

Wednesday, 21 September 2022

West Coast Land Reclassification

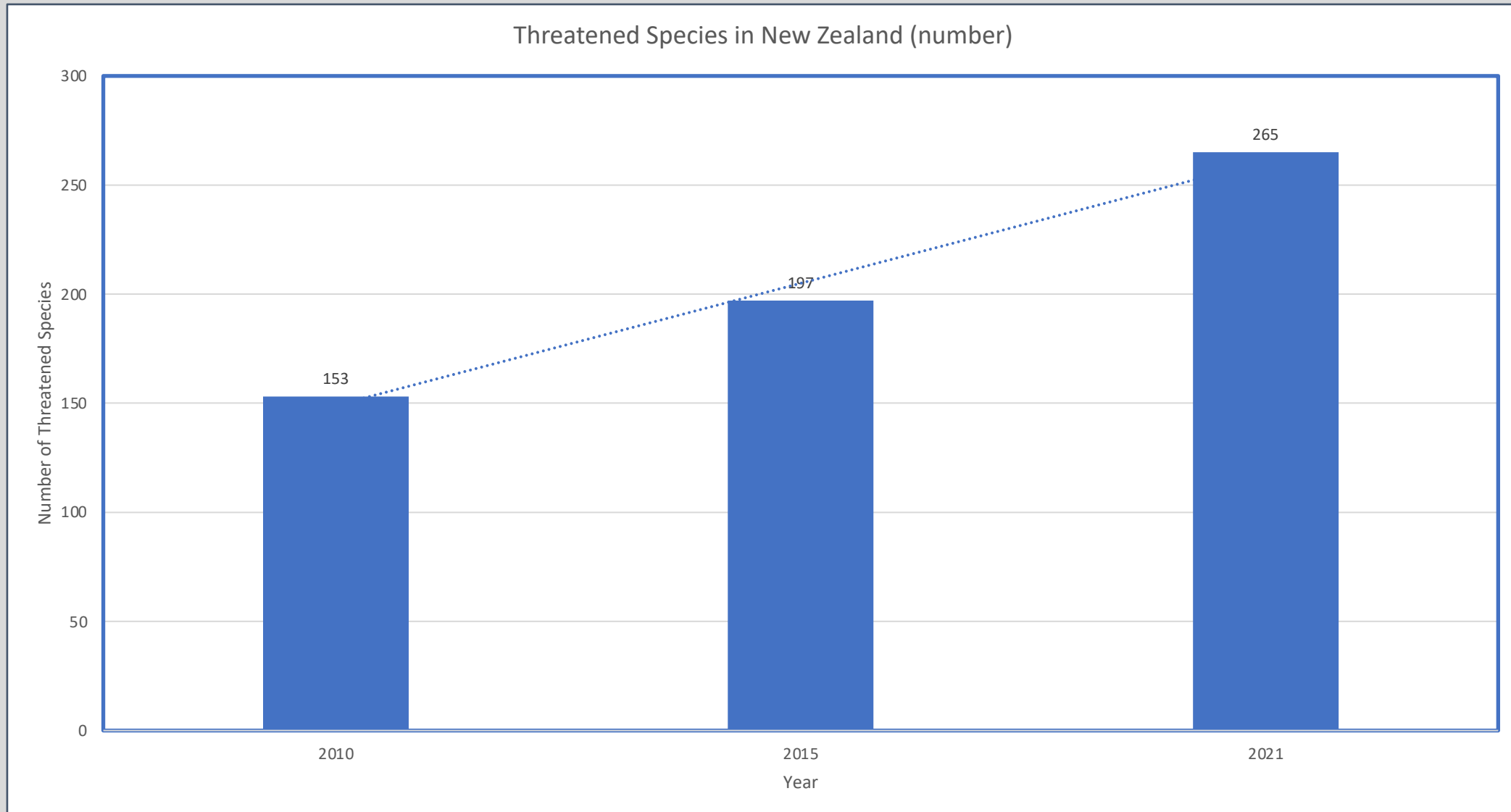
McGuinness Institute oral submission

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CEO, McGuinness Institute

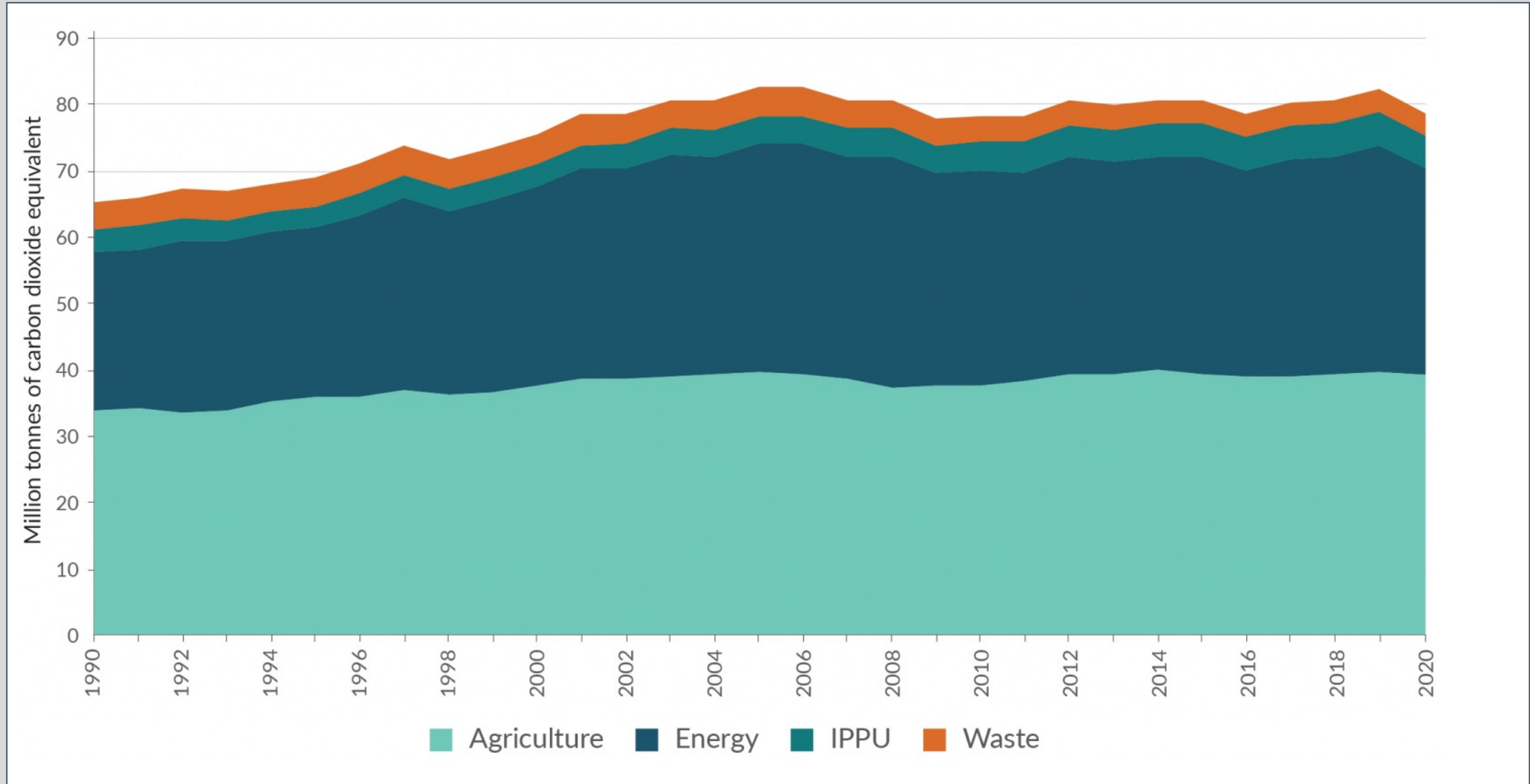
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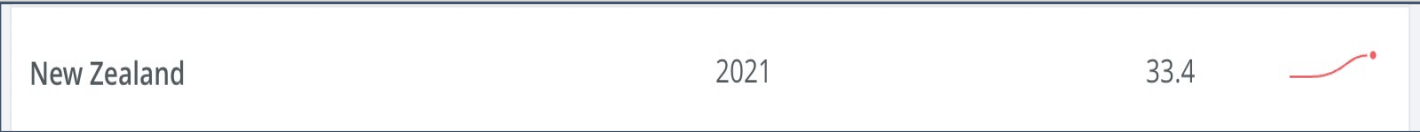
Myth 1: We are protecting our unique flora and fauna



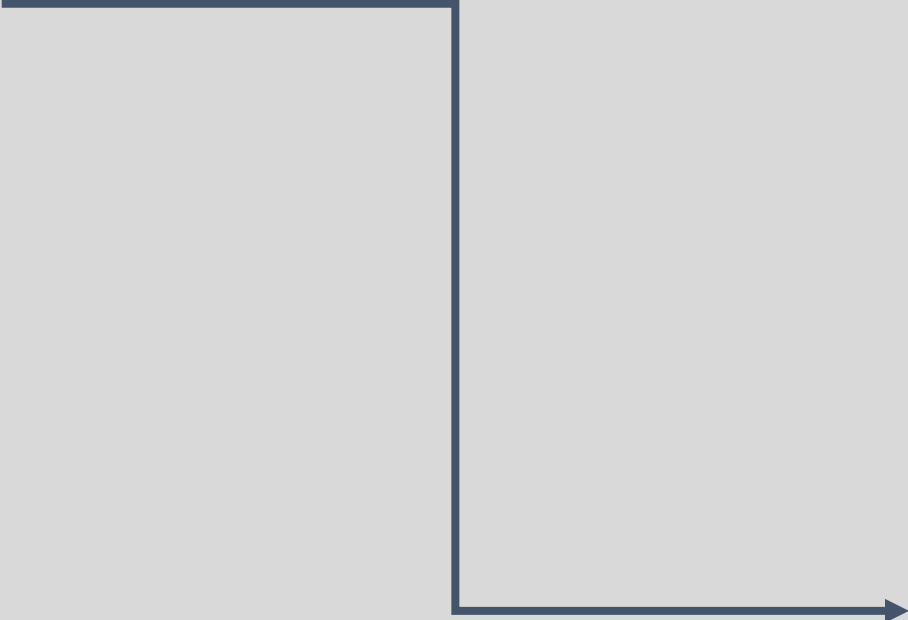
Myth 2: We are managing CO2



Myth 3: We have more protected areas than other countries



NZ is the 29th country on the list of terrestrial protected areas (% of total land value)



