

Media release

27 May 2022



Three years of MetService Red Warnings for New Zealand's most severe weather

MetService Red Warnings are reserved for New Zealand's most extreme weather and since the National Weather Service introduced them three years ago (27 May 2019) there have been seven severe weather Red Warning events.

Six events have occurred in the last year (May 2021-May 2022) including the devastating Canterbury flooding at the end of May 2021 and the recent Gisborne and Wairoa flooding.

Damage to homes and properties, washed-out bridges, isolated communities, evacuated residents, toppled trees, and power outages are some of the impacts caused by these weather events which wreaked havoc in Fiordland, Westland, Canterbury, Buller, Taranaki, Gisborne and Wairoa. (See detailed list below.)

All but one of the seven MetService Red Warning events were for heavy rain and five resulted in local or regional states of emergency being declared.

MetService only issue Red Warnings when they expect widespread significant impacts, disruptions, and safety issues.

MetService Severe Weather Manager Elke Louw says, "We work closely with regional councils ahead of issuing the Red Warnings and during the events to understand local concerns. The more forewarning, we can provide, the more time communities have to prepare and stay safe."

MetService meteorologists provide up to date advice as events unfold to local Emergency Management crews, Waka Kotahi NZ Transport Agency on roading impacts, lines companies on the impact of strong winds on powerlines, media outlets, and the public through the MetService website, app and social media.

Three years on, Red Warnings are helping to grab people's attention.

Lisa Murray, Head of Weather Communications says, "We introduced the Red Warnings to make it easier for everyone to understand the level of severity of forecast weather. Now, people know - if it is red, it is serious!"

"Our warnings let people know when and where the severe weather is going to hit, and what impacts to expect. Our baseline message in these Red Warning events is to take immediate action to protect your whānau, and property and follow the advice of local authorities and emergency services."

Gary Knowles, Director Civil Defence Emergency Management, National Emergency Management Agency (NEMA) says, "MetService Red Warnings certainly raise awareness of incoming extreme weather, and this helps Civil Defence Emergency Management Groups and NEMA with preparing for potential impacts and getting the message out that people need to take action to keep themselves and their whānau safe."

MetService uses a three-tier colour-coded warning system. The use of colour-coded warnings linked to impacts is recommended by the World Meteorological Organisation, of which New Zealand is a member.

“As our climate changes the frequency and severity of weather events increases, the enhanced warning system is vital to get the information to everyone in Aotearoa New Zealand,” says Lisa Murray.

“We know from a scientific study into the Canterbury flooding a year ago that it was 10 – 15% more intense because of climate change. It is not surprising to see three Red Warning events related to the West Coast, because research tells us that we are more likely to see intense rainfall in this area as the climate changes further.”

END

Notes to editors

As New Zealand’s official provider of severe weather warnings, MetService provides land-based severe weather alerts through a system of Watches and Warnings.

There are two levels of warnings: an Orange Warning (orange hexagon graphic) and a Red Warning (red triangle graphic).

The majority of warnings issued by MetService will be orange. Red Warnings are reserved for the most severe weather events.

On **27 May 2019** MetService Red Warnings were introduced as part of the National Weather Service’s warning system.

Synopsis of the seven Red Warning weather events to date:

The Red Warnings listed below were all preceded by Outlooks, and either Watches or Orange Warnings, and in all cases contact with the Council and/or CDEM Group.

1. Fiordland flooding, 3-4 Feb 2020

Red Warning for Heavy Rain issued. Extreme rainfall event of 1000mm at Milford in 50 hours which caused significant flooding and major damage to SH94 isolating Milford and trapping tourists. Local states of emergency were declared in Fiordland and Southland. Flooding also experienced in other parts of Southland and Otago where Orange Warnings had been issued.

2. Canterbury flooding, 29-31 May 2021

Red Warning for Heavy Rain issued. Extreme rainfall event 300-400mm of rain over a 48-hour period which caused significant flooding in Canterbury, Rainfall totals of 200mm were observed along the Canterbury foothills, peaking at 540mm for the event at Mt Somers in the headwaters of the Ashburton River leading to widespread flooding, Infrastructure damage to many roads and bridges, power outages and isolated communities. States of Local Emergency were declared in Ashburton, Timaru and Selwyn, followed by a State of Emergency for the Canterbury Region as a whole.

3. West Coast flooding, 15-17 July 2021

Red Warning for Heavy Rain issued. This was an extreme rainfall event for Buller and Westland with 330-380mm of rain forecast. The heavy rain caused slips, rivers to break their banks and

Westport was cut off by widespread flooding, resulting more than 2000 residents being evacuated.

Local state of emergency declared for the Buller District.

4. Canterbury winds, 12 – 13 September 2021

Red Warning for Strong Winds issued. Northwesterlies were forecast to gust up to 160kmph in exposed parts of the Canterbury High Country but only reached as high as 130kmph. Impacts includes downed powerlines, trees, fences and a few flipped vehicles and many people in Canterbury were without power.

5. West Coast flooding, 1-3 February 2022 & Taranaki flooding, 5-6 February 2022

Red Warning for Heavy Rain issued. 500 - 800mm fell in 72 hours for central and southern Westland, with 170 - 350mm for Grey and 300 - 550mm for Buller. Hundreds of people were evacuated on Friday night due to flooding and a local state of emergency was declared in Buller district. Most of the damage from the heavy rain had been along the road network.

The rain moved its way up the country to the North Island throughout Waitangi weekend. A Red Warning for Heavy Rain was issued for Taranaki on the evening of 5 February, and it was hit by an extraordinary amount of rain in a very short burst. A few weather stations exceeded 400mm, with Cape Egmont, at sea level, receiving a typical July's-worth of rainfall in just four hours. Coastal and South Taranaki took the biggest hit, with roads washed out and flooding.

6. East Coast flooding, 23 March 2022

Red Warning issued for Heavy Rain. Gisborne Airport recorded a month's worth of rain in seven hours on Wednesday night with 86.9mm, while inland some places recorded totals of 200-300mm or more. The extreme rain event had major impacts with millions of dollars' worth of damage to property and infrastructure including the bridge at Tokomaru Bay being washed out isolating the community. Major roading impacts caused by raging rivers, slips and flooding, and damage to power lines, A state of emergency was declared for the Tairāwhiti region.

7. East Coast flooding, 12-13 April 2022

Red Warning for Heavy Rain issued for the Gisborne and Wairoa district from the passing of Ex-tropical Cyclone Fifi. The region was still recovering from the recent events and was again lashed by an extreme rain event, with 150-200mm of rain falling in some places in 24 hours. Impacts included significant flooding, bridges washed away, falling of trees, power outages and people were isolated after damage to several roads.

To get the most up-to-date information on severe weather around the country, sign up for our Watches and Warnings notifications on metservice.com or download the MetService mobile app.

For more information or for an interview with Lisa Murray please call andrea.tandy@metservice.com or 027 5700 721

Videos: the following videos are available for you to run with your story:

- Explainer of MetService Severe Weather Warnings (60sec or 3.30min version)
- Animation regarding the impacts of heavy rain and our Severe Weather Rain warning.

https://www.dropbox.com/sh/en0otkez3rzkgag/AAApRqI4zUI5_XlzG3HlwJeXa?dl=0