



The
Aotearoa
Circle

Mā te Kaitiakitanga
ko te Tōnuitanga
Prosperity Through
Guardianship



SNAPSHOT

Natural Infrastructure Plan

Embedding, maintaining and enhancing our natural infrastructure to achieve economic prosperity for Aotearoa New Zealand.

Why investment in Natural Infrastructure matters

By recognising natural infrastructure as the productive infrastructure that it actually is, we can strengthen our economy, reduce risk, create jobs, and build a future we can proudly say we helped shape.

Aotearoa New Zealand's economy is intrinsically linked to the environment. With 70% of our exports reliant on natural resources, investing in resilience and natural capital is not a trade-off - it is a win-win.

That's why we believe our Natural Infrastructure Plan presents a 1 + 1 = 3 investment: it addresses today's challenges while building capacity for tomorrow.

It also points to the need for a shift in conversation beyond hard engineering solutions that may appear cheaper upfront, but often cost more over time in maintenance, repairs and lost co-benefits.

We understand why infrastructure matters. Roads move goods and services. Pipes deliver water and power. Bridges connect communities and enable commerce.

Natural infrastructure is less visible and therefore less valued. It exists in wetlands, native forests, dunes, rivers and floodplains. It quietly provides flood mitigation, water filtration, erosion control, carbon sequestration and temperature regulation without invoices, contracts or maintenance schedules.

Nature may be the most undervalued infrastructure asset we have. And because we undervalue it, we underinvest in it.

For too long, we have framed economic growth and environmental health as competing interests. This Plan demonstrates that we can - and must - achieve both. By doing so we can capitalise on the multiple benefits that investment in natural infrastructure offers - often with lower, long-term operating costs.

And as the New Zealand Infrastructure Commission Te Waihangā has identified, long-term strategy and planning are essential to guiding infrastructure investment and enhancing national resilience. This Plan adds a powerful tool to our infrastructure toolkit to support this.

Practical Actions

The Natural Infrastructure Plan has been developed through a coalition of 200+ contributors with over 10,000 combined hours of research, debate and collaboration. It reflects deep expertise and shared ambition.

What it is not is a list of aspirations. Instead, it provides practical actions from clear policy levers for government to significant opportunities for business, leadership and investment.

The plan also includes six case studies demonstrating the measurable benefits of incorporating nature-based solutions into infrastructure planning.

It encourages decision-makers to widen the lens through which infrastructure investments are assessed.

The Investment Decision Toolkit, for example, provides a structured way to evaluate natural infrastructure alongside traditional engineered solutions.

Public agencies, private companies and iwi can use these tools to compare options, assess long-term value and capture multiple co-benefits.

When making decisions that will shape infrastructure for decades, the greatest risk is not choosing the wrong option. The greatest risk is failing to consider all available options.

Natural infrastructure is not an environmental add-on. It is a credible, investable infrastructure asset.

By investing in natural infrastructure, we can reduce risk in insurance, improve returns on investment, and know we will have enduring agriculture, tourism and regional development growth.

The question is no longer whether we can afford to invest in natural infrastructure.

It is whether we can afford not to.



