

## **Key findings of the Canterbury Climate Change Risk Screening Interim Reports**

### **Canterbury's built environment**

The following 11 assets are at highest risk from climate change-related hazards: urban communities, rural communities, flood management schemes and stopbanks, water supply infrastructure, irrigation and water races, wastewater treatment plants, roads and bridges, rail, marine facilities, airports, solid waste and contaminated sites, and coastal barriers and seawalls.

Opportunities from climate change related to the built environment include more renewable energy due to increased sunshine hours, and increased efficiency of wastewater ponds in warmer temperatures.

Canterbury councils are undertaking existing actions for 10 of the 11 priority risks. These include capacity and protection works; hazard, risk/impact, and capacity assessments; management strategy evaluation; incorporating into 30-year Infrastructure Strategies; community engagement.

### **Canterbury's natural environment**

The following 13 systems or environments are most at risk from climate change: native terrestrial, freshwater, and marine biodiversity; ground and surface water availability and quality; water quality in marine, estuaries, harbours, lakes, and rivers; natural coastal habitats (such as dunes, estuaries, and rocky shores); coastal wetlands; lowland and coastal environments; mountain and hill country environments; alpine and high country environments; and terrestrial, freshwater, and marine pests and disease.

Opportunities from climate change related to the natural environment include the potential for better land use and ecosystem-based adaptation.

Local authorities are undertaking existing actions for 10 of the 13 priority risks. These include hazard and risk/impact assessments; planning rules to manage water abstraction; projects to enhance natural features that improve water quality.

### **Canterbury's human domain**

Direct and indirect impacts on health, mental health, wellbeing, community cohesion and stability, community resilience and the capability of government agencies are priority risks to the human domain.

Opportunities under the human domain include improved health and wellbeing because of warmer temperatures.

### **Canterbury's economy**

Sectors most at risk from climate change-related impacts include livestock farming, cropping, forestry, fishing and aquaculture, and tourism.

Growth in agriculture from a longer growing season and increased tourism from a longer summer season are opportunities from climate change.

### **Canterbury's governance domain**

Impacts on emergency planning, response and recovery operations; the ability to fund and maintain infrastructure and public services; the functioning of planning rules and policies; insurance and banking systems; the functioning of social service agencies; legal liability; water governance; and reputation of institutions are priority risks to the governance domain.

Opportunities in the governance domain include more empowered communities and access to new funding sources.

### **Canterbury's cultural domain**

Priority risks from climate change identified in a workshop with representatives from Ngāi Tahu include marae access and infrastructure, māhinga kai, cultural landscapes, freshwater availability, tāonga species, Ngāi Tahu investments, rangatiratanga and governance.