All Countries and Economies			
Country	Most Recent Year	Most Recent Value	
Seychelles	2021	61.5	
New Caledonia	2021	59.7	
Venezuela, RB	2021	56.9	
Luxembourg	2021	51.3	
Bhutan	2021	49.7	
Brunei Darussalam	2021	46.9	
Turks and Caicos Islands	2021	44.4	
Palau	2021	44.2	
Liechtenstein	2021	42.6	
Hong Kong SAR, China	2021	41.9	
Greenland	2021	41.6	
Zambia	2021	41.3	
Bulgaria	2021	41.0	
Slovenia	2021	40.4	
Cambodia	2021	39.7	
Poland	2021	39.5	
Cyprus	2021	38.6	
Croatia	2021	38.4	
Tanzania	2021	38.2	
Namibia	2021	37.9	
Slovak Republic	2021	37.6	
Guinea	2021	37.6	
Belize	2021	37.5	
Germany	2021	37.5	
Congo, Rep.	2021	36.8	
Bahamas, The	2021	36.6	
Greece	2021	35.2	
Comoros	2021	33.8	
New Zealand	2021	33.4	

Solutions for the West Coast

The goals

- Make the West Coast
 - a physical sponge to manage floods
 - nature-based – Wild West – tourism/products
 - a carbon-sink
 - the jewel in the global crown (e.g. a UN World Heritage Area, extending Te Wāhipounamu)
 - a mental health mecca (latest research)

The solution

- Create an ecological corridors along the length of the West Coast

Eight recommendations

Recommendation 1: Ensure stewardship settings provide protection for current and future generations by increasing the number of areas with national park status.

Recommendation 2: Create biodiversity corridors between national parks using existing stewardship land around rivers (where possible).

Recommendation 3: Consider how stewardship land can be used to restore native forest to meet the Climate Change Commission recommendations to Government, including creating 300,000ha of new native forest between 2021 and 2035.

Recommendation 4: Caveats placed on land (especially regarding mining and public access)

- If land is reclassified as a ‘conservation park,’ it should be determined whether mining will be permitted on that land.
- Where mining is not allowed, caveats should be placed on this land to prevent mining in the future.
- Land should be protected and, where possible, public access should be maintained so communities can use conservation land for recreational purposes.

Recommendation 5: Establish a dashboard to measure key metrics

- To assist with conservation and to ensure environmental standards are maintained, a dashboard of key environmental and conservation metrics should be established for each piece of land. This will allow for regular analysis of each piece of land and will also assist with the five-yearly review of land reclassification.
- These metrics should be agreed by an expert panel and should include specific and measurable indicators of the health of the land and the species habitats within it (e.g. regularly measuring number of native flora and fauna present, pollution levels in rivers, and other ecological and environmental data). The metrics should be clearly established and regularly reviewed.
- If thresholds are breached, the land classification should be reconsidered, which could be part of the five-year review process.

Recommendation 6: Stage the land reclassification process

- This reclassification process should be staged to allow for adaptive management where required.
- If environmental thresholds are breached (as established by the dashboard of key metrics), it will allow for the classification of the land (or the conditions put upon it) to be changed.
- This is the first reclassification process of its scale in New Zealand.
- Species and habitat management may need to change as a result of climate change, extreme weather, natural disasters and a number of other factors.
- **A staged approach would allow for reclassification to change, as required, to protect changing species habitats.**

Recommendation 7: Increase DOC funding & resourcing

- **As responsibility for managing the national parks and increased areas of conservation land will fall under DOC, they will require increased resources and funding.**
- Additional funding should be provided to allow for pest control, maintenance and native reforestation, and to reflect the increased DOC land area.
- Furthermore, climate change will result in extreme weather and natural disasters which will require increased funding and resources.

Recommendation 8: Establish a five-year review of the land reclassification process

- This land reclassification process should be reviewed once a five years has passed. This is the first land reclassification process of this scale in Aotearoa New Zealand, and a number of issues are likely to come to light once the process has been completed.
- To help assist with this review, the dashboard of key metrics of each piece of land should be established and reviewed.
- Climate change and a number of other high-impact events will also have an impact on how land is used in the future. It is prudent to allow for this land to be reclassified if another use better fits the purpose of conservation.
- A wider reassessment of how stewardship land is classified and which classification categories exist is likely to occur. A five-year review will allow any changes to the reclassification process to be incorporated.

Background: By the numbers

Total conservation land

32% of New Zealand's total land area is in conservation areas (8.5 /26.8million ha.), being land or foreshore held under the Conservation Act 1987).

There are 3 types of conservation land:

- (i) park areas;
- (ii) wildlife and habitat protections; and
- (iii) Reserves and specially protected areas.

Total stewardship land

10% of New Zealand's total land area is held as stewardship land (2.7/26.8 million ha.) under the Conservation Act 1987.

3000 pieces of stewardship land exist.

This proposal is **nationally significant.**

It makes up:

2% of all land

(0.6/26.8) This proposal relates to 0.6 million ha. of stewardship land.

7%

of all conservation land (0.6/8.5).

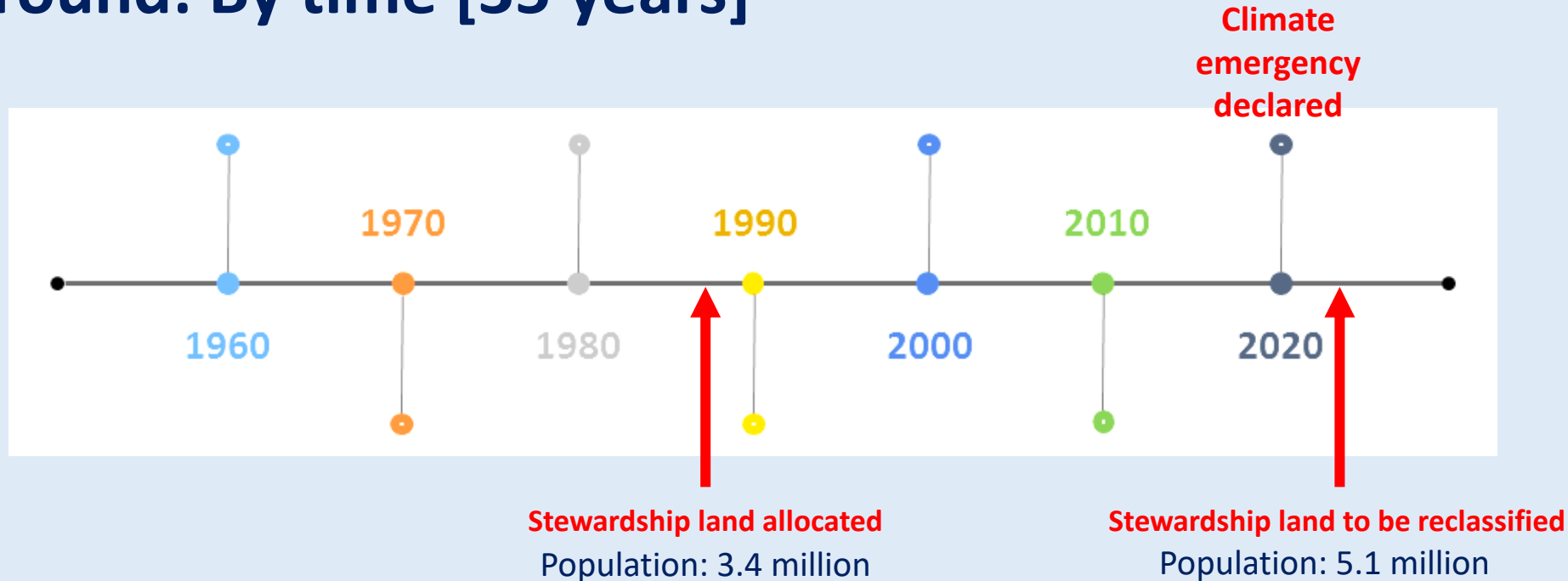
22%

of all stewardship land (0.6/2.7).

17%

of all pieces of stewardship land (504/3000). This proposal relates to 504 pieces of stewardship land.

