

Friday, 27 March 2026

NIWA's Hotspot Watch

A weekly update describing soil moisture patterns across the country to show where dry to extremely dry conditions are occurring or imminent. Regions experiencing significant soil moisture deficits are deemed "hotspots". Persistent hotspot regions have the potential to develop into drought.

Recent rainfall and current soil moisture conditions:

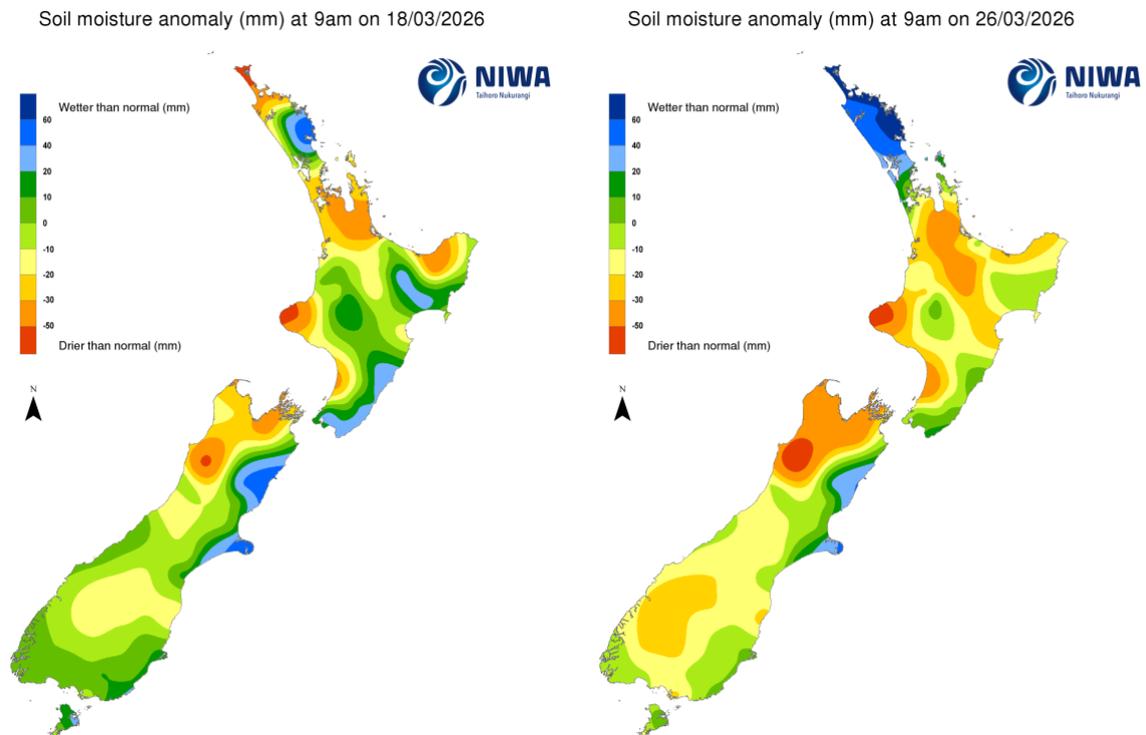
In the North Island, weekly rainfall totals of 100 to 200 mm were recorded for most of Northland, the Coromandel Peninsula and the north of Waikato, most of Bay of Plenty, and about Taranaki Maunga, with a few spots recording up to 200 to 300 mm of rain in Northland. In the Waikato about Hamilton and Tokoroa, and about Rotorua and in the east of the Bay of Plenty, 30 to 50 mm of rain were recorded. The remainder of Waikato and Taranaki, the north of the Manawatū-Whanganui, Gisborne, and Hawke's Bay recorded 10 to 30 mm of rain. The remainder of the North Island received less than 10 mm of rain over the past seven days, with many locations in the lower North Island recording no rainfall at all. Northland, Auckland, and the Coromandel experienced a large increase in soil moisture over the last week. Elsewhere, a moderate to large decrease in soil moisture occurred across the remainder of North Island. The driest soils, when compared to normal for the time of year, are found along the coast of Taranaki from New Plymouth to Cape Egmont. However, very recent rainfall is expected to result in an easing of the dryness. This should be reflected with subsequent soil moisture maps. The wettest soils, when compared to normal for the time of year, are in the east and the north of Northland.

