fraser Avery, farmer

## A shared vision of sustainable farming

A future of diverse landscapes, more planning, fewer inputs and farming practices that improve soil and water health

Practices with the greatest positive impact on sustainability



Urban Visitors



Host Farmers



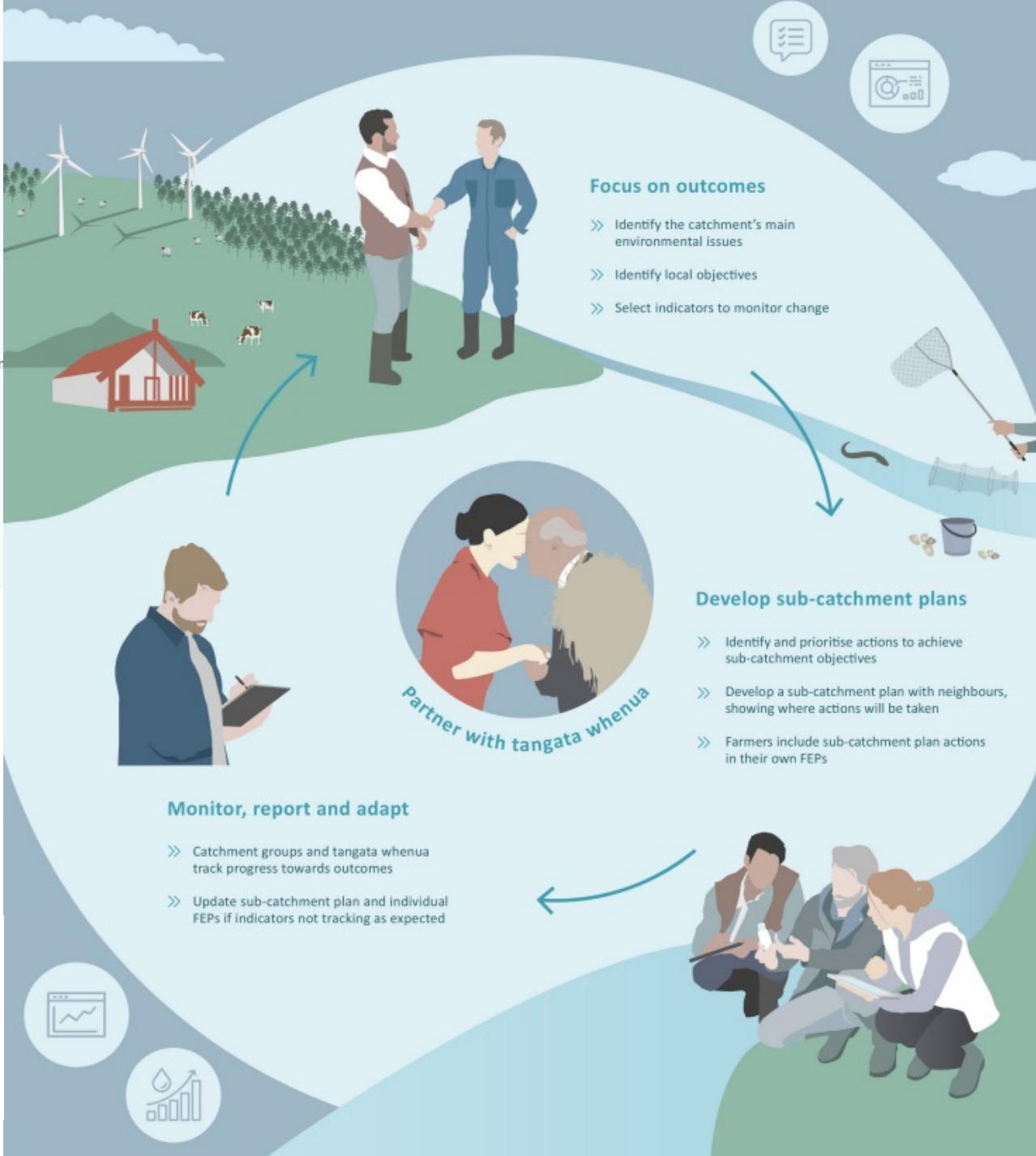


PATHWAYS TO TRANSITION

# Designing Effective Farm Environment Plans

We have prepared a guidance document for people who need to design effective FEPs, FEP templates and processes. The guidance is for government regional councils, primary industry bodies, farm consultants and advisors, farmers and growers.

## Freshwater Farm Plans





## Actions to Include in a Farm Environment Plan

To zoom in, click your farm type button and box for the issue you need to address.

A bigger action box indicates a lower cost and/or more effective strategy.

Achieving your plan can be helped by participating in catchment or action groups.

Filter:

all	deer	dairy	drystock	arable	horticulture
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Tile drain amendments	Precision irrigation*	Variable rate irrigation and fertigation*		Dams and water recycling	Restricted grazing of winter forage crops	Decreasing nutrient inputs (if in excess)	Cover/catch crop*	Variable rate fertiliser*	Variable rate irrigation and fertigation*	Cover/catch crop	Vegetated buffer strips/ planting	Restricted grazing of winter forage crops	Decreasing nutrient inputs (if in excess)**	Increasing forested area/ windbreaks**		Bridging stock stream access				
Controlled release fertiliser	Stock exclusion/ Fencing	Strategic grazing of pasture/crops within CSAs*	Aluminium sulphate applied to pasture, forage cropland...	Cover/catch crop*	Red mud (bauxite) to land	Precision application of fertiliser*	Change animal type	Strategic grazing of pasture/crops within CSAs*	Controlled release fertiliser*	Sediment traps/ retention ponds/ bunds	Strategic grazing of pasture/crops within CSAs*	Minimum tillage/ direct drilling of seed	Precision application of fertiliser**	Variable rate fertiliser**		Stock exclusion/ Fencing				
Precision application of fertiliser*	Variable rate fertiliser*	Decreasing nutrient inputs (if in excess)	Returfishing and widening flood irrigation bays	Alternative wallowing	Bridging stock str...	Precision irrigation	Constructed/ natural seepage wetlands	Stock exclusion/ Fencing*	Denit...	Contour cultivation	Construct...	Stock exclusion/ Fencing	Precision irrigation**	Variable rate irrigation and fertigation**		Strategic grazing of pasture/crops within CSAs*				
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## Resources

### Toolboxes

Land Use Tools

Economic Tools

Decision-Support Tools

## Documents

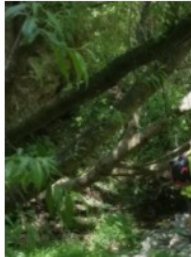
Documents and publications about the Our Land and Water National Science Challenge.

## Think Pieces

Our Land and Water uses a 'think piece' process that connects researchers with stakeholders to explore ideas and co-author a paper.

## For Researchers

Reference materials for researchers, scientists and stakeholders working with Our Land and Water.



## Resources

Our research is producing digital tools, maps, methods, models and guidance to help New Zealanders transform our primary industries, whether you're on the farm or in the Beehive.

Thank you ... acknowledging all of the researchers in the OLV whanau.