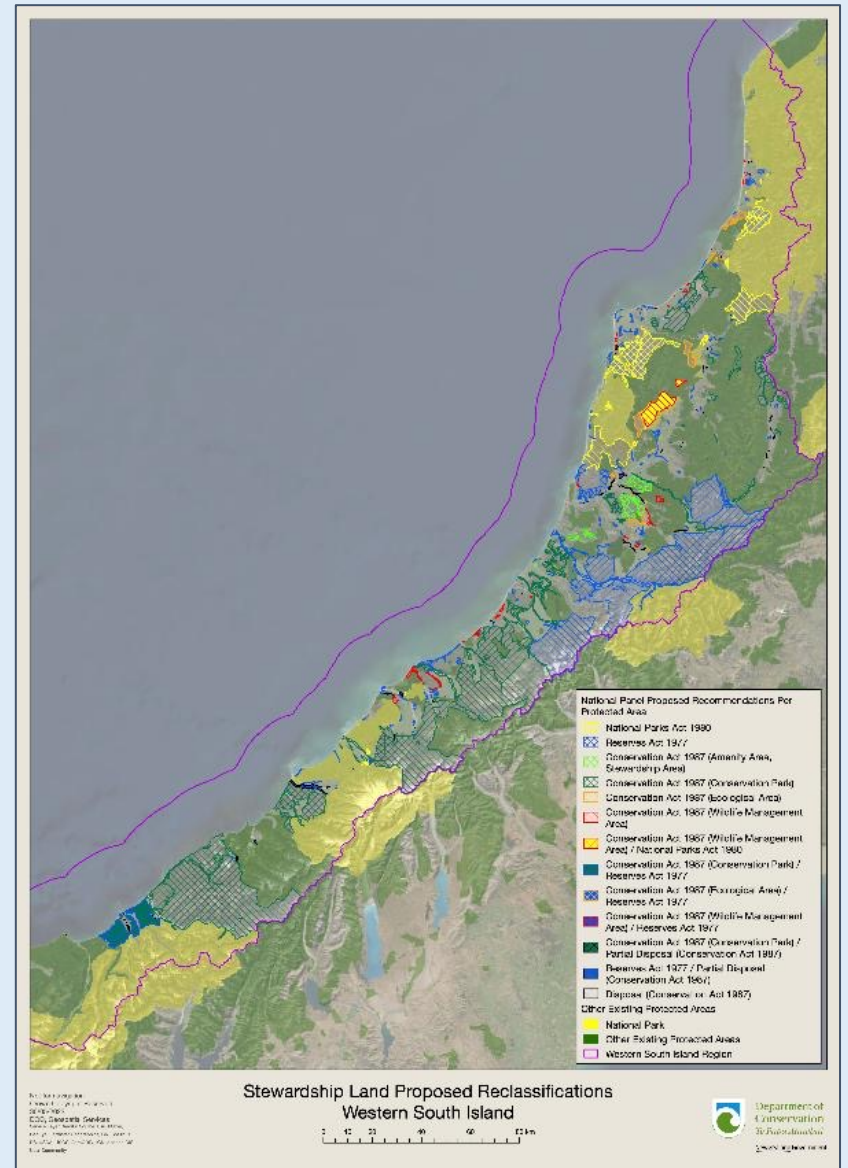
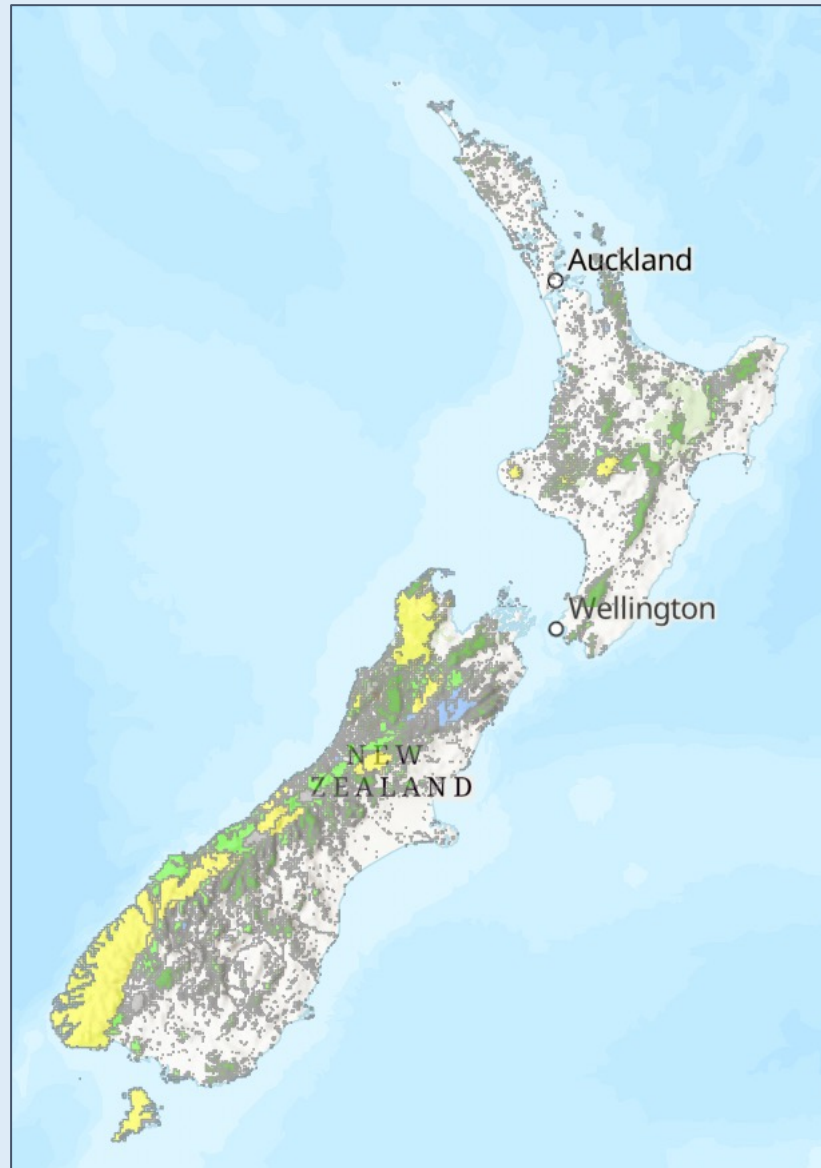
Background: By time [35 years]



- **1987:** Conservation Act 1987 passed. Stewardship land is allocated to DOC without a land classification system.
- **28 May 2021:** The national panels were announced by the Government as part of measures to streamline the stewardship land reclassification process and to ensure appropriate layers of protection. It was anticipated to take about eight months for each panel to undertake their work and provide recommendations.
- **30 May 2022:** DOC opens public notification period. Initially closing 25 July 2022, it was further extended 20 working days to 23 August, 2022 (making a period of 40 days in total).

Background: By land

DOC is working through a process of reclassifying stewardship land so it has the appropriate layers of protection. Stewardship land is protected under the Conservation Act and cannot be disposed of unless there is **no or very low conservation value**.



Rationale 1: The biodiversity crisis



Our indigenous ecosystems and species are in a **state of rapid decline**, due to a combination of factors including commercial and human use and pollution of land, increasing invasive pests and diseases and climate change and extreme weather changes.

We continue to lose fundamental ecosystems and habitats including tussock grasslands, sand dunes, indigenous scrubland and indigenous forests. **Once these species are lost, we cannot bring them back.**

With many of our species and habitats at risk of disappearing forever, the Government's 2020 biodiversity strategy sets the scene in stark terms:

'Despite all that we are doing to try to protect and restore habitats and assist species, Papatūānuku and New Zealand's indigenous biodiversity is in crisis. Around 4000 species are threatened or at risk of extinction. Many plants and wildlife continue to decline or are just hanging on. We need to act urgently to ensure that nature is healthy and thriving for its own sake and for current and future generations.'

The strategy – full title [Te Mana o te Taiao: Aotearoa New Zealand Biodiversity Strategy 2020](#) – contains staggered goals for the years 2025, 2030 and 2050. The task of achieving those 2025 goals falls to the recently released [Biodiversity Strategy Implementation Plan](#).

Rationale 1: The biodiversity crisis cont.



Aotearoa New Zealand is internationally recognised as a centre of biodiversity due to a significant proportion of endemic plant and animal species. As well as working to protect the health of our environment, these species also provide a powerful part of our tourism industry and our worldwide reputation as ‘100% pure New Zealand’.

As stated by the Ministry for the Environment in *Our Land 2021*:

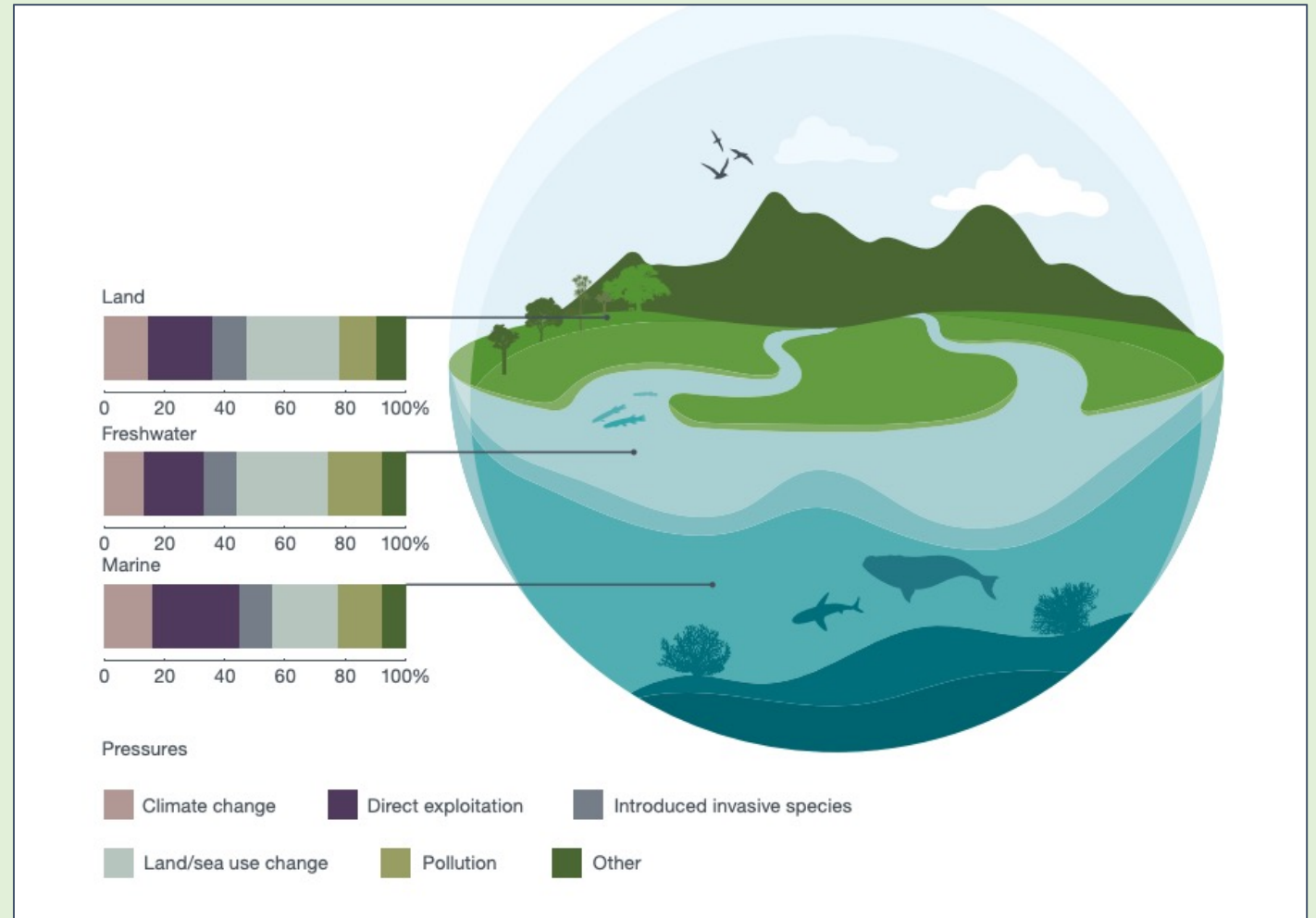
New Zealand’s landscapes are spectacularly diverse – sand dunes, active volcanoes, braided rivers, alps, and fiords. These landscapes allowed a huge range of land ecosystems to develop – 152 major classes and 71 rare ecosystems – all with distinct plants and animals.

