



Hawke's Bay Trends

THE STATE OF OUR ENVIRONMENT

May 2022

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March swung high, April low while May proved a ballast with exactly 100% of the month's average rainfall. The distribution wasn't even though – rain hit Waikaremoana and skirted Tangoio, leaving the latter short of rainfall for two months.

Soil moisture levels were decidedly robust through May, even in rain-short Tangoio, and good groundwater levels remain a joy to behold. River flows were the month's disappointment and fell below normal for the first time since January.

Both day and night time temperatures stood a degree above average for May giving us a warm punctuation to autumn. They kneecapped the wood burner season as it launched from the starting blocks so air quality notched a win and it's thankfully zilch for PM₁₀ exceedances.

Kathleen Kozyniak
Principal Scientist - Climate and Air

SUMMARY May 2022

No complaints – average rain and nicely warm.

This is a summary of the regions rainfall, river flows, ground water, air quality and soil moisture levels. Data and images provided by HBRC.

June to August Forecast

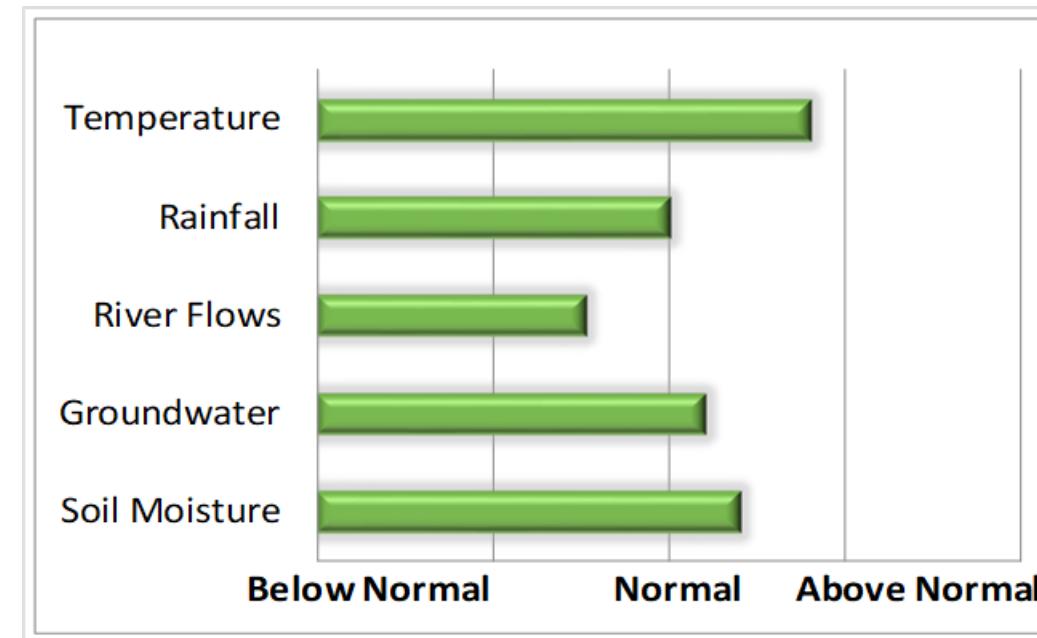
Temperature Above average

Rain Near or above normal

River flows Near or above normal

Soil moisture Above normal

source : NIWA



For more information

www.hbrc.govt.nz

P: 06 835 9200

RAINFALL

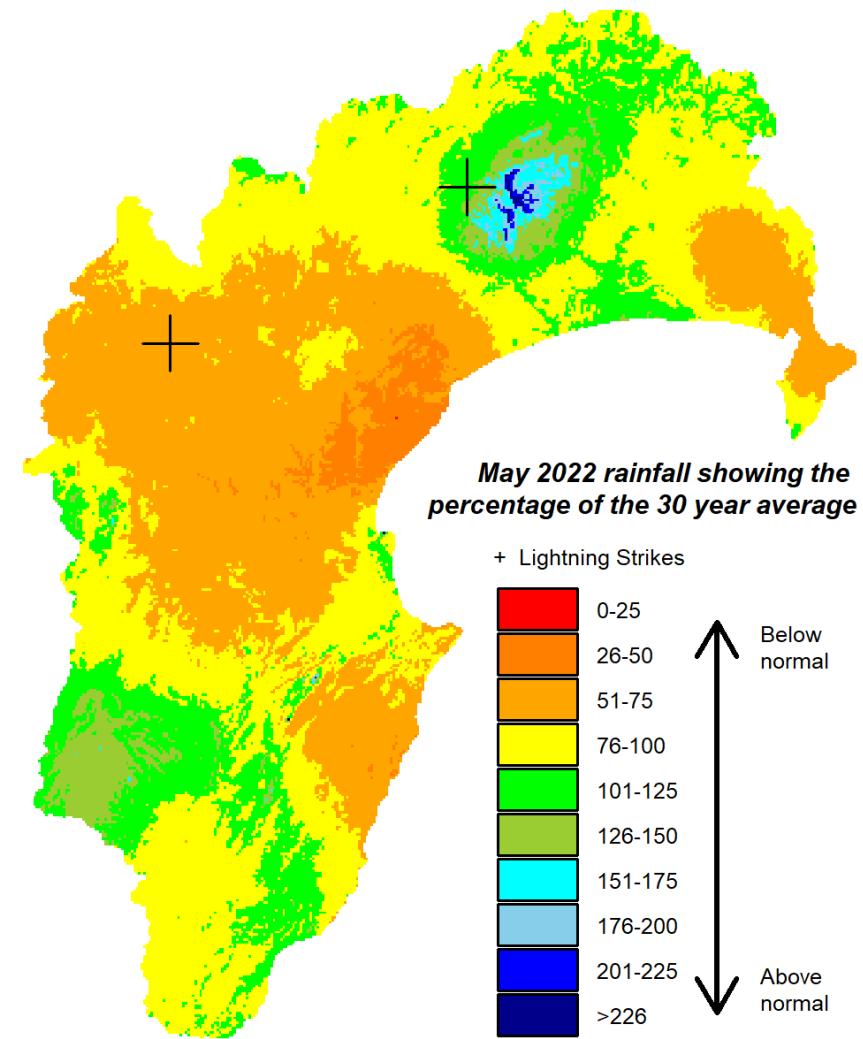
Exactly average. Two cloud to ground lightning strikes.

Lightning counts come from the Blitzortung.org lightning network to which HBRC contributes.

Percentage of normal May rainfall
(30 year average)

For areas in the region:

Waikaremoana	131%
Northern HB	93%
Tangoio	62%
Kaweka	114%
Ruahine	117%
Heretaunga Plains	85%
Ruataniwha Plains	104%
Southern HB	91%
Hawke's Bay Region	100%



TEMPERATURES

A degree above average.