The hotspots in Auckland and Northland have dissipated. The hotspot in the Hauraki District has grown and is now covering more of the eastern Waikato, with additional smaller hotspots near Taupo. Elsewhere, hotspots about the Manawatū-Whanganui coast near Foxton, along the South Taranaki coast west of Hāwera, and along the Taranaki coast from Cape Egmont to New Plymouth have all grown or strengthened. A new hotspot has formed in Hawke's Bay about Napier and Hastings. As of 24 March, the New Zealand Drought Index (NZDI) map shows abnormally dry conditions along the coast of the Horowhenua District, about the Taranaki coast, just north of Raglan northward into Auckland region.

In the South Island, weekly rainfall totals of 50 to 150 mm were recorded in the western Tasman region, with 30 to 50 mm recorded elsewhere in Tasman, and in pockets of Westland, Nelson, Marlborough, North Otago, and Fiordland. The remainder of the South Island generally recorded less than 30 mm of rain over the past week, with portions of Southland and Otago receiving no rain at all. A moderate to large soil moisture decrease occurred for the entire South Island. The driest soils in the South Island, when compared to normal for the time of year, are in Westland about Reefton. However, very recent rainfall is expected to result in an easing of the dryness. This should be reflected with subsequent soil moisture maps. The wettest soils, when compared to normal for the time of year, are in North Canterbury just south of Kaikōura and in Banks Peninsula.

The previous hotspot along the Nelson-Tasman border with Marlborough has strengthened and expanded, while the hotspot in the Marlborough Sounds has strengthened. An additional hotspot has formed in the Wairau Valley in Marlborough, and a new hotspot have formed in Otago about the Queenstown Southern Lakes district. As of 24 March, the New Zealand Drought Index (NZDI) map

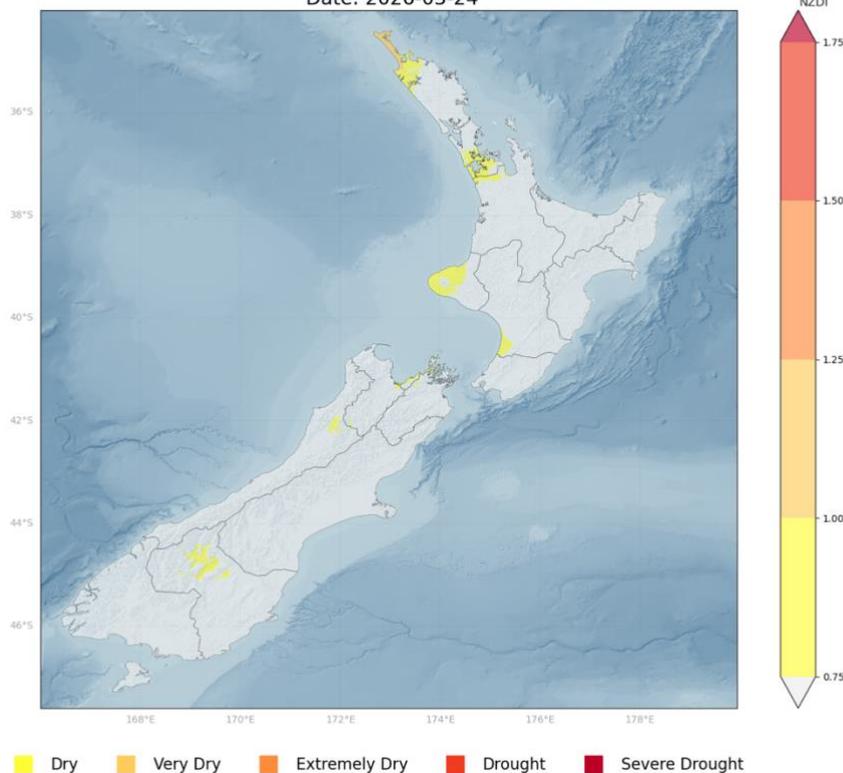
shows abnormally dry conditions in Central Otago, in a small area of Westland about Reefton, and in Nelson.