Rationale 1: The biodiversity crisis cont.

DOC's Report on *Biodiversity in Aotearoa* report presents five overarching pressures that are recognised as having the largest impact on biodiversity (Fig. 2):

- Changes in land and sea use
- Direct exploitation
- Climate change
- Pollution
- Introduced invasive species (especially in island nations such as Aotearoa).

Changing the way we protect stewardship land means we can protect biodiversity in Aotearoa New Zealand.



Rationale 1: The biodiversity crisis cont.



Brewster Hut track. Source: Xiaomi Note westcoast.co.nz/?asset=3530-ig-17886910730645959

Why does protecting our biodiversity matter?

Environment NZ:

'Aotearoa New Zealand's biodiversity provides the life supporting systems that enable all organisms, including humans, to survive. Our wetlands purify water and help prevent flooding and drought. Indigenous forests provide carbon sinks and purify the air we breathe as well as providing recreation and amenity values. Forests provide products such as timber, fuel, food and medicines. Our farming, forestry and horticulture depend on the resources and services provided by biological systems.'

Indigenous biodiversity is often found nowhere else in the world. It is important to New Zealand's environment, culture, society and economy. For Māori, the connection with nature is one of whakapapa (kinship).'

Rationale 1: The biodiversity crisis cont.

Proportion of Aotearoa New Zealand's species found nowhere else on earth

72% 
OF BIRDS (LAND,
FRESHWATER AND MARINE)

84% 
OF VASCULAR PLANTS
(LAND AND FRESHWATER)

81% 
OF INSECTS
(LAND AND FRESHWATER)

7% 
OF MARINE MAMMALS

88% 
OF FRESHWATER FISHES

100% 
OF REPTILES, FROGS, BATS
(LAND AND FRESHWATER)

Figure 3. Proportion of New Zealand's indigenous species found nowhere else on Earth. Data does not include extinct species. Sources: Macfarlane et al. (2010); Gordon (2013); NZTCS (2019).

Rationale 1: The biodiversity crisis cont.

New Zealand vegetation cover before human occupation (740 years ago) and in recent times (2018/19).

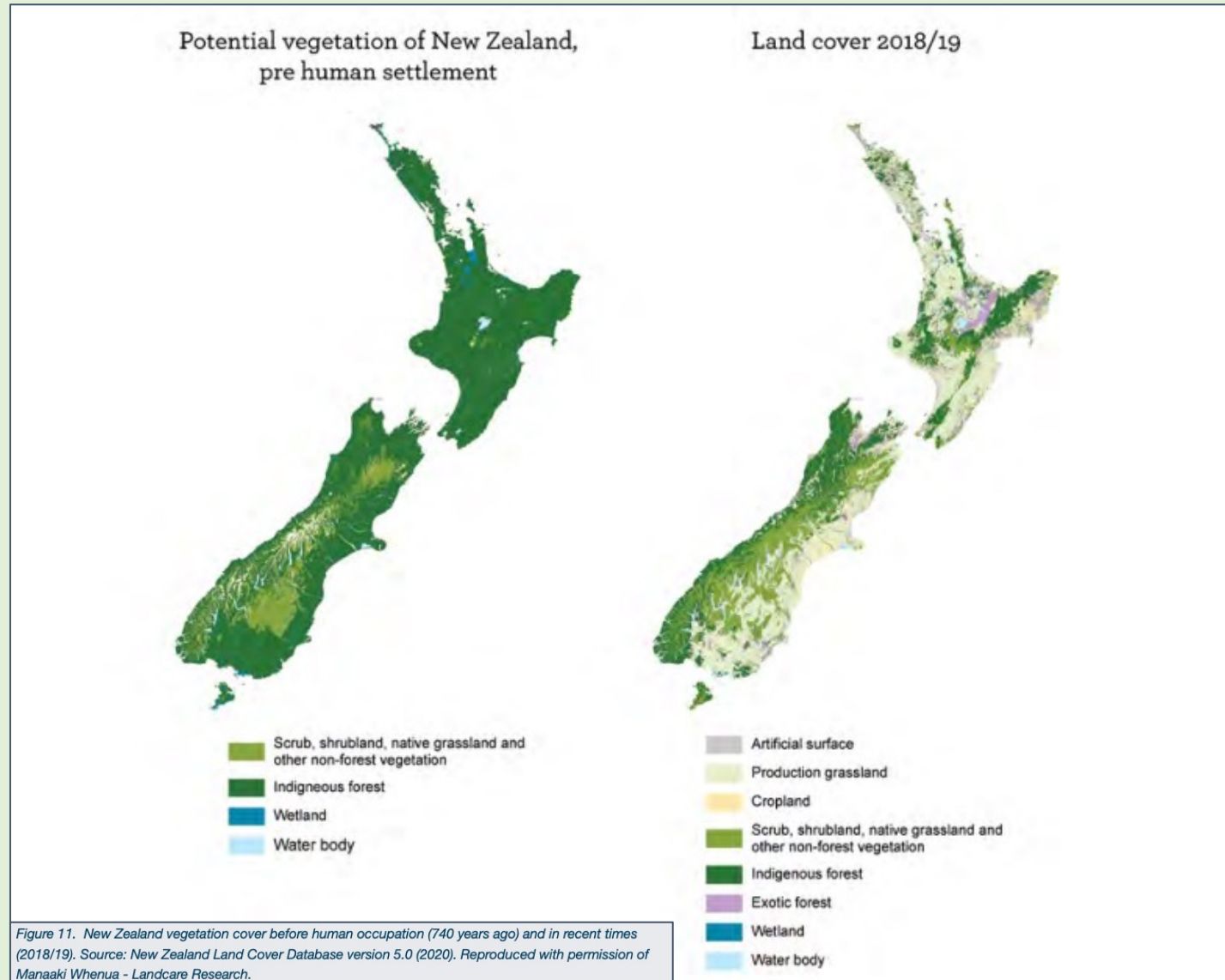


Figure 11. New Zealand vegetation cover before human occupation (740 years ago) and in recent times (2018/19). Source: New Zealand Land Cover Database version 5.0 (2020). Reproduced with permission of Manaaki Whenua - Landcare Research.

Rationale 2: The climate emergency

Climate change is impacting our environment.

Biological changes are being observed globally and in New Zealand. These include shifts in the range of some species, and earlier timing of leaf-unfolding, bird migration, and egg-laying in some species. We cannot predict precisely what will happen, but we know there will be a number of changes which will increase pressure on species and their habitats.

Other impacts are changes to marine and land ecosystem productivity and disruption of freshwater ecosystems due to warmer water and lower flows in rivers and streams. **Protecting our biodiversity can help provide stability and resilience as we adapt to the fluctuations and disturbances brought about by climate change.**

Rivers in particular will need room to move as extreme weather and natural disasters change their movement patterns.

We have a unique and irreversible opportunity here to use stewardship land to protect our biodiversity and work to mitigate the future impacts of climate change.



Source: wrc.govt.nz/council/careers/living-on-the-west-coast

New Zealand's 10 most significant climate change risks, based on consequence and urgency

National Climate Change Risk Assessment for New Zealand (p. 14), Ministry for the Environment (2022).

Domain	Risk	Rating	
		Consequence	Urgency (44–94)
Natural environment	Risks to coastal ecosystems, including the intertidal zone, estuaries, dunes, coastal lakes and wetlands, due to ongoing sea-level rise and extreme weather events.	Major	78
	Risks to indigenous ecosystems and species from the enhanced spread, survival and establishment of invasive species due to climate change.	Major	73
Human	Risks to social cohesion and community wellbeing from displacement of individuals, families and communities due to climate change impacts.	Extreme	88
	Risks of exacerbating existing inequities and creating new and additional inequities due to differential distribution of climate change impacts.	Extreme	85
Economy	Risks to governments from economic costs associated with lost productivity, disaster relief expenditure and unfunded contingent liabilities due to extreme events and ongoing, gradual changes.	Extreme	90
	Risks to the financial system from instability due to extreme weather events and ongoing, gradual changes.	Major	83
Built environment	Risk to potable water supplies (availability and quality) due to changes in rainfall, temperature, drought, extreme weather events and ongoing sea-level rise.	Extreme	93
	Risks to buildings due to extreme weather events, drought, increased fire weather and ongoing sea-level rise.	Extreme	90
Governance	Risk of maladaptation across all domains due to practices, processes and tools that do not account for uncertainty and change over long timeframes.	Extreme	83
	Risk that climate change impacts across all domains will be exacerbated because current institutional arrangements are not fit for adaptation. Institutional arrangements include legislative and decision-making frameworks, coordination within and across levels of government, and funding mechanisms.	Extreme	80

Rationale 2: The climate emergency cont.

The environment is going to suffer under pressure from extreme weather and natural disasters. As noted by NZ Forest & Bird, conservation land will be useful in protecting New Zealand from future climate shocks:

‘Even the small amount of conservation stewardship land with low conservation value may be important areas for climate change mitigation and adaptation. The recent IPCC report emphasised the mitigation potential of improved management and restoration of forests and other ecosystems. New Zealand’s Climate Change Commission recommendations to Government included creating 300,000ha of new native forest between 2021 and 2035. For this to succeed it will be crucial to retain any degraded areas of public conservation land which could be restored to healthy native forest.

There may also be areas of stewardship land which are degraded or former wetlands. New Zealand has lost 90% of its original wetland extent, and environmental organisations are calling for doubling of our area of wetlands. It is worth assessing whether any stewardship land under review could be restored as a wetland.’