Mean Difference from Normal

Maximum Temperature: 1.4°C
Minimum Temperature: 1.0°C

Mean Daily Maximum: 17 °C

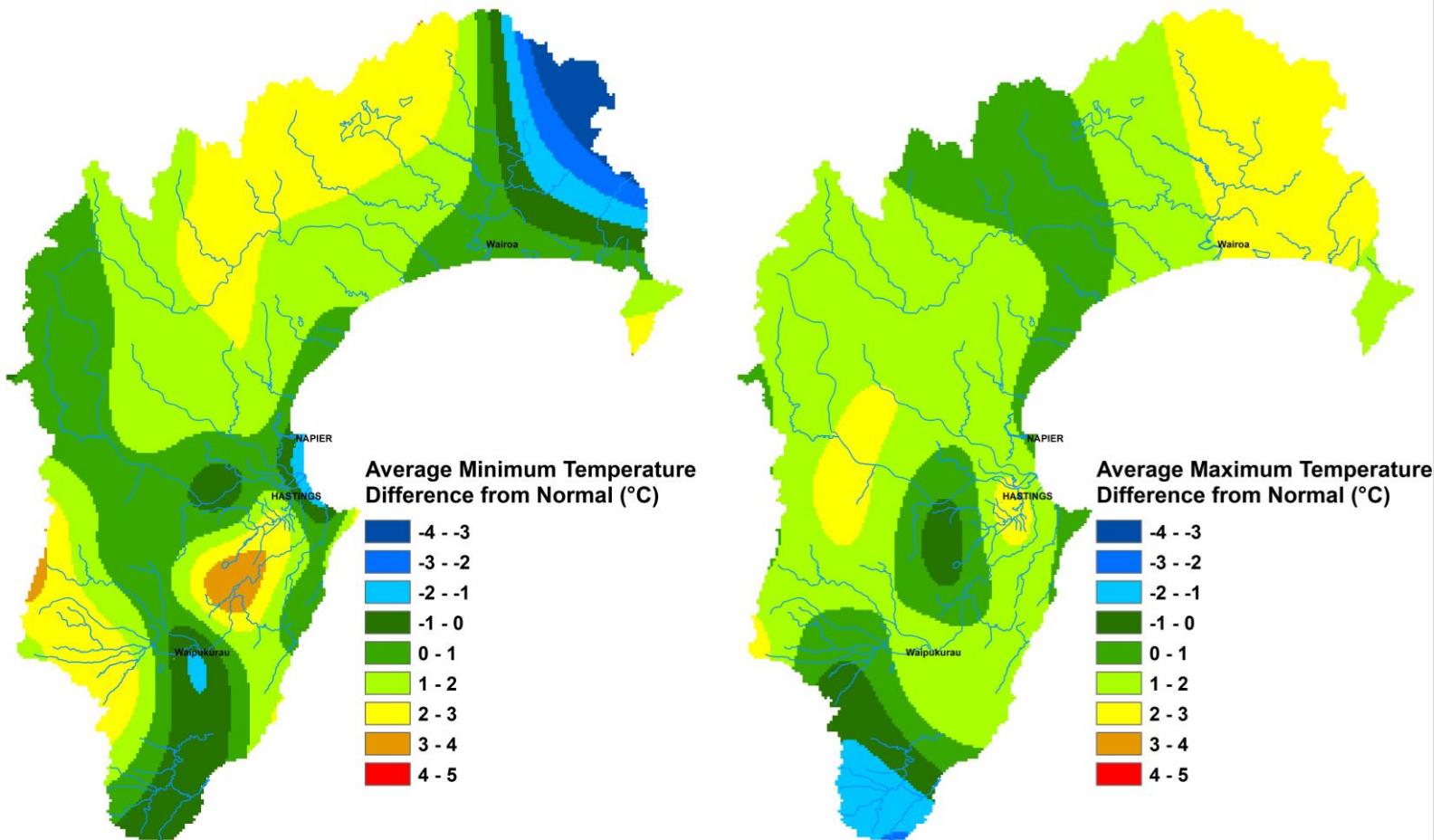
