



A NATURE POSITIVE AOTEAROA

Report at a glance
October 2024

OUR CONNECTION WITH TE TAIAO – OUR NATURAL WORLD – IS WHAT MAKES US WHO WE ARE AS KIWIS.

But nature is in trouble. Aotearoa New Zealand has over 4,000 native species threatened or at risk of extinction – while increasingly severe and frequent climate-related weather events are showing us the enormous cost of climate change and pushing our wildlife and the ecosystems on which they rely closer to the brink.

Our economy is underpinned by our primary industries and tourism sector, which rely heavily on a healthy natural world. We need nature to survive – and prosper – but the case for urgently addressing nature-loss is still poorly understood.

This report is the first of its kind in Aotearoa New Zealand and estimates the costs and opportunities of halting and reversing biodiversity decline by 2030. It shows us the likely costs of advancing critical actions – and the huge cost of our inaction.

It also tells us how businesses can make nature-positive changes in their operations, and how government can help to get them there. Together, we hope to create a pathway to a nature-positive future for Aotearoa New Zealand.



THE GLOBAL PICTURE

The alarming loss of the world's biodiversity is threatening our economy and the wellbeing of current and future generations. Conservative estimates suggest global GDP declines by USD\$2.7 trillion by 2030 if we do not act to protect and restore nature quickly.

In 2022, Aotearoa New Zealand joined other countries around the world in signing on to the United Nations Kunming-Montreal Global Biodiversity Framework – a series of 23 global targets to halt and reverse nature-loss by 2030.

This report delves into five of these targets and looks at the economic impacts, challenges and opportunities of achieving them in Aotearoa New Zealand. The targets we look at are:



Target 2:

Restore 30% of all degraded ecosystems



Target 3:

Conserve 30% of land, waters and seas



Target 4:

Halt species extinction, protect genetic diversity, and manage human-wildlife conflicts



Target 6:

Reduce the introduction of invasive alien species by 50% and minimise their impact



Target 10:

Enhance biodiversity and sustainability in agriculture, aquaculture, fisheries, and forestry

We've focused on these five Global Biodiversity Framework (GBF) targets because of their relevance for us here in Aotearoa New Zealand.

NATURE-POSITIVE COSTS AND OPPORTUNITIES FOR AOTEAROA

Protecting nature could save Aotearoa New Zealand more than \$270 billion over the next 50 years

Our analysis shows that protecting and restoring 30% of our land, waters, and seas (Targets 2 and 3 of the GBF) makes economic sense.

Actions such as creating more Marine Protected Areas to help marine life thrive, restoring degraded wetlands, or repurposing land to support native forest growth could all bring a net benefit to Aotearoa New Zealand's economy of an estimated NZD\$272 billion from 2025-2080.

Through the restoration of wetlands and native planting, additional carbon will be sequestered and will support Aotearoa New Zealand to meet a higher proportion of its emissions reduction targets with domestic action. Landowners and developers of these projects will share these benefits with the Government, saving the economy billions of dollars annually. Nature-positive actions, such as river restoration projects and predator eradication, lead to improvements in insurance risks and water quality, and better health outcomes. These benefits have flow-on effects that boost productivity and lead to greater economic growth.

The savings are also achieved through the opportunities a thriving natural environment brings.

Preserving our ability to continue to enjoy Aotearoa New Zealand's natural assets – such as our native bush, rivers, lakes and moana supports economic activity – protects our country's 'clean, green' reputation internationally, and benefits our international tourism sector and primary industry export markets. Our wild caught fisheries sector will have increased productivity and resilience as a result of a healthier marine environment.

By 2035 the economic benefits are expected to outweigh the costs of inaction, but we need to substantially increase our investment in nature to achieve this

We currently spend around \$4 billion per year on biodiversity in Aotearoa New Zealand, with most of this coming from central and local governments. We estimate that we need approximately NZD\$26.5 billion every year to 2030 to meet the GBF targets.

That means that investment into nature could be required to increase by approximately 6.5 times the current spend on nature – or NZD\$22.5 billion per year.

While this is a sizable sum, the longer we wait, the more costly the action becomes – and the more likely irreversible damage occurs.

For example, creating more Marine Protected Areas could result in some upfront costs for Government and industry through establishment costs, monitoring and enforcement, and some short-term lost revenue through displaced fisheries. However, these costs will be quickly outweighed by improved longer-term brand resilience in the fisheries sector, the contributions to the tourism economy, and the increase in fishing yield for the industry.

While there are some upfront initial implementation costs if we are to invest in halting and reversing nature-loss, from 2030 onwards, the benefits are expected to outweigh the costs annually, and result in significant long-term economic growth.