Pictured above: Soil Moisture Anomaly Maps, relative to this time of year. The maps show soil moisture anomalies over the past two weeks.

As of 24 March, the New Zealand Drought Index (NZDI) map shows abnormally dry conditions along the coast of the Horowhenua District, about the Taranaki coast, north of Raglan northward into Auckland, Central Otago, in a small area of Westland about Reefton, and in Nelson. Please note: some hotspots in the text above may not correspond with the NZDI map. This difference exists because the NZDI uses additional dryness indices, including one which integrates the rainfall deficit over the past 60 days. Changes are therefore slower to appear in the NZDI compared to soil moisture anomaly maps that are instantaneously updated.

New Zealand Drought Index (NZDI)
 Date: 2026-03-24



The week ahead:

In the North Island, a tropical low moving toward the South Island will leave lingering rain and showers across the North Island for Friday (27 March). Lingering showers in northerly flow are expected through Saturday and Sunday afternoon, followed by another front and low pressure system will move across the North Island on Sunday night and Monday. The Monday weather system will produce showers and isolated downpours for western and northern areas of the North Island, with spotty showers to follow through Tuesday (31 March). High pressure will build across New Zealand for Wednesday and Thursday, with mostly settled weather other than a few showers about the east and the north of the North Island. Weekly rainfall totals of 50 to 100 mm are expected for the eastern Bay of Plenty and north of Gisborne, with highest totals about the foothills and ranges. Elsewhere, expect 30 to 50 mm of rain for the remainder of the Bay of Plenty and Gisborne, the foothills of Hawke’s Bay, Auckland, Northland, and the Waikato, with localised heavier totals in thunderstorms. The remainder of the North Island will receive 10 to 30 mm of rain over the next seven days.

Due to the expected rainfall in the next week, soil moisture will remain the same or decrease slightly across the lower North Island, with the remainder of the North Island seeing a moderate to large increase in soil moisture. The hotspots in Auckland, the Waikato, and Taranaki will likely dissipate, while the hotspot in the Manawatū-Whanganui and Hawke’s Bay may weaken slightly over the next week.

In the South Island, a tropical low will push across the South Island on Friday (27 March) and will clear early Saturday, bringing heavy rain to the west of the South Island and pockets of heavy rain about the lower South Island. Saturday afternoon will be settled and mainly dry ahead of another low pressure system emerging from the Tasman Sea. On Sunday and early Monday, the area of low pressure and a corresponding front will bring another period of rain, with isolated heavy rainfall across the South Island, especially in the west, and a gusty southerly change. High pressure will build over the Tasman on Tuesday and Wednesday, spreading eastward over the country for late Wednesday into Thursday (1-2 April), bringing mainly dry weather. Weekly rainfall totals of 100 to 200 mm are expected about inland Westland, with 30 to 50 mm for the remainder of Westland, and the west and south of Southland. The remainder of the South Island is likely to record 10 to 30 mm of rain over the next seven days.

Due to the expected rainfall in the next week, soil moisture levels are likely to see a moderate to large increase for the west of the South Island, and the Tasman and western Marlborough regions. The remainder of the South Island will see soil moisture remain the same or experience a slight decrease over the next week. The hotspots in Nelson-Tasman, Marlborough, and Westland will weaken or dissipate. The hotspots in Otago will remain and possibly grow, while additional hotspots may form in Otago and South Canterbury.

