



Where to from here? How we ensure the future wellbeing of land and people

A summary of the Ministry for the Environment's Long-term Insights Briefing 2023

Aotearoa New Zealand needs to think about and plan for the future

Long-term Insights Briefings like this one give the public service an opportunity to think innovatively about issues that will matter in the decades ahead and for generations to come.

The briefings – which government agencies must produce every three years – present medium- and long-term trends, risks and opportunities that may affect Aotearoa New Zealand and the wellbeing of New Zealanders.

How we all use, manage and care for the land is a conversation New Zealanders have been having for many years. This briefing is intended to contribute to this kōrero and give voice to perspectives that might not otherwise be heard.

Therefore, as we developed this first briefing, we intentionally sought the views of a variety of rangatahi groups. Their lives will be affected for many decades by the choices we make today, and they will be a key part of how we keep this conversation going into the future.

This also aligns with the Ministry's role as an environmental steward. Under the Environment Act 1986, we're required to carefully consider the needs of future generations as part of how we advise on natural and physical resources.

By taking a broad, long-term perspective, this briefing can help us understand what actions may be required.

It's our hope that this briefing enhances the ongoing conversation, and the need for integrated meaningful action, about the long-term future of the land, the wider environment, and how people interact with and value nature.

Land is an intergenerational taonga (treasure)

The topic of the Ministry for the Environment's first briefing is He aha ngā mahi ka whai ake ināianei? Me pēhea te whakarite i te toiora o te whenua me te tangata ā muri atu | Where to from here? How we ensure the future wellbeing of land and people.

Land connects every part of te taiao (the environment). How land is cared for affects lakes, rivers, oceans, air, climate and native species – and they, in turn, affect the land.

Land is also intrinsically linked with people's lives and livelihoods. It is central to Aotearoa New Zealand's economy, culture, identity and many other aspects of society.

So the land must be well looked after to ensure a resilient, sustainable future for everyone.

Land is under pressure

Just over half of Aotearoa New Zealand's total land area is used for agriculture, forestry and urban activities.

For many years, Aotearoa New Zealand's land has been under pressure from things like more intensive agricultural practices, pollution, urban sprawl, rural subdivision, invasive species and climate change, as evidenced in reports such as Environment Aotearoa 2022 and Our Land 2021.

These pressures have many effects on the land.

- **Threats to native plants, animals and ecosystems:** more than 3,000 land-based native species are currently threatened with or at-risk of extinction.
- **A shrinking amount of highly productive land:** in 2019 over 100,000 hectares of highly productive land (land that is particularly good for food production) was unavailable or restricted from use as farmland.
- **Degrading soil and water quality:** between 2014 and 2018 only 20 per cent of monitored sites met all seven targets for soil quality.
- **Pollution and waste in urban areas:** it is estimated almost 18 million tonnes of waste are generated per year, of which 72 per cent goes to landfills.

The land's future will be shaped by local and global drivers of change

It's difficult to predict the future. The state of the land – and how we use, manage and care for it – will be shaped by local and global drivers of change. These drivers are complex and interconnected. Some could increase pressures and demands on the land, while others could improve conditions.

Key drivers include:

- climate change altering weather patterns and raising sea levels
- population growth creating demand for resources
- economic and consumer demands influencing what New Zealanders make and use

- geopolitics and international dynamics affecting the local environment and economy
- policy and regulation shaping how land is used
- technology and innovation influencing the way we live and work
- social and cultural values shaping what is acceptable on the land.

These trends are not set in stone. But either way, challenges lie ahead for the land, and for the aspects of people’s wellbeing that depend on it.

A vision for the future of land

Working with multiple rangatahi (youth) groups and the Ministry for the Environment’s executive leadership team, and through two rounds of [public consultation](#), we have created a vision of what the state of the land, and New Zealanders’ relationship with it, could look like in 2050.

In this vision, which is premised on deep environmental responsibility and reciprocity, the relationship between people and whenua is stronger, people give back to the land as much as it provides, and an intergenerational perspective is embedded within society. Iwi and Māori exercise meaningful kaitiakitanga (stewardship), and people’s connections with the land are reflected in the country’s politics, economy and everyday life.

