

# Canterbury – climate risk, vulnerabilities and impacts 2025

## 2050 climate outlook

- **Rainfall/flooding:** Up to a doubling in frequency of extreme rainfall events by 2050, including over 10% more rain intensity in these events.
- **Drought:** Best-guess estimate of a double the frequency of significant soil moisture droughts by 2050.
- **Fire:** Risks from extreme fire weather are modest in the current climate but will worsen only slightly over the next several decades.
- **Heat stress:** Risks are judged to be moderate in the current climate but will worsen over the coming decade.



## Vulnerability to climate change

- Very little shelter for stock shade.
- Erosion risk low due to low slope angles.
- Water storage offsets high drought risk for region but is dependent on river and groundwater flows.
- Wind-exposed sites; low wildfire risk; slight flood risk.
- Increasing vulnerability to extreme heat and drought will develop through 2050 and beyond.



## Improving climate resilience

### Pasture and feed

- Diversify pasture species.
- Improve staff capability in feed budgeting.

### Animals and technology

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

### Infrastructure

- Install sprinklers in yards.
- Improve energy resilience through localised generation.
- Maintain and progressively upgrade drainage capacity.
- Expand on-farm water storage.

### Trees, shade and shelter

- Increase shade and shelter through tree planting.
- Proactively trim or remove ageing/damaged trees.

### People and operations

- Adjust working hours to avoid peak summer heat.

## Climate change risk

