



# Preparing for El Niño



**F**orecasters are predicting that the strong El Niño conditions of spring 2015 will continue over summer and into autumn 2016. El Niño 2015/16 could rank amongst the four strongest El Niño events recorded.

Every El Niño is different and its impacts on New Zealand's climate cannot be easily predicted. During El Niño, New Zealand generally experiences stronger or more frequent winds from the south-west in spring and west in summer, typically leading to cooler temperatures, more rain in the west and drier conditions in the north and east.

El Niño will increase the chances of more frequent and extreme adverse weather events so you need to think about how you will manage your way through. Hope for the best but plan for the worst.





## WHAT YOU CAN DO



Have a plan in place with set dates for decisions depending on climate conditions. Discuss your plan with trusted advisers and update it over time.



Make decisions early and take action.



Pastoral farmers – feed is key. Based on your up-to-date feed budget, conserve true feed surplus and assess the potential for summer feed crops.

Implement and monitor a feed budget to meet your planned stock numbers, and act on deficits early. Prioritise stock classes for destocking early and feed the remaining stock as well as possible to maximise income.



Use irrigation water efficiently and plan for water restrictions.



Have a robust and realistic budget, and monitor it.

## WHAT IS EL NIÑO?

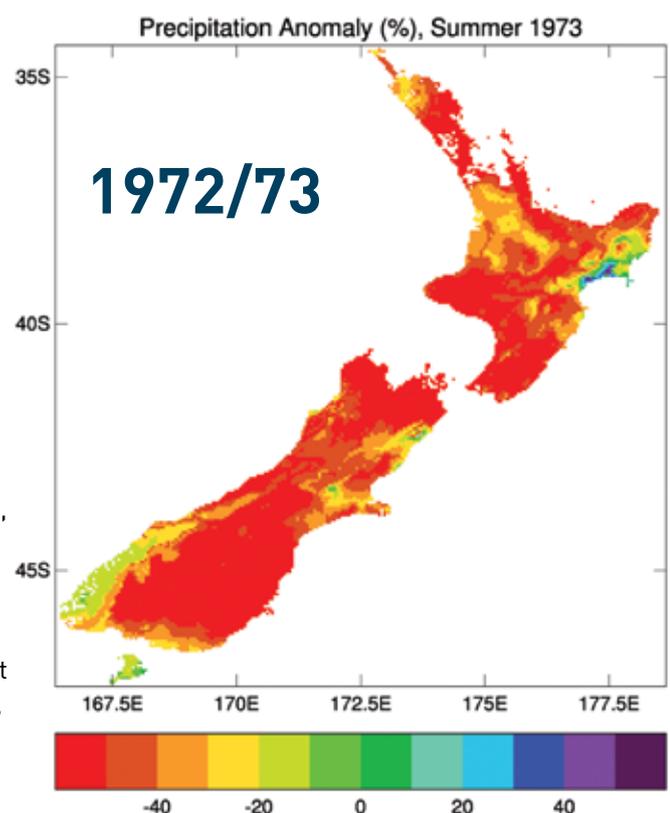
El Niño is the extreme end of a natural cycle known as the El Niño Southern Oscillation, during which major changes in atmospheric and oceanic circulation result in a sustained period of warming in the central and eastern tropical Pacific.

El Niño occurs every 3-7 years on average, during which easterly Pacific “trade winds” weaken for a prolonged period or even reverse direction, moving warm surface waters eastward along the equator and preventing cold, deep water from upwelling on the tropical west coast of South America. This leads to extensive warming of large regions of the ocean and influences weather patterns across the Pacific.

Typically, El Niño peaks during the late Southern Hemisphere spring or early summer, and weakens in the following year. In moderate to strong El Niños, sea surface temperatures are typically 2–3°C above normal at their peak. Sea temperature anomalies at about 100m depth below the surface can be even larger. This year, there are reports of sub-surface temperatures reaching 5°C above normal in parts of the eastern tropical Pacific, which suggests the current El Niño development is relatively strong.

In El Niño years, New Zealand tends to experience stronger or more frequent winds from the west in summer, leading to drought in east coast areas and more rain in the west. In winter, the winds tend to be more from the south, bringing colder conditions to both the land and the surrounding ocean. In spring and autumn southwesterlies tend to be stronger or more frequent, providing a mix of the summer and winter effects.

### Difference in rainfall to the long term





Monitor seasonal forecasts, and extreme weather and fire warnings.



Talk to experts, such as your bank, accountant, vets, professional advisers, and peers who have survived this before.



Make time for yourself, your staff and your family. Look out for your neighbours. Sometimes a few hours away from the business can make a huge difference.



Look after your animals – regularly monitor stock condition.