Stewardship land should not be disposed of, but should be retained as it will prove important to mitigate the impacts of a changing climate.

Rationale 2: The climate emergency cont.

Changing the way land is categorised and used can reduce emissions and greenhouse gases that are already occurring in the atmosphere. Where possible, **it should be considered how conservation land can be used to restore native forest and meet the Climate Change Commission recommendations to Government, including creating 300,000ha of new native forest between 2021 and 2035.**

As stated by the Ministry of the Environment in *Our Land 2021*:

Rising temperatures on land and in the ocean will translate into effects on land and how it can be used (IPCC, 2019). The climate has always shaped the types of ecosystems and land use that are possible in a given place, but it will increasingly influence the range of possible land uses in a particular area.

The Institute has also recommended a number of checks and balances to ensure management and reclassification can be adapted to face the issues created by climate change and extreme weather events as they arise. In the face of a changing world, flexibility to adapt is recommended. For instance, a national park area may suffer flood or fire damage, meaning adjacent land is required for conservation and species habitat.

Rationale 2: The climate emergency cont. – Extreme weather

Extreme weather events are happening now and are continuing to increase in intensity and occurrence.

These events will continue to impact all land in New Zealand, including how we value and use land. Humans, and all species, will have to adapt our lifestyles and change our habitats.

The West Coast in particular is already significantly affected.

As recently as 18 August 2022:

A state of local emergency has been declared for the Nelson Tasman and West Coast regions as heavy rain continues to fall causing flooding, slips that have closed roads and the evacuation of more than 200 homes. Nelson mayor Rachel Reese described the flood as a ‘one-in-100-year event’. It’s the result of another ‘atmospheric river’ weather event that experts say is likely connected to climate change.

Weather live updates: State of emergency declared for West Coast, Nelson-Tasman, warnings in place for North Island (as at 17 August 2022)



Coastguard New Zealand
about a month ago

- Red Warning
- Orange Warning
- Watch
- Heavy Rain
- Strong Winds
- Thunderstorm
- Heavy Snow
- Road Snowfall

Weather Warning

MetService New Zealand has upgraded Rain Warnings for Buller & Westland regions. Heavy Rain Warnings remain in place for Tasman, Marlborough Sounds, Richmond and Bryant ranges, Rai Valley, Nelson Region & Northland.

Significant heavy rain and strong winds are forecast for many parts of western New Zealand. Please ensure any boats on moorings or in marinas are secure, and double check marine forecasts in your area before boating this week.... [See more](#)

14 likes, 1 comment, 2 shares

Rationale 3: Compounded events – Biodiversity & climate change

As per the DOC, *Biodiversity in Aotearoa* (2020):

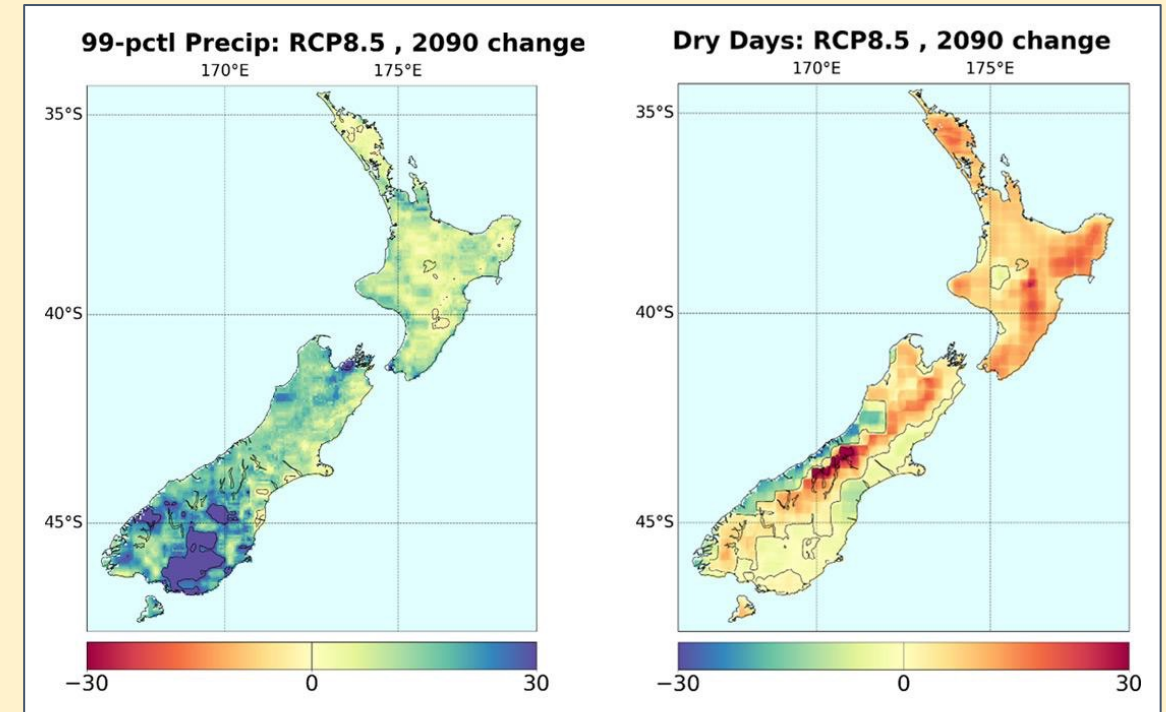
New Zealand's biodiversity will come under increasing pressure as a result of global climate change.

Pressures such as ecosystem fragmentation and pests will also likely be exacerbated.

It is difficult to know precisely how New Zealand's biodiversity will respond to climate change in the long term. This is partly because the country's climate is already highly variable, and partly because for land ecosystems many species and habitat types are now restricted in range as a result of vegetation clearance and the introduction of invasive pests.

The pressure to protect our biodiversity is increasing with climate change.

Projected changes in extreme precipitation (in %) and in the number of dry days per year by the end of the 21st century, for the ensemble-mean of 6 climate models under the highest CO₂ concentration scenario RCP8.5 from the IPCC 5th Assessment. (NIWA)



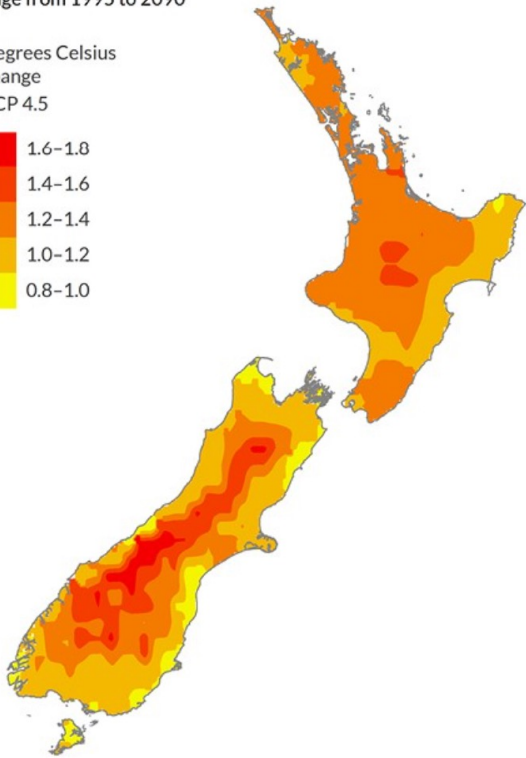
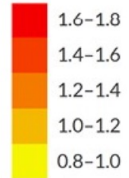
Old way: hotter/colder/wetter/drier

New way: magnitude, frequency, where, and when they compound

Chapter 5: Looking ahead: future emissions and climate How climate is projected to change

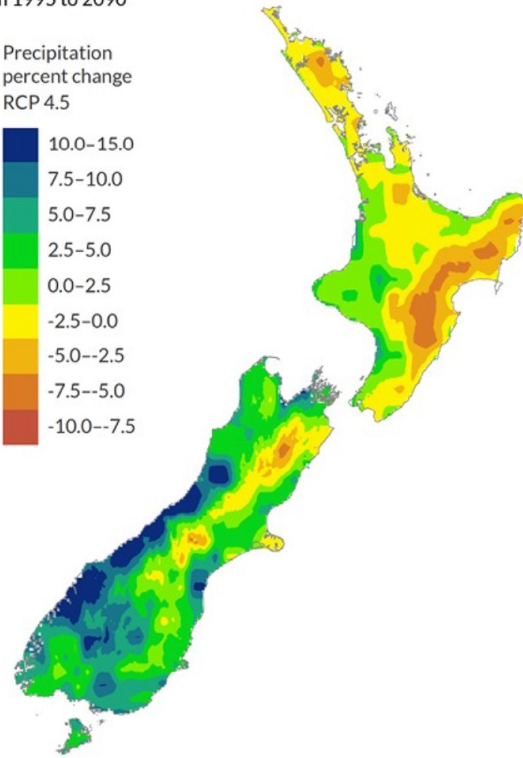
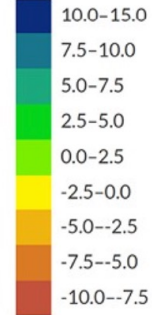
Projected annual mean temperature change from 1995 to 2090

Degrees Celsius change
RCP 4.5



Projected annual mean precipitation change from 1995 to 2090

Precipitation percent change
RCP 4.5



FAQ 11.2: Will climate change cause unprecedented extremes?

Yes, in a changing climate, extreme events may be unprecedented when they occur with...