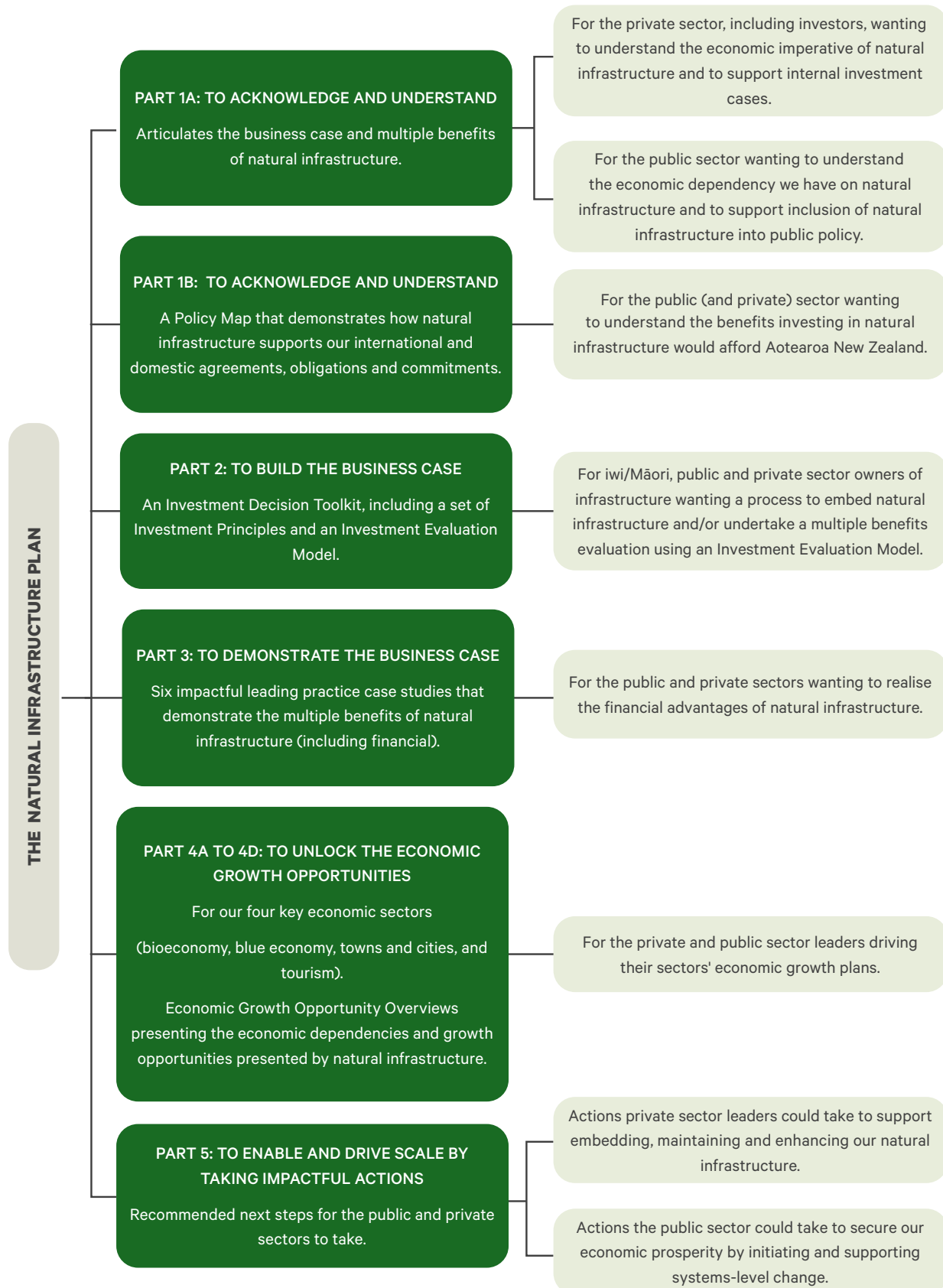
Vicki Watson

Chief Executive
The Aotearoa Circle

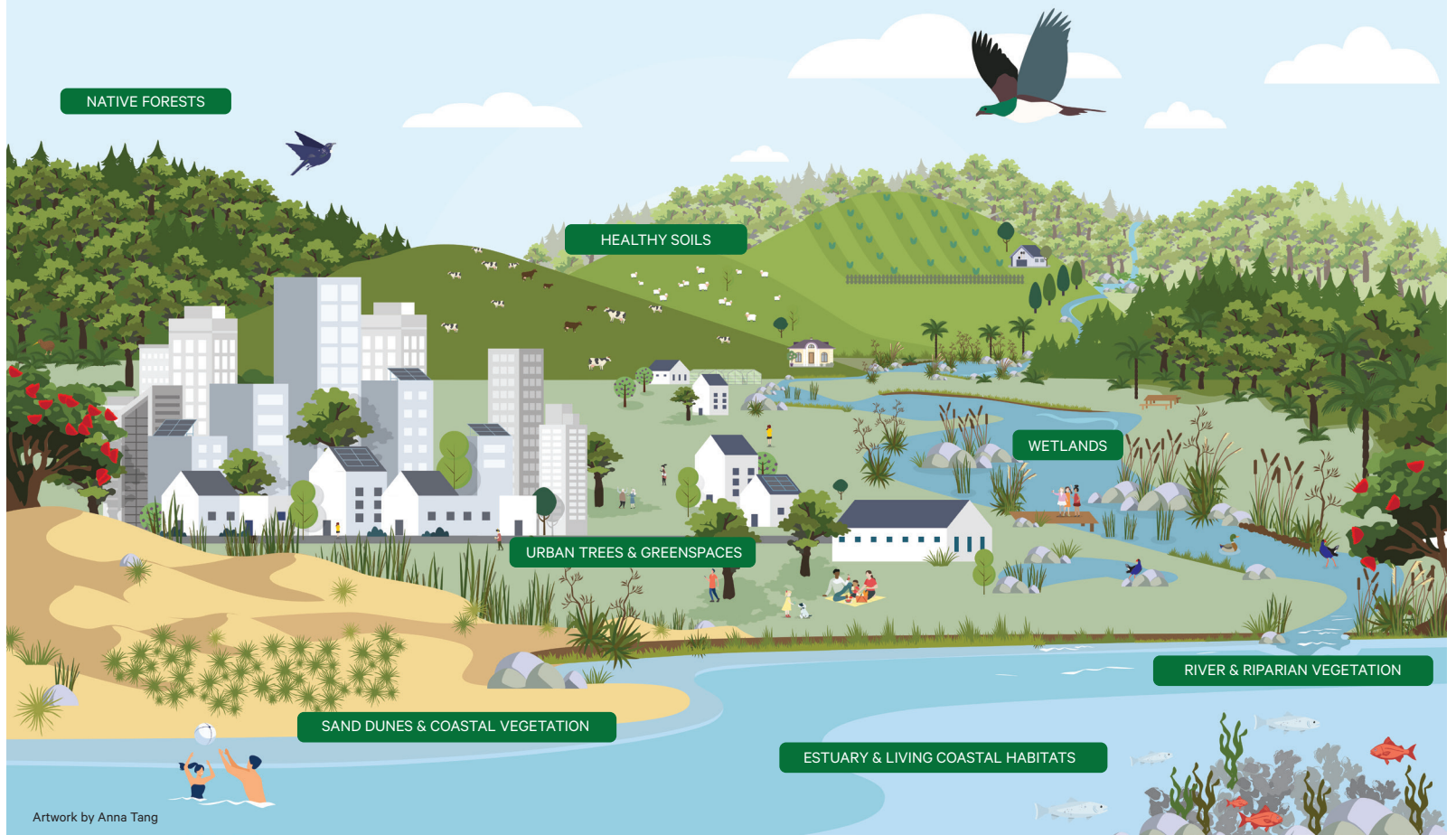
The structure of the Natural Infrastructure Plan

The Natural Infrastructure Plan comprises several sections framed against the five objectives. Each has a specific purpose and intended audience.

Note: Parts 1B, 2, 3 and 4A-4D are available as separate PDFs to download on www.theaotearoacircle.nz



What is Natural Infrastructure?



NATURAL INFRASTRUCTURE	SERVICES IT PROVIDES
 <p>NATIVE FORESTS</p>	<ul style="list-style-type: none"> • Stabilises slopes and reduces erosion and landslides • Regulates water (slows runoff, sustains baseflows, improves quality) • Habitat for native species; supports cultural values and recreation • Stores carbon over long timeframes; provides local cooling and shade
 <p>RIVER & RIPARIAN VEGETATION</p>	<ul style="list-style-type: none"> • Filters sediment, nutrients and some pathogens before they reach waterways • Shades streams, lowering temperatures for aquatic life • Stabilises banks and reduces erosion • Provides habitat corridors for native species and inanga spawning areas
 <p>WETLANDS</p>	<ul style="list-style-type: none"> • Temporarily store floodwaters and buffers stormwater • Retain water and supports drought resilience • Filter nutrients and contaminants, improving water quality • Sequester and stores carbon (notably peat systems) • Provide habitat and mahinga kai values
