

Central North Island – climate risk, vulnerabilities and impacts 2025

2050 climate outlook

- **Rainfall/flooding:** Extreme rainfall events will be 2–3 times more frequent.
- **Rainfall/flooding:** These events will include an additional 10–15% of rainfall.
- **Drought:** Expectation of a 2-to-3-fold increase in the frequency of soil moisture droughts, by 20250.
- **Heat stress:** Risk of extreme heat stress for livestock remains low/moderate.
- **Drought:** Increasing drought is the largest climate hazard, increasing significantly over time.



Vulnerability to climate change

- Shelterbelts and plantings reduce erosion and wind risks and provide stock shade. Lower slope areas reduce erosion risk.
- Free draining Taupō ash/pumice soils mitigate flood impact.
- Lots of woodland increases wildfire risk.
- Good security of water supply but limited irrigation on free-draining soils.
- Erodible recent soils.



Improving climate resilience

Pasture and feed

- Diversify pasture species.

Animals and technology

- Utilise livestock with heat tolerance, feed efficiency and low-methane genetics.
- Use wearable technologies (e.g. e-collars).

Infrastructure

- Improve laneway durability and resilience.
- Improve energy resilience through localised generation.
- Maintain and progressively upgrade drainage capacity.
- Cover yards to reduce effluent contamination and capture water.

Trees, shade and shelter

- Increase tree cover for shade, shelter and erosion control.

People and operations

- Wet high-traffic areas (e.g. tracks around houses and sheds) to manage dust.
- Apply learnings from Northland biosecurity responses.

Climate change risk

