

Northland – climate risk, vulnerabilities and impacts 2025

2030 climate outlook

- **Drought:** Estimated 35% increase in frequency of soil moisture droughts by 2030.
- **Rainfall/flooding:** Potential for 35% increase in frequency of extreme rainfall events by 2030.
- **Heat stress:** Heat-related risks in Northland should be interpreted as chronic.
- **Wind/flooding:** Wind-related risks most likely associated with ex-tropical cyclones and thus occur as a compound wind-flooding hazard.



Vulnerability to climate change

- Limited economic impact of heavy rain events to date, some flood risk.
- Some economic impacts of major droughts noted.
- Farm types diversifying with new avocado orchard and dairy.
- Some hill areas are low producing and erosion susceptible.
- Increasing vulnerability to drought, extreme heat and erosion.
- Extensive land retirement to trees on some farms.



Improving climate resilience

Animals and technology

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

Infrastructure

- Improve energy resilience through localised generation.
- Maintain and progressively upgrade drainage capacity.
- Expand water storage and reticulation infrastructure.
- Incorporate climate scenarios into asset management decisions.

Trees, shade and shelter

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

People and operations

- Strengthen biosecurity planning and apply learnings from tropical pest and disease management.



Climate change risk