 <p>URBAN TREES & GREENSPACES</p>	<ul style="list-style-type: none"> • Reduce urban heat and provide shade for people and places • Intercept rainfall and reduce stormwater runoff • Improve air quality and support urban biodiversity and wellbeing
 <p>SAND DUNES & COASTAL VEGETATION</p>	<ul style="list-style-type: none"> • Trap and stabilise sand, reducing coastal erosion • Buffer storm surge and waves; enable natural shoreline adjustment • Provide habitat for coastal species and protect communities and assets inland
 <p>ESTUARY & LIVING COASTAL HABITATS</p>	<ul style="list-style-type: none"> • Attenuate waves and help stabilise shorelines • Filter water, cycle nutrients and improve clarity • Store "blue carbon" in sediments and vegetation • Provide nursery habitat that supports fisheries and biodiversity
 <p>HEALTHY SOILS</p>	<ul style="list-style-type: none"> • Provide the foundation for food production by cycling nutrients, retaining moisture and supporting fertile land • Reduce erosion and sediment loss when healthy, protecting waterways and downstream ecosystems • Help buffer flooding by absorbing, storing and slowly releasing water across the landscape • Filter contaminants and improve water quality before water reaches rivers, estuaries and aquifers • Store carbon and support soil biodiversity that underpins ecosystem resilience

