



## FIRE RISK

Many regions of New Zealand are expected to get warmer, drier and windier in the future. These changes will cause a significant increase in fire danger for some areas, meaning higher potential losses for forest growers.

## FUTURE FIRE DANGER

Fire risk is likely to rise significantly in many parts of Zealand as the climate changes. A doubling or even trebling of fire danger is possible in some areas as a result of higher temperature and decreased rainfall. Stronger winds and lower humidity will also contribute to higher fire danger.

Over the next two to three forestry rotations, the greatest relative (%) changes are projected in areas with a moderate current fire risk (e.g. coastal Southland, Dunedin, Wellington and Wanganui). In areas where fire dangers are currently highest (e.g. Gisborne and Christchurch) the risk is also expected to increase, by a further 5-10 days of very high and extreme fire danger.

Fire risks in other regions may remain the same or decrease due to higher rainfall. These areas include the West Coast of the South Island and areas of the North Island where fire dangers are already low, such as Taranaki and the Coromandel.

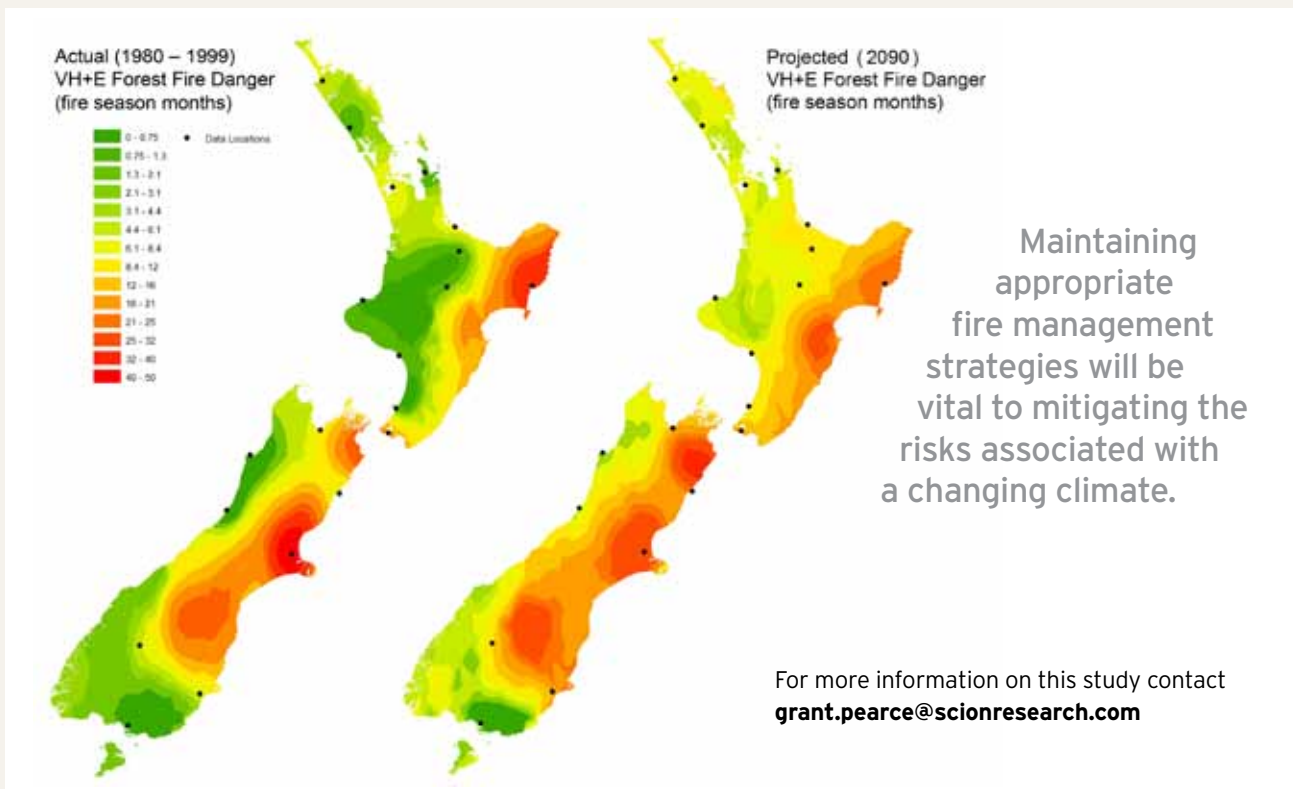
These results came from a study by Scion funded by the Ministry of Agriculture and Forestry. Knowledge of potential changes in future fire risk across New Zealand is important for rural fire agencies and forest growers.





## PROJECTED CHANGES IN FIRE RISK

The maps below show the pattern of projected changes in the average number of days per year of Very High and Extreme (VH+E) fire danger.



### Climate change will affect planted forests in New Zealand

Over the next two or three forestry rotations, NIWA projects the following likely climate trends in New Zealand:

- Warmer by about 2.0°C (mid-range projection)
- Wetter in the west and drier in the east
- More extreme weather events

Some of these changes will create opportunities. Others will require higher levels of risk management.