Larger magnitude



Increased frequency



New locations



Different timing



New combinations (compound)

Figure 1: Confidence in the quality of data concerned with the occurrence of extreme climate events

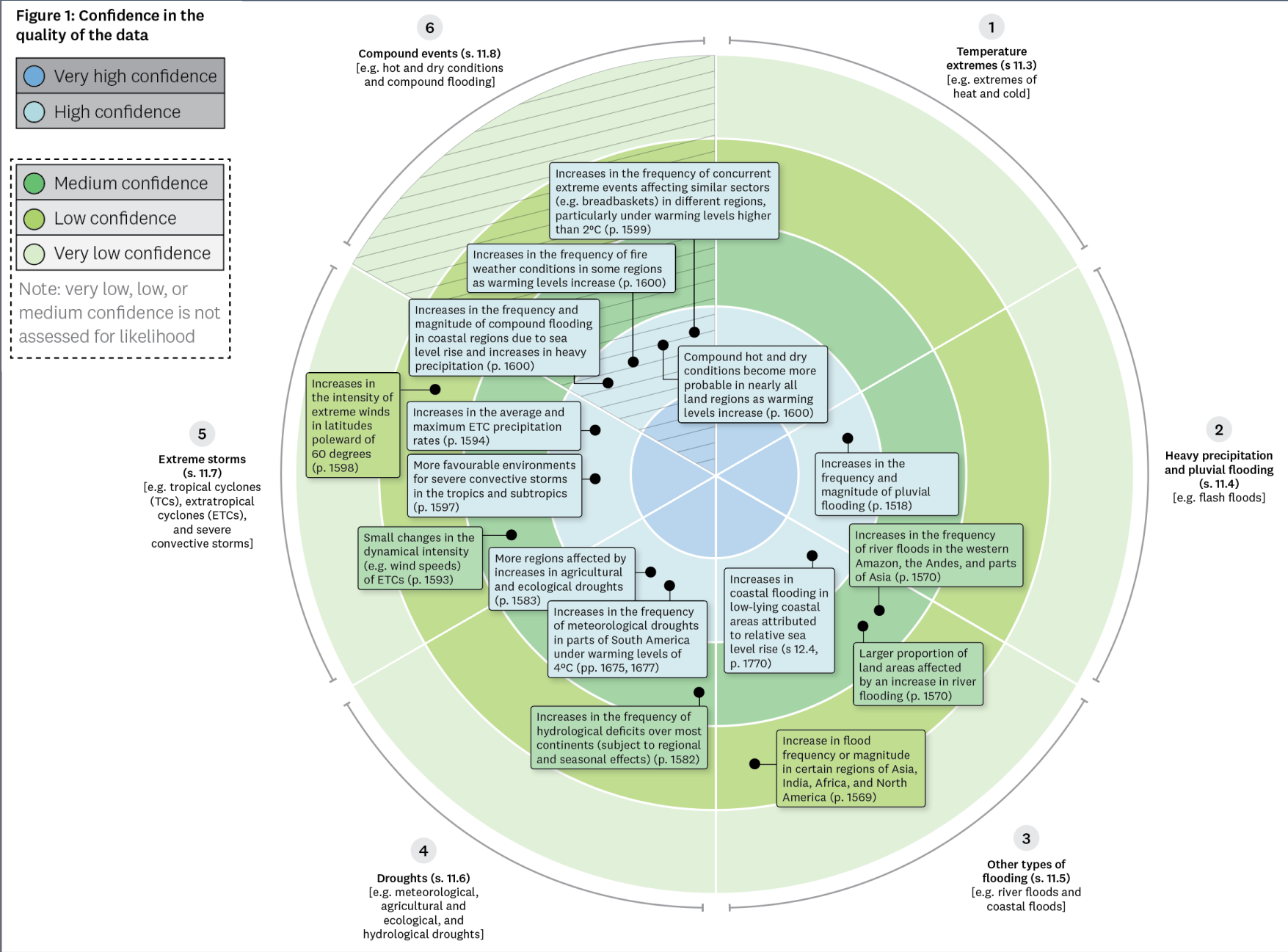


Figure 2: Likelihood of an extreme climate event occurring where there is high confidence or very high confidence in the quality of data

Figure 1: Confidence in the quality of the data

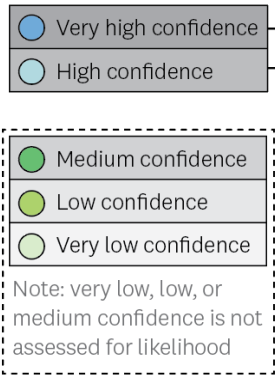
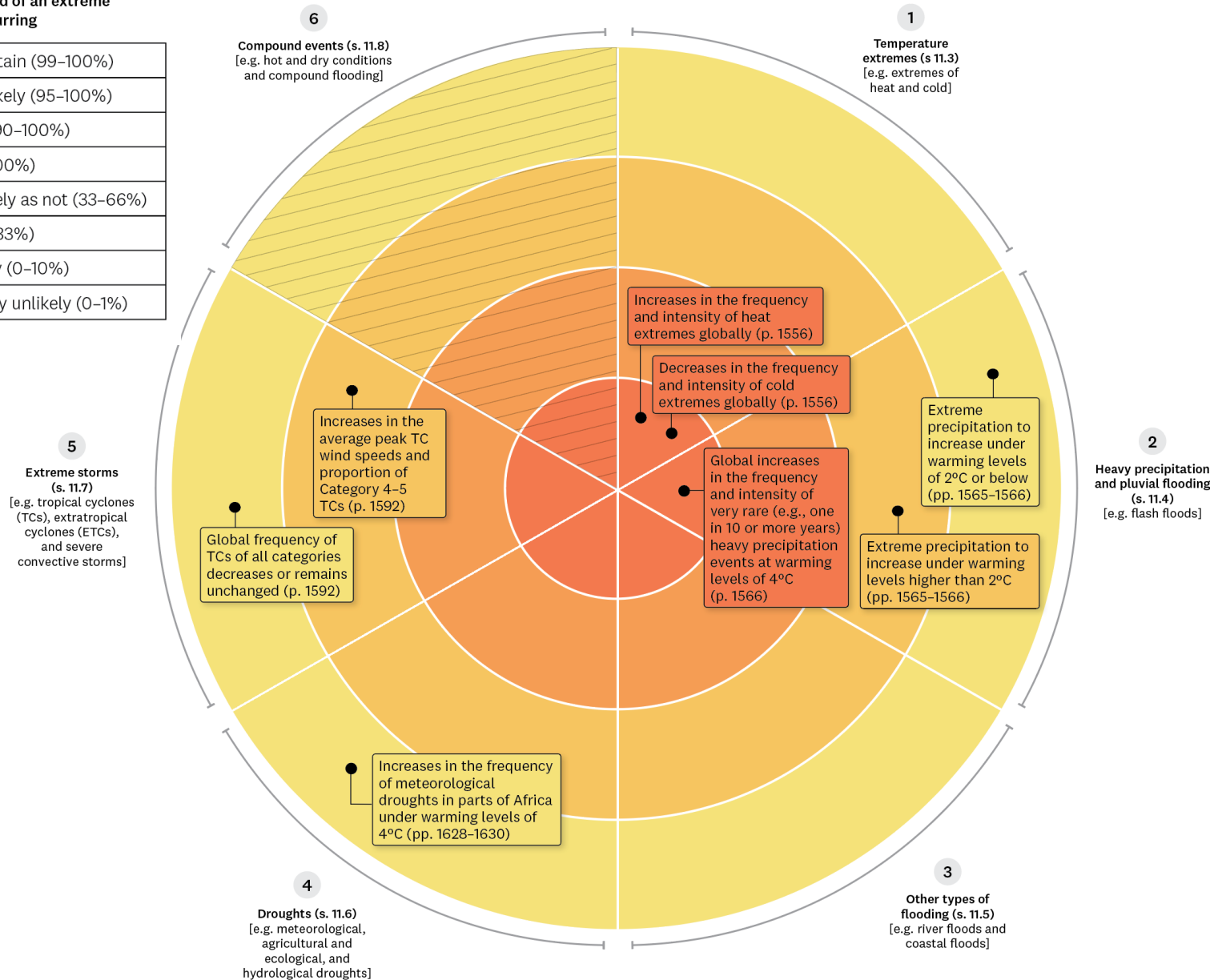


Figure 2: Likelihood of an extreme climate event occurring

● Virtually certain (99–100%)
● Extremely likely (95–100%)
● Very likely (90–100%)
● Likely (66–100%)
● About as likely as not (33–66%)
● Unlikely (0–33%)
● Very unlikely (0–10%)
● Exceptionally unlikely (0–1%)



Strategic solution: Create ecological corridors

- Ecological corridors (also known as biological or wildlife corridors) should be established along the length of Aotearoa New Zealand to connect national parks.
- Corridors will allow for species to travel freely between areas, improving species habitat, protecting biodiversity, and allowing native flora and fauna to thrive.
- Rivers are naturally highly connected corridors. Corridors will work to protect either side of rivers, allowing species to move along river pathways and mitigating the effects of climate change.
- **Stewardship land should be used to restore native forest and meet the New Zealand's Climate Change Commission recommendations to Government including creating 300,000ha of new native forest between 2021 and 2035.**
- **To protect conservation land for the future, more areas should also be classified with the highest level of protection as increased additions to national parks, including areas that create ecological corridors.**