The Multiple Benefits Evaluation Framework

A framework to evaluate different infrastructure solutions - natural or traditional.

Benefit Domain	FINANCIAL	RISK & RESILIENCE		ENVIRONMENTAL			SOCIAL	CULTURAL
Benefit Typology	Financial opportunities through reduced costs and improved asset values	Disruptions to a systemically important supply chain (major trade, food security or mahinga kai)	Disruptions to, or failure of, critical infrastructure	Biodiversity loss and ecosystem collapse (e.g. pest or disease incursion)	Severe weather events (e.g. flooding & wildfire)	Natural resource shortages (e.g. caused by drought)	Changes in social and recreational amenity	Changes in cultural amenity
Natural Infrastructure Benefits - Nature's Contributions to People (NCP)	Avoided/reduced CAPEX	Improved/reduced service disruption ("loss of function")	Improved/ maintained availability of insurance	Increased/ maintained abundance and diversity of native species	Reduced emissions/ Improved emissions mitigation; increased nature-based carbon storage permanence & sequestration	Improved/ maintained groundwater and/ or surface water quality and/ or quantity and/ or recharge and storage	Improved access and recreational use of the natural environment	Expanded/ maintained cultural/ spiritual settings & learning/inspiration opportunities. Supporting identities.
	Avoided/reduced OPEX	Improved/ maintained primary sector productivity/ outputs	Improved/ maintained insurance premiums	Improved/ maintained presence of endangered/ threatened species	Reduced/avoided surface runoff and associated erosion/ slips (incl climate adaptation)	Improved/ maintained marine water quality or marine flow regime	Improved/ maintained livelihood opportunities	Increased/ maintained cultural property/land value
	Avoided/reduced consenting and/or compliance costs	Increased/ maintained food security	Improved/ maintained asset protection and resilience (incl climate change resilience)	Improved/ maintained habitat (incl aquatic) protection/ restoration	Improved/ maintained surface water flows and/ or flood protection and/ or stability - inland or coastal (incl climate adaptation)	Improved/ maintained Material NCP (e.g. Energy, food, materials, medicinal, biochemical & genetic resources)	Improved/ maintained tourism opportunities	Expanded/ maintained mahinga kai
	Increased/ maintained property/land value	Improved resilience of operations and supply chains		Improved/ maintained Regulating NCP (e.g. pollination, seed dispersal, air-soil-water quality, water flows, natural pest control etc)		Improved/ maintained biomass	Improved/ maintained community engagement and wellbeing (including physical and psychological experiences)	
	Improved/ maintained asset design life	Reduced loss of useable land due to improved resilience or integrity		Improved/reduced use of High-Impact Commodities				
	Improved/new revenue streams/ investment due to the provision of Ecosystem Services to benefiting parties			Improved/ maintained terrestrial habitat extent				
	New and improved products, services and/or brand value			Improved/ maintained aquatic habitat condition				
	Improved/ maintained Return on Investment							

Overview of case studies demonstrating the business case for natural infrastructure