Achieving such a vision would involve major transformations of Aotearoa New Zealand’s politics, economy and society.

Transformational change is needed to ensure the wellbeing of both the land and future generations

We have an opportunity now to change course – and to do so in a coordinated and meaningful way.

Tracing back from an aspirational future to the present situation – a futures-analysis technique known as backcasting – helped identify pathways we could use to influence change. Change won’t be achieved by a specific policy, and existing initiatives can only get us part way there. It will involve changes to the way we make decisions and take action in our communities, hāpū and iwi, government, businesses and institutions.

In the briefing, we have proposed nine ways that could support change across three levels.

- **Achieving incremental change:** The top tier are interventions that could be most easily actioned. These leverage points help enhance resilience and address specific events but have less impact than the other options:
 1. Increasing the effectiveness of policy and legislation
 2. Empowering communities to take action
 3. Investing in sustainable infrastructure and technology.

- **Supporting transitional change:** The middle tier of interventions go deeper into the origins of environmental problems and help transition systems and institutions for more widespread change:
 4. Investing in science and mātauranga Māori
 5. Promoting environmental education and knowledge transfer
 6. Embracing collaborative governance and coordination.
- **Enabling transformational change:** The deepest tier of leverage points address the root causes of Aotearoa New Zealand’s environmental issues. While more complex and challenging to implement, they have greater ability to bring about long-lasting change:
 7. Embedding environmental responsibility into institutions
 8. Enhancing equity in decision-making
 9. Building resilience to global pressures.

These changes would require everyone to work together

Achieving transformational change requires input, participation and collaboration from all areas of society.

In this briefing, we have proposed some ways to instigate the transformational change required to ensure the future wellbeing of land and people.

This is intended to stimulate conversation that will need to take place over the coming years and decades, through bringing to the fore the perspectives of future generations. Along with these ongoing conversations, urgent and integrated action is needed today.

By thinking, planning and acting now, it is possible to better ensure the demands of the present do not outweigh the rights of future generations and the sustainability of the land.

Drivers of future land change

Some drivers are local, others are global — all are interconnected.

DRIVERS OF CHANGE



Climate change

will have the most significant impact — increasing temperatures, changing rainfall patterns and raising sea levels.



Population

is growing, with New Zealand projected to reach 6 million people by 2050 — affecting demand for housing, food and services.