Source: bioheritage.nz/state-of-biodiversity

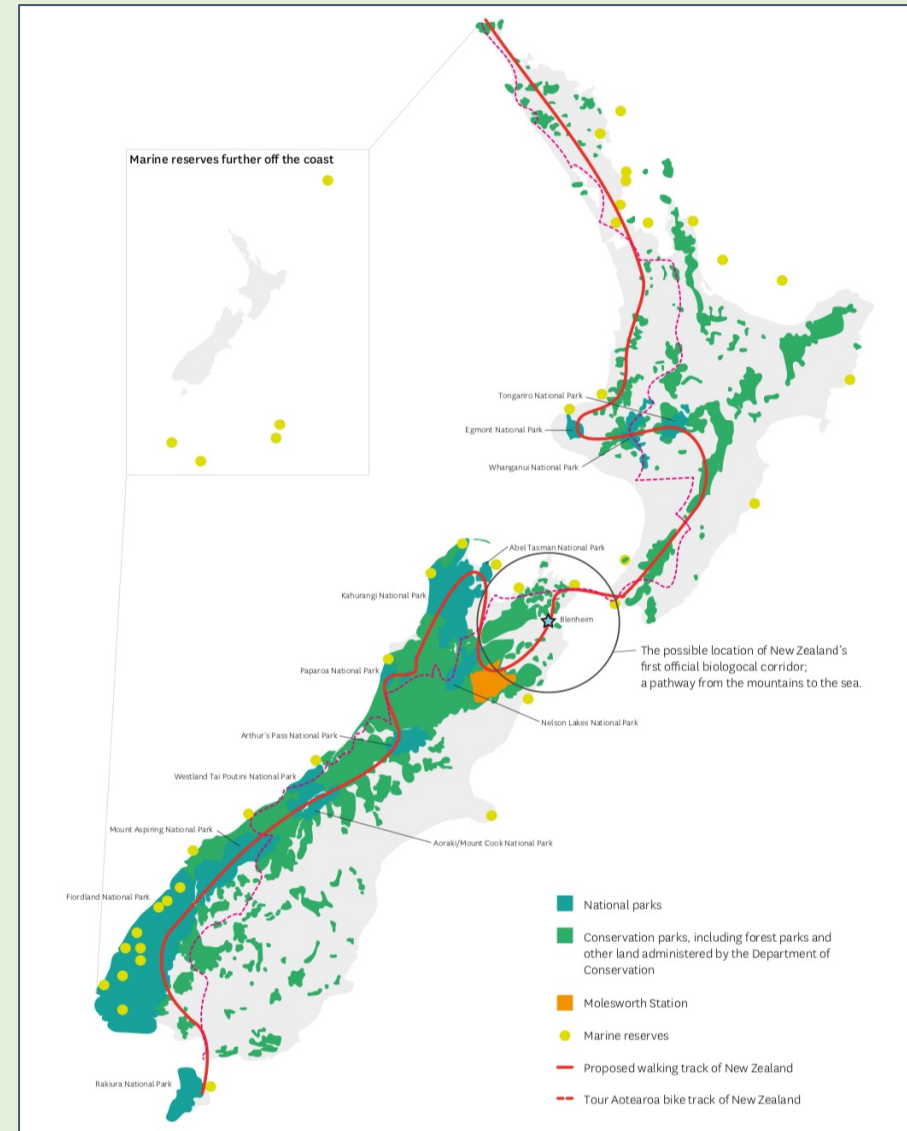
Strategic solution: Create ecological corridors cont.

Compared to its natural state, our country has been fragmented into separate 'islands' or blocks of land divided by roads, farms, urban areas, mines, dams, etc. This interferes with the natural landscape and ecosystem. Fragmentation of habitats means smaller and more isolated areas have a lower number of species.

The principle behind ecological corridors is the number of species declines where islands are smaller and further away from other islands. **Developing a corridor or connected path is considered to have high functional connectivity if it allows for a lot of individual dispersal and movement, and it supports ecological processes.**

Ecological corridors exist throughout North America, as well as a number in Aotearoa New Zealand, particularly in the Wellington region. The science supporting this began in the 1960s where scientists discovered small islands have a smaller number of species than large islands. Islands closer to a mainland have a higher number of species and the number of species declines the further they are from the mainland.

To ensure native Aotearoa New Zealand flora and fauna survive and thrive, large interconnected natural areas must be protected, prioritising size and connection for species to move. Stewardship land provides an opportunity to achieve this.



Strategic solution: Create ecological corridors cont.

Species loss is less likely to happen in large areas where lost species may be able to migrate back to their habitat. Large areas also have more area compared to perimeter length so suffer less from edge effect, which protects the species within the area.

Research shared by NZ Forest & Bird also establishes some general rules for ecological corridors, which should be considered in the reclassification process:

- Large reserves are better than small ones;
- A single large reserve is better than a group of small ones of equivalent total size;
- Reserves close together are better than reserves far apart;
- Round reserves are better than long thin ones; and
- **Reserves connected with corridors are better than unconnected ones.**



Strategic solution: Create ecological corridors cont.

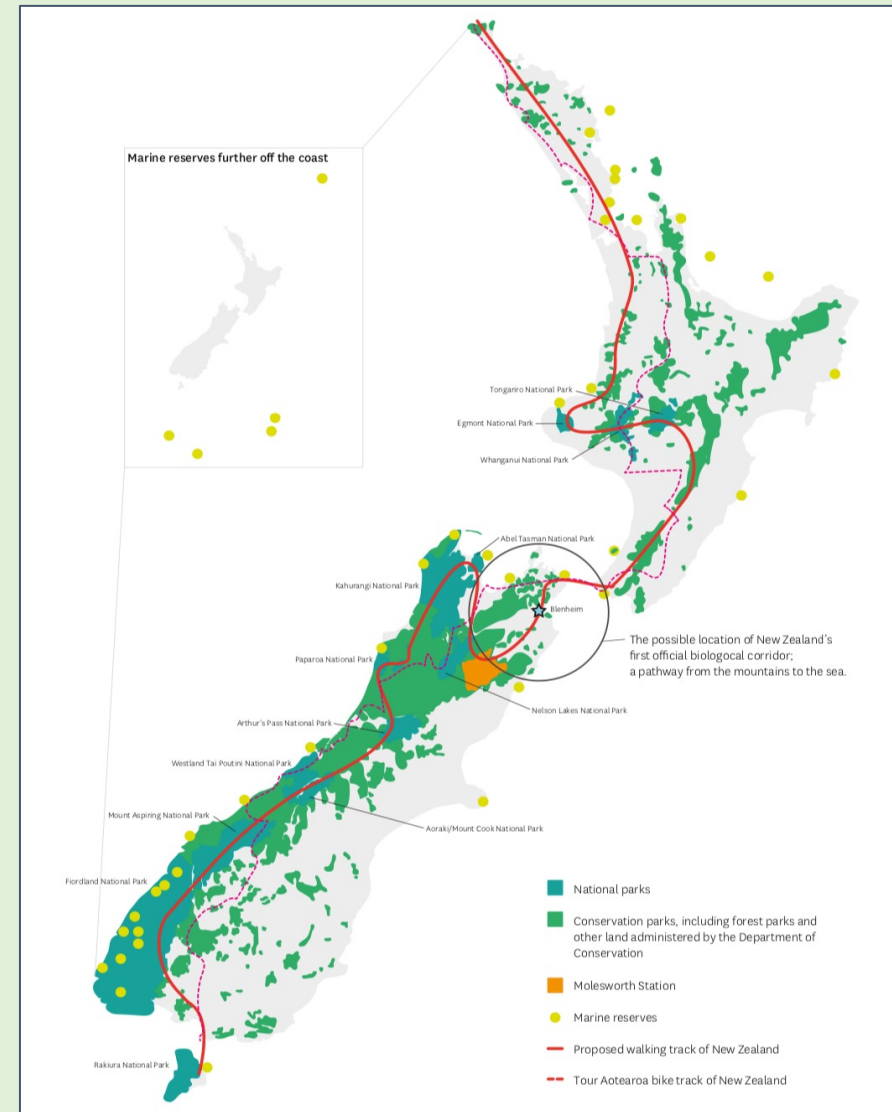
Isolated populations of wildlife or plants are less genetically viable and at much greater risk than connected populations.

Many species must migrate with seasons, roam to find mates, or change habitats to locate new sources of food.

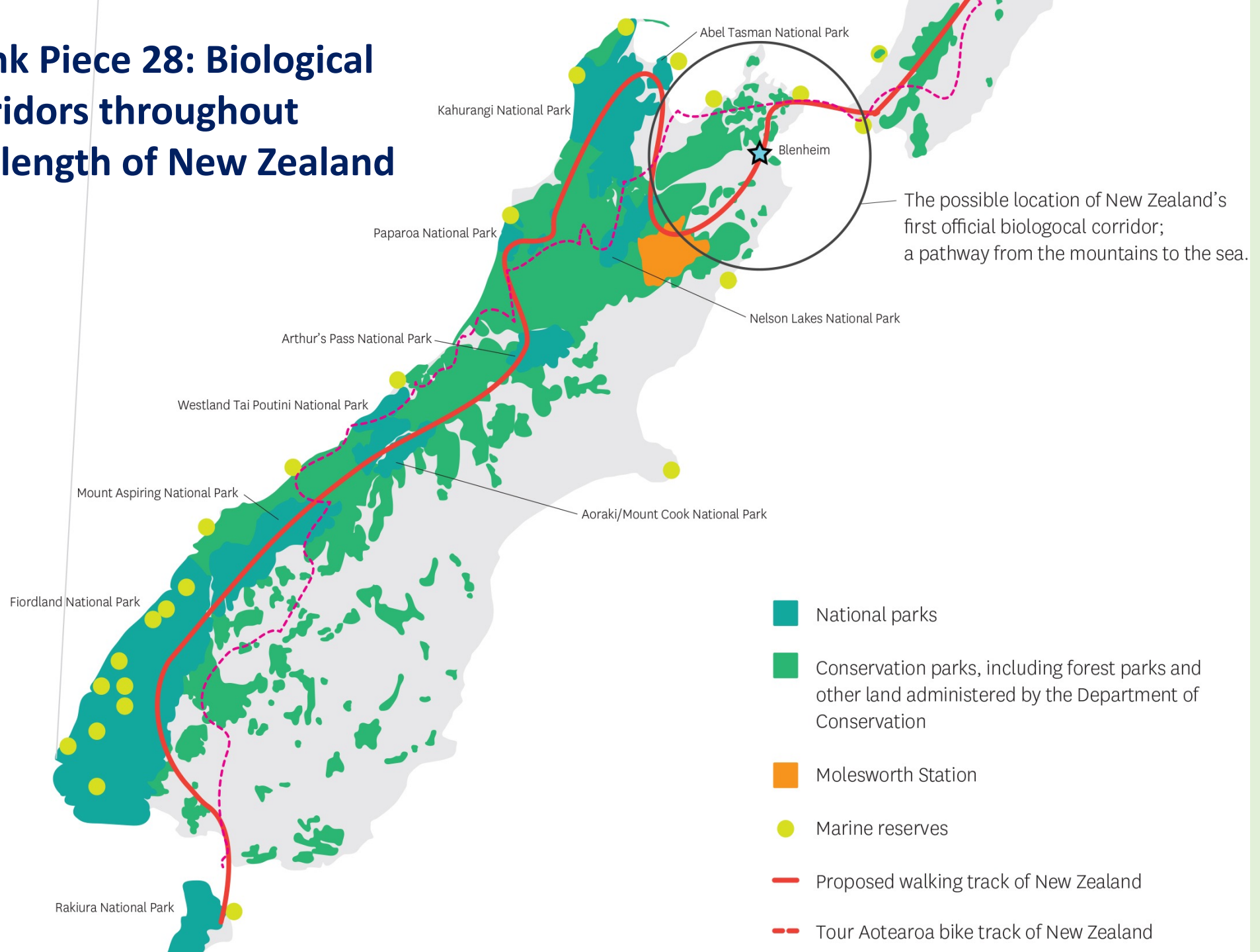
Fragmented populations are forced to inbreed, degrading their genetics. Fragmentation also hinders plants that rely on animals to widely disperse their seeds and pollen.