**PROTECTING 30% OF OUR LAND,
WATERS AND SEAS MAKES
ECONOMIC SENSE**



Putting nature-based solutions at the heart of our climate response could save Aotearoa New Zealand over \$50 billion by 2080

Nature-based solutions to climate change we've modelled in our report, such as native forest restoration and planting and restoring wetlands, could capture and store an additional 13.7 million tonnes of carbon dioxide every year from 2030.

This additional carbon sequestration could bring total economic benefits equal to NZD\$56.4 billion, which would be shared by Government and landowners.

Notwithstanding the need for deep and accelerated gross emissions reductions, investing in nature-based solutions will also support Aotearoa New Zealand to meet its future Nationally-Determined Contributions and could result in the Government saving up to NZD\$2.3 billion annually, with significant additional revenue going to landowners.

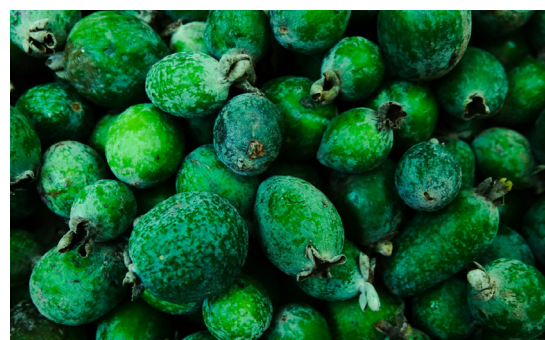
Protecting nature brings opportunities for our primary industries - but a transformation of our economy will be required

Nature-positive action brings change – and opportunities – for our primary sectors. We modelled a set of specific actions, and the costs and benefits of these, which showed that by 2080 the primary industries sectors will be \$7.7 billion better off by protecting nature. There are also additional actions that our primary industries can take to support in meeting the GBF targets beyond those modelled in this report.



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The long-term prosperity of our **fisheries and aquaculture industry** is directly linked to the health of our ocean. Meeting the GBF targets will require the industry to shift away from indiscriminate practices like bottom trawling and dredging, operate within a more precise Quota Management System, and ensure aquaculture farms are appropriate in size and location for their long-term sustainability. Our modelling shows that if more Marine Protected Areas are implemented now, positive economic impacts will occur from 2039 onwards due to increased productivity of nearby fisheries.



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Our **horticulture industry** is deeply reliant on nature. To support Aotearoa in meeting the GBF targets the industry could reduce its use of fertilisers and irrigation, increase riparian planting, adopt new sowing technologies and methods, and change farm management techniques. As a result, the sector could be better protected from climate-related natural disasters and pest and disease invasions. Taking nature-positive actions will also help the industry attract price premiums for its premium quality products in international markets.

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In a nature-positive Aotearoa, our **livestock sector** will need to optimise its fertiliser and pesticide use, reduce its reliance on irrigation, increase riparian planting, and increase the diversification of land. Placing protections over natural resources – for example, through water conservation orders, and repurposing land to support native forest growth and wetland restoration – will result in decreased agricultural output.

However, the sector could see higher prices as a result of protecting and growing our premium ‘green and clean’ brand. Actions to restore rivers and lakes will also reduce the risk of floods and droughts – and the impacts these have on farming communities – while achieving predator-free status should reduce the risk of disease within livestock populations. Our modelling suggests that the sale of carbon credits presents a \$39.5 billion opportunity for landowners, the majority of whom will be livestock farmers.

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In a world where New Zealand has reversed biodiversity loss, the **forestry industry** would transform and expand. This means ensuring native trees make up a greater proportion of our forest cover, and managing plantation forests to ensure they’re more diverse and support biodiversity. The transformation of the industry will improve its efficiency and resilience and protect its reputation as a sustainable producer – a key international competitive advantage.

Businesses and Government both have a role to play

It’s clear that taking action now to halt and reverse nature-loss presents significant economic benefits in the long-run.

There are huge opportunities businesses can unlock as consumers increasingly demand sustainable products, and there is also a role for the Government to play in creating the right conditions for businesses to invest in nature.

That could be through:

- Making it mandatory for businesses to assess and reveal their impacts on nature;
- Supporting industry efforts to develop innovative practices and/or technology that can support nature recovery while improving efficiency and resilience;
- Establishing an investment fund or blended finance investment mechanism which targets nature-related projects that bring long-term financial benefits to the country;
- Creating a system of biodiversity or carbon credits generated by nature action. These could be sold either through a voluntary market or through a compliance market, for example if the New Zealand Emissions Trading Scheme was expanded to include nature-based sequestration solutions beyond forestry;
- Developing a nature-positive labelling system to help businesses make credible claims and consumers make informed choices;
- Developing a sustainable finance strategy and taxonomy that links to nature-positive consumer standards.

THE ACTIONS IDENTIFIED IN THIS REPORT SHOW THAT WE ALL NEED TO WORK TOGETHER TO REALISE THESE BENEFITS AND PROTECT OUR MOST FUNDAMENTAL ASSET: NATURE.