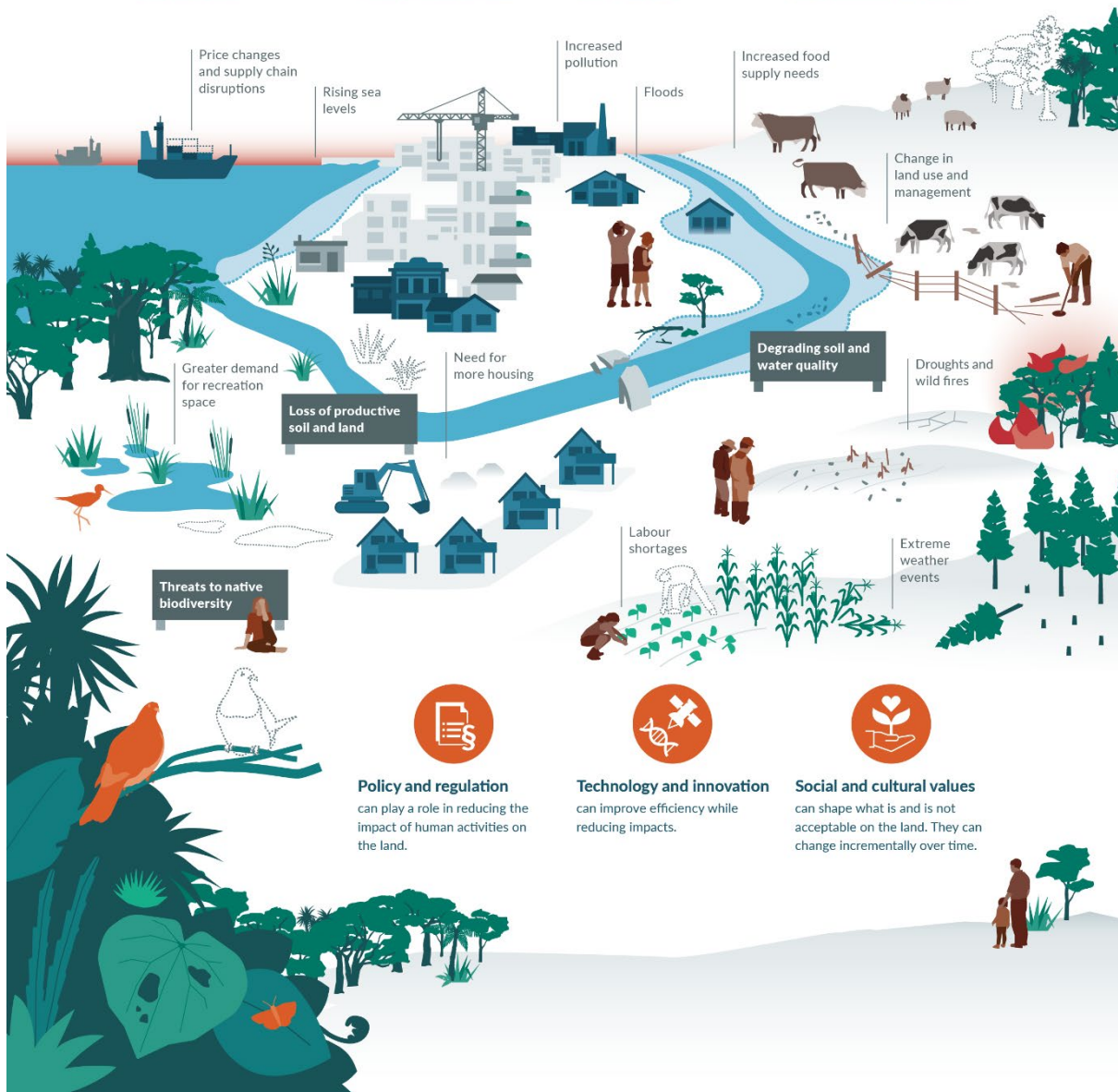
Economic and consumer demands

for food, products and how they're made are a significant driver of land use.



Geopolitics and international dynamics

like conflicts, pandemics and economic conditions impact the local environment and people.



Policy and regulation

can play a role in reducing the impact of human activities on the land.



Technology and innovation

can improve efficiency while reducing impacts.



Social and cultural values

can shape what is and is not acceptable on the land. They can change incrementally over time.

Transformational change

Nine pathways to a more resilient future for the land and every generation.



ACHIEVING INCREMENTAL CHANGES



Increasing effectiveness of policy and legislation
is required to help transition to a more sustainable system.

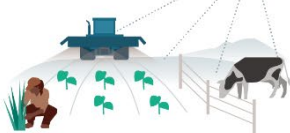


Empowering communities
can drive local action towards sustainable land use.



Investing in sustainable infrastructure and technology
can support businesses and communities to change to sustainable practices and a circular economy.

SUPPORTING TRANSITIONAL CHANGE



Investing in science and mātauranga Māori
can drive research and development to improve sustainability and have collective benefits.



Promoting environmental education and knowledge transfer
can strengthen people's understanding, awareness and sense of responsibility for the environment.



Embracing collaborative governance and coordination
can help develop solutions that work for the entire community.

ENABLING TRANSFORMATIONAL CHANGES



Embedding environmental responsibility into Aotearoa New Zealand's institutions
can ensure the land's wellbeing is central to decision-making.



Enhancing equity
can enable all New Zealanders to act on and embrace environmental responsibility.



Building resilience to global pressures
can enable a more diversified and environmentally sustainable economy.