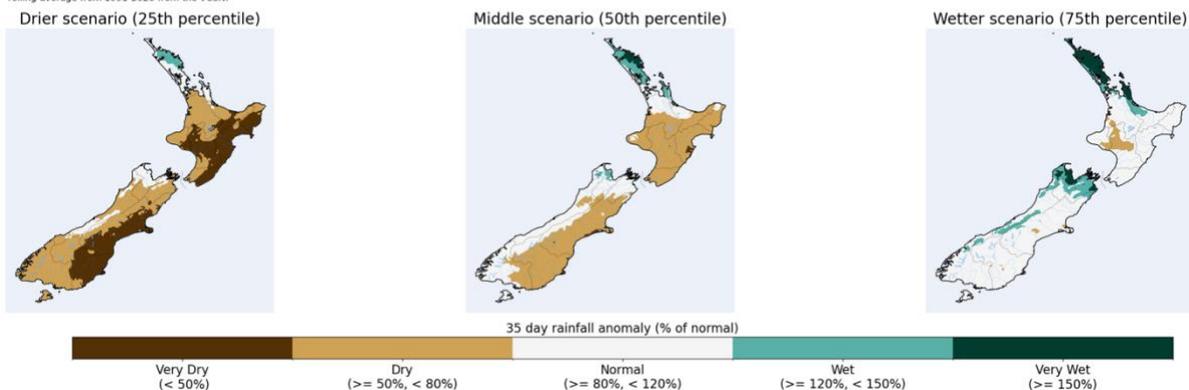
Long-term outlook (through late-April):

- In the drier (25th percentile) scenario, drier than normal conditions are signalled for the entire country, except for Northland, with very dry conditions for Canterbury, Otago in the South Island, very dry conditions for the lower and eastern North Island, wetter than normal conditions for Northland, and near normal conditions elsewhere.
- The middle (50th percentile) scenario shows drier than normal conditions for the east and south of South Island and for all of the North Island except Northland, Auckland, and the Coromandel, wet to very wet conditions for Northland, and near normal conditions for the remainder of the country.
- In the wetter (75th percentile) scenario, dry conditions are signalled for portions of the Manawatū-Whanganui, wet conditions are expected for the north of the South Island and the north of the North Island, with very wet conditions for Northland, northern Auckland, the Coromandel, and Nelson-Tasman, and near normal conditions elsewhere.

NIWA35
Rainfall anomaly for 35 days
Model initiation: 00 UTC Tue 24/03/2026
Valid: 01 PM Tue 24/03/26 - 12 PM Mon 27/04/26 NZST



"Normal" is the percentage relative to a climatology and the forecast. The climatology is a 35 day rolling sum of a 35 day rolling average from 1991-2020 from the VCSR.



NIWA35

Risk of areas experiencing dryness or drought within 35 days

Model initiation: 00 UTC Mon 16/03/2026

Valid: 01 PM Mon 16/03/26 - 12 PM Sun 19/04/26 NZST



"Dryness" refers to the categories of "Very Dry" and "Extremely Dry" in the NZDI categorisation. "Drought" refers to the categories of "Drought" and "Severe Drought" in the NZDI categorisation.

Wetter scenario (10th percentile)



Middle scenario (50th percentile)



Drier scenario (90th percentile)



Pictured above: 35-day forecast rainfall anomaly scenarios (Top), and 35-day forecast dryness and drought scenarios (Bottom). These maps are updated daily at

<https://niwa.co.nz/climate/seasonal-climate-outlook>

Background:

Hotspot Watch: a weekly advisory service for New Zealand media. It provides soil moisture and precipitation measurements around the country to help assess whether extremely dry conditions are imminent.

Soil moisture deficit: the amount of water needed to bring the soil moisture content back to field capacity, which is the maximum amount of water the soil can hold.

Soil moisture anomaly: the difference between the historical normal soil moisture deficit (or surplus) for a given time of year and actual soil moisture deficits.

Definitions: "Extremely" and "severely" dry soils are based on a combination of the current soil moisture status and the difference from normal soil moisture (see soil moisture maps at <https://www.niwa.co.nz/climate/nz-drought-monitor/droughtindicatormaps>)

Hotspot: A hotspot is declared if soils are "severely drier than normal" which occurs when Soil Moisture Deficit (SMD) is less than -110 mm AND the Soil Moisture Anomaly is less than -20 mm.