Case study	Title	Existing network infrastructure supported	Economic sector(s) supported	Economic growth facilitated by the natural infrastructure	Delivers financial benefits	Delivers positive environmental benefits	Delivers social /cultural benefits
1	Kaipara Moana Remediation, Auckland/Northland	Water and waste	Bioeconomy Blue Economy	Sustaining primary production, local jobs, protecting harbour and key fishery nursery	✓	✓	✓
2	Tangaroa Stream, Waitara Flood Resilience Scheme, Taranaki	Water and waste	Towns and cities	Protection of residential and business assets for economic continuity and city growth	✓	✓	✓
3	Queensland Reef Credit Scheme, Australia	Water and Waste	Bioeconomy Blue Economy Tourism	Sustaining primary production, tourism/fisheries value protection and growth	✓	✓	
4	South-West Christchurch Resilient Urban Development	Water and waste	Towns and cities	Residential and industrial urban development/uplift	✓	✓	✓
5	Auckland Airport, Innovative Stormwater Project	Water and waste Ports and airports	Towns and cities	Airport operational expansion	✓	✓	
6	Kirimoko Park, Residential Development, Wanaka	Land transport Water and waste	Towns and cities	Development costs reduction, supporting urban growth	✓	✓	✓

So what, now what? 2026 recommendations

(I) PUBLIC SECTOR – 2026 OPPORTUNITIES

We appreciate that in a general election year there are limits as to what can be undertaken and achieved by the public sector. These three options provide key opportunities to get progress underway.

1. Definitions

- **Include ‘natural infrastructure’ in the definition of infrastructure** – specifically section 3, the New Zealand Planning Bill (2025) with a cross reference to the Natural Environment Bill (2025)

2. Recognition and Inclusion

- Recognise Aotearoa New Zealand’s **economic dependency on natural infrastructure as a national risk** by including this in the National Risk and Resilience Framework¹.

3. Collective Understanding and Capability

- Bolster central and local government understanding of natural infrastructure, including its ecosystem and resiliency benefits, to ensure it is included as options in infrastructure solutions.

(II) PRIVATE SECTOR – 2026 OPPORTUNITIES

1. Awareness

- The insurance sector takes a lead on raising awareness of the benefits of natural infrastructure to demonstrate how insurance can remain accessible

2. Fund

- Continue to work on innovative funding models and finance mechanisms that can fund natural infrastructure at scale

3. Collective Understanding and Capability

- Bolster private sector capability by showcasing and sharing case studies of natural infrastructure to better understand the financial and multiple benefit opportunities.

¹ <https://www.dpmc.govt.nz/our-programmes/risk-and-resilience/national-risk-and-resilience-framework>

Thank you to all who were involved.

160

Engagement sessions

170

Attendees - Executive Forum

60

Attendees - Future Voices Forum

10,000+

Combined hours spent

Our partners are at the heart of everything we do - driving meaningful change through genuine collaboration.

The Natural Infrastructure Plan simply wouldn't have been possible without their commitment to our kaupapa.

Our Partners

Premium



JANE TAYLOR
Former Guardian
The Aotearoa Circle

Leading



Active

- Air New Zealand
- Alliance Ecology
- Bay of Plenty Regional Council
- Beca
- Bioeconomy Science Institute
- Boffa Miskell
- BRANZ
- Cawthron Institute
- Chapman Tripp
- Contact Energy
- Deloitte New Zealand
- Department of Conservation
- DLA Piper
- DNA Design
- Earth Sciences New Zealand
- EnviroNZ
- EY New Zealand
- IDEEA Group
- Indevin Group
- Kerridge & Partners
- KPMG New Zealand
- Land Information NZ
- Local Government New Zealand
- Marsh
- MartinJenkins
- Mercury
- Ministry for Primary Industries
- MBIE
- Ministry of Foreign Affairs & Trade
- Ministry of Transport
- Moana New Zealand
- Nature Positive Limited
- New Zealand King Salmon
- New Zealand Post
- New Zealand Trade & Enterprise
- Ngāi Tahu Holdings
- Ngāpuhi Asset Holdings Limited
- Ngāti Whātua Ōrākei Whai Rawa Ltd
- Pāmu
- Port of Tauranga
- PwC New Zealand
- QBE Insurance
- Rabobank
- Ravensdown
- RealNZ
- Rio Tinto | NZAS
- Sanford
- Sealord
- Sudima Hotels
- T & G Global Limited
- Te Puni Kōkiri
- Toitū Envirocare
- Tourism Holdings Limited
- Tourism New Zealand
- Wellington City Council