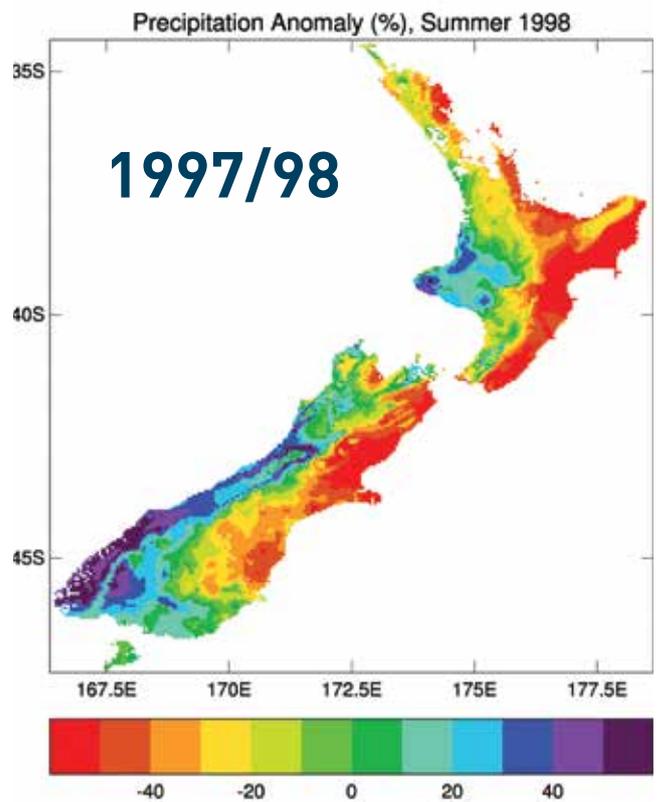
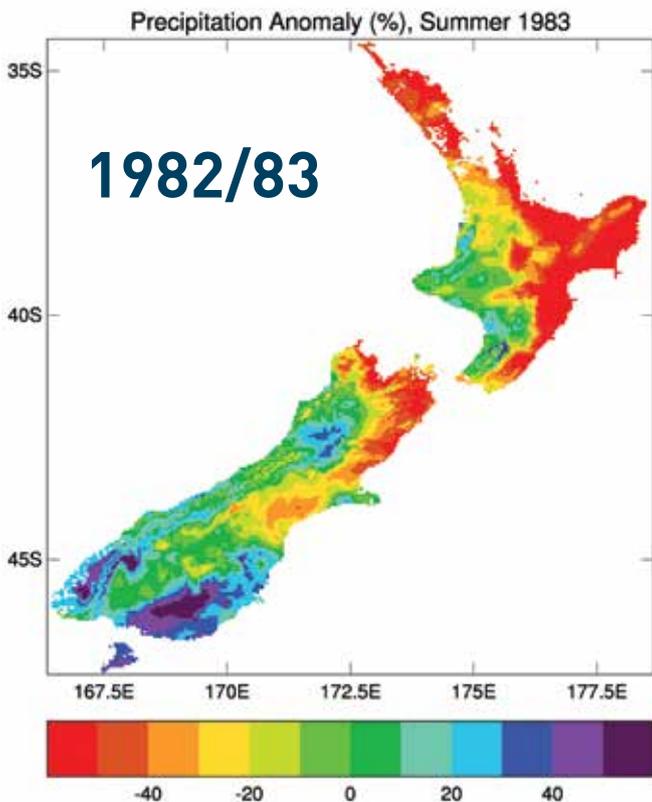
Ask for help if you need it.



If you are unsure where to go for advice or assistance, contact the Rural Support Trust to find out what your options are 0800 787 254.



## average for the three biggest El Niño years



## KEY CONTACTS AND FURTHER INFORMATION

- » **Rural Support Trusts** for advice about managing stress, and the range of financial assistance measures available. 0800 787 254 [www.rural-support.org.nz](http://www.rural-support.org.nz)
- » **Federated Farmers** for advice and support tools to help all farmers during adverse events such as flood and drought. 0800 Farming (0800 327 646) [www.fedfarm.org.nz](http://www.fedfarm.org.nz)
- » **DairyNZ** for advice for dairy farmers on dealing with drought, floods and the low payout. 0800 4 DAIRY NZ (0800 4 324 7969) [www.dairynz.co.nz](http://www.dairynz.co.nz)
- » **Beef + Lamb New Zealand** for advice for beef and sheep farmers on managing drought and other extreme weather events. 0800 233 352 [www.beeflambnz.com](http://www.beeflambnz.com)
- » **Horticulture New Zealand** for contact information for commercial fruit and vegetable growers and product groups. 0508 467 869 [www.hortnz.co.nz](http://www.hortnz.co.nz)
- » **Foundation for Arable Research (FAR)** for information on resilient cropping [www.far.org.nz](http://www.far.org.nz)
- » **Irrigation NZ** for advice on calibrating your irrigation system. [irrigationnz.co.nz/irrigator/irrigation-system-calibration/](http://irrigationnz.co.nz/irrigator/irrigation-system-calibration/)
- » **Rural Women New Zealand** for local community events and support. 04 473 5524 [www.ruralwomen.org.nz](http://www.ruralwomen.org.nz)
- » **Dairy Women's Network** for acquiring dairy business knowledge and skills (e.g. adapting budgets). 0800 4DAIRYNZ [www.dwn.co.nz](http://www.dwn.co.nz)
- » **Farmstrong** for advice on farmer wellness and wellbeing [www.farmstrong.co.nz](http://www.farmstrong.co.nz)
- » **Ministry for Primary Industries** for information on the classification of adverse events and where to go for help. 0800 008 333 [www.mpi.govt.nz](http://www.mpi.govt.nz)
- » **Work and Income** for advice on welfare support. 0800 559 009 [www.workingforfamilies.govt.nz](http://www.workingforfamilies.govt.nz)
- » **Inland Revenue** for information about tax relief, contact your tax agent or Inland Revenue's emergency helpline on 0800 473 566
- » **NIWA: Daily Climate Maps** [www.niwa.co.nz/climate/daily-climate-maps](http://www.niwa.co.nz/climate/daily-climate-maps)
- » **Met Service:** Rain radar [metservice.com/maps-radar/rain-radar/all-new-zealand](http://metservice.com/maps-radar/rain-radar/all-new-zealand)
- » **Climate Cloud** collection of resources relating to the risks and impacts of climate change on land based businesses. [www.climatecloud.co.nz](http://www.climatecloud.co.nz)
- » **NIWA: Hotspot Watch:** [www.niwa.co.nz/our-science/climate/publications/hotspot-watch](http://www.niwa.co.nz/our-science/climate/publications/hotspot-watch)
- » **Your local veterinary practice**