Where possible, public conservation land should be rehabilitated to help deal with native reforestation, enhance ecological buffer zones and maintain ecological diversity.

The Institute further supports all proposed additions to national parks and would like to see a greater number of areas adjacent to national parks given a higher level of protection, including making ecological corridors along the length of Aotearoa New Zealand.



Think Piece 28: Biological corridors throughout the length of New Zealand



Ecological corridors cont. – The Bhutan example

There is a provision in Bhutan's constitution stipulating that at least 60% of the country must be under forest cover. Today, forest cover comprises up to 70.46% of the total land area and an additional 8.60% of the country is now included in biological corridors.

Bhutan also has a network of ecological corridors connecting all its protected areas, which enables population intermingling, genetic diversity and greater resilience to current and future stressors for many wildlife species.

The country's forest cover is connected with a network of ecological corridors, allowing wildlife to move freely in their natural habitats throughout the whole country.

These corridors are part of why Bhutan is also a **'global biodiversity hotspot'**. Bhutan sets a precedent for conserving land for future generations.

The country's use of ecological corridors is an example of how Aotearoa New Zealand can shape its future and protect the environment for future generations.

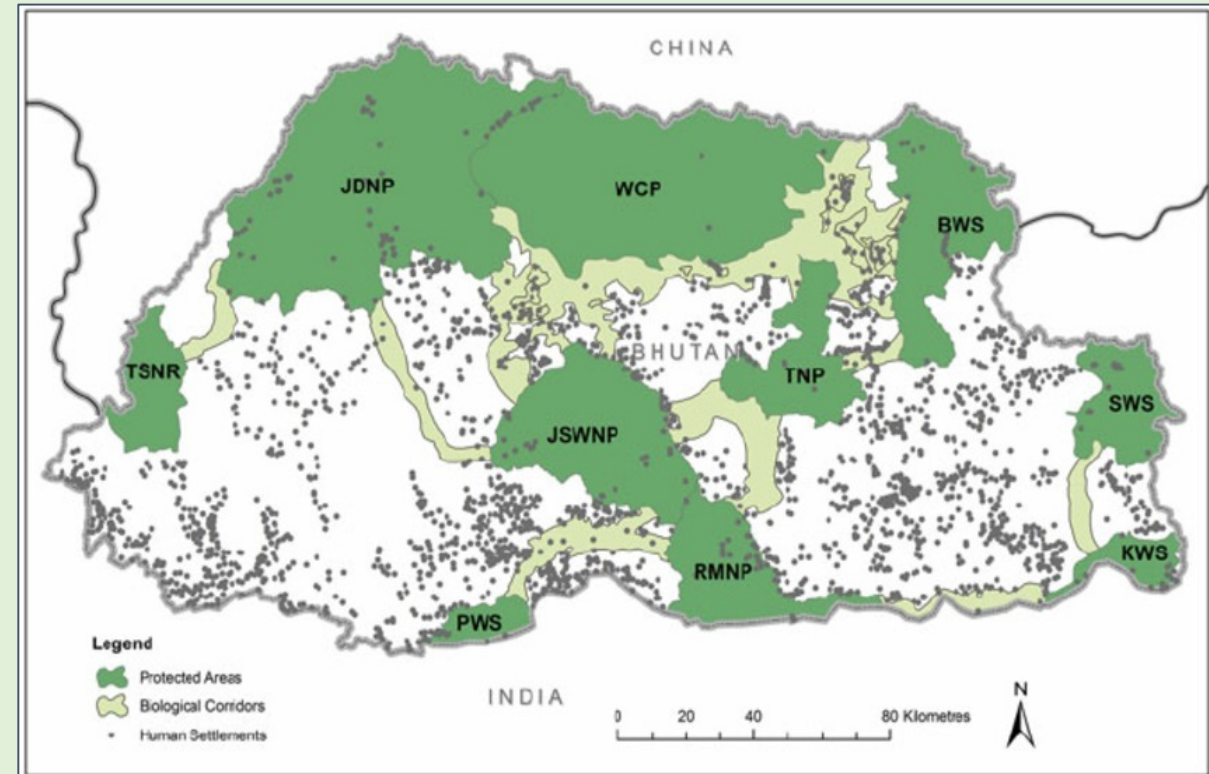


Image: From Rajaratnam, Vernes and Sangay, "A Review of Livestock Predation by Large Carnivores in the Himalayan Kingdom of Bhutan," *Problematic Wildlife – A Cross-Disciplinary Approach*.

Ecological corridors cont. – The Bhutan example

Rare images of wild tigers in Bhutan, captured by camera traps, show tigers and other animals using high-altitude wildlife corridors which are lifelines to isolated tiger populations and critical to genetic diversity, conservation and growth.

This image is of a wild tiger is captured on a camera trap in corridor eight in Bhutan.



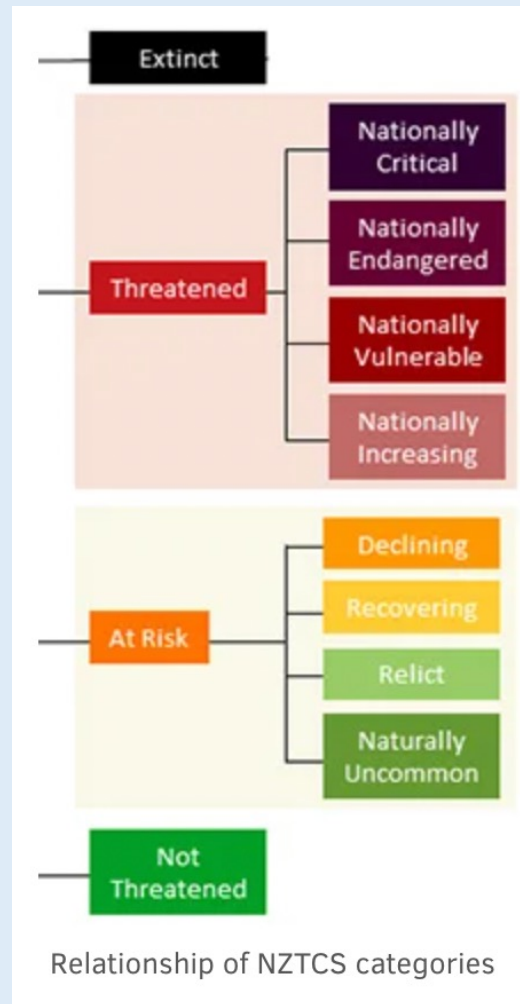
Photograph: Emmanuel Rondeau/WWF-UK. Source: <https://www.theguardian.com/environment/gallery/2017/aug/01/wild-tigers-of-bhutan-in-pictures>

Background: The scale of this task

Stewardship land includes some of our most spectacular landscapes and unique ecosystems. It is therefore likely to be home to many of the 4000 threatened and at risk plant and animal species identified by DOC (2019).

The stewardship land for reclassification on the West Coast has a **high conservation value** and **significant ecological importance**, including unique and breathtakingly beautiful mountains, forests and rivers.

This reclassification process provides a unique opportunity to protect and conserve our land for future generations, an opportunity which decreases once land is 'disposed of' and used for other purposes.



Source: westcoast.co.nz

Summary of key Institute recommendations

Key Institute recommendations:

- **Recommendation 1:** Ensure stewardship settings provide protection for current and future generations by increasing the number of areas with national park status.
- **Recommendation 2:** Create biodiversity corridors between national parks using existing stewardship land around rivers (where possible).
- **Recommendation 3:** Consider how stewardship land can be used to restore native forest to meet the Climate Change Commission recommendations to Government, including creating 300,000ha of new native forest between 2021 and 2035.
- **Recommendation 4:** Caveats placed on land (especially regarding mining and public access). Public access to be maintained (where possible).
- **Recommendation 5:** Establish a five-year review of the land reclassification process.
- **Recommendation 6:** Establish a dashboard to measure key metrics.
- **Recommendation 7:** Stage the land reclassification process.
- **Recommendation 8:** Increase DOC funding & resourcing.

Strategic solution: be the first to create an ecological corridor.

Further questions

The Institute is of the view that deeper analysis is required prior to making any ‘final’ decisions. This includes:

1. How would ‘low ecological value’ be valued for sale and what is the process for sale?

2. What (if any) land has been assessed as ‘highly productive/low ecological value’ land?

- The combined impact of climate change and the biodiversity crisis will have an irreversible impact on the way we use land, including how we produce and consume food.
- Food security is going to be an increasing concern over the future, an issue which will increase due to climate change and land may need to be repurposed into producing food. New Zealand will benefit from the ability to produce enough food for our population in times of crisis.

3. Have the Panels considered adding legal caveats to each piece of land?

- This is particularly relevant to pieces of land where mining may occur. Adding legal protection will ensure the land is protected from uses that would interfere with its conservation value. Another consideration is how legal protection could be put into place at certain environmental thresholds, particularly water quality, to ensure they are not exceeding high levels of pollution. If these thresholds are breached, the land classification could be reconsidered. Lastly, caveats may be a useful tool in ensuring public and iwi access is protected in the future.

4. Have the Panels considered how technology can impact conservation in the future?

- It is recommended the Panel considers reviewing their decisions and classifications after five years has passed and in staging the reclassification process. Staging the process will allow for adaptations to be made to match improvements in technology. It will also allow for analysis of key metrics (this could be part of the land dashboard) to ensure the decisions are reviewed and land receives the conservation status recommended.

Wednesday, 21 September 2022

Thank you
Ngā mihi

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