Ministry for the Environment Climate change impacts on New Zealand

Figure 03



TEMPERATURE

Temperature is expected to increase throughout the country. This will mean:

- decreased frequency and severity of frost
- more days above 25°C
- longer growing season
- increased rural fire risk
- increased demand for water
- increased occurrence of food and water-borne diseases



TOWNS AND CITIES

- increased stormwater flooding
- warmer winters: decrease in cold related illnesses
- warmer summers: increase heat stress
- decreased electricity use in winter (less heating)
- increased electricity use in summer (more air-conditioning)





WIND increased westerly winds in winter and spring (especially in the south), more north-easterlies in summer and autumn (especially in the north)



- increased precipitation

- increased intensity in weather events
- increased flooding particularly in already flood-prone areas
- increased slips
- increased soil erosion



COASTAL

- sea level rise
- increased storm surge
- coastal inundation
- increased coastal



- changes in length and area of glaciers
- rise in snowline
- reduction in snow days
- decrease in seasonal snow duration and depth



NATURAL AREAS

- species distribution changes
- changes to/loss of habitat
- increased pressure from pests, animals and plants



EX-TROPICAL CYCLONES*

- increased intensity
- increased wind, waves, storm surge and rainfall
- *Tropical cyclones, in travelling to NZ change their character, becoming slightly less intense but causing damage over a much wider area



decreased annual rainfall

- decreased run-off to rivers
- increased evaporation
- increased frequency and severity of drought
- increased irrigation demand