Mean Daily Minimum: 7°C

Highest Daily: 25.6 °C

Location: Hastings AWS (Metservice)

Lowest Daily: -3.2 °C

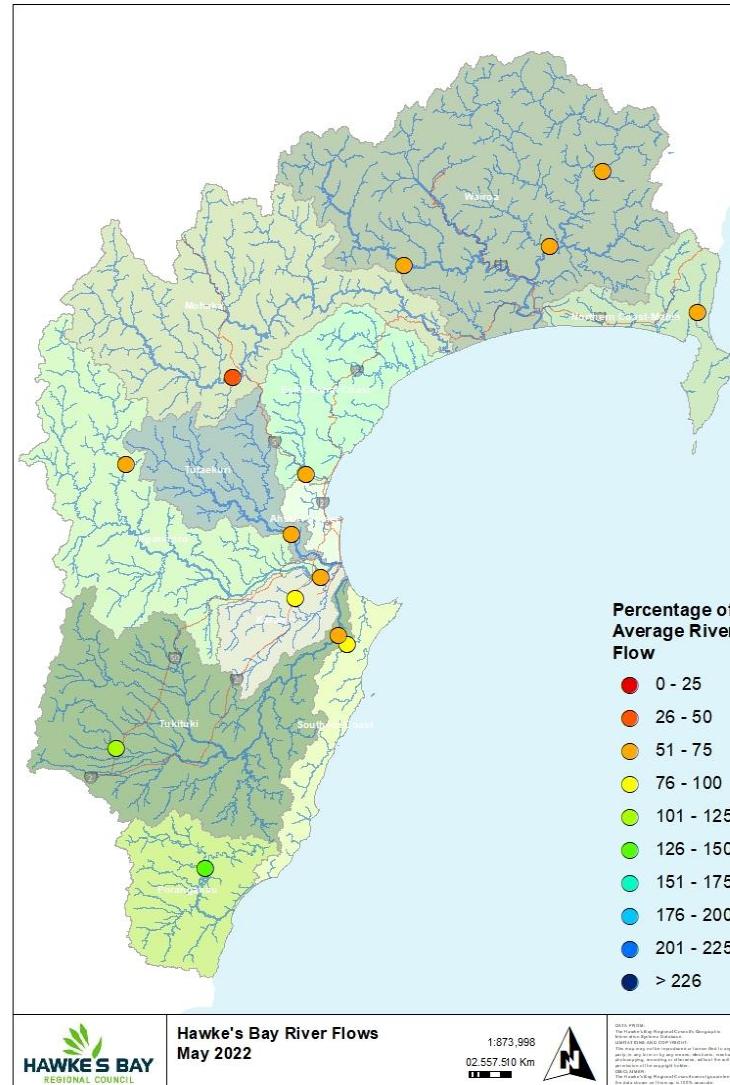
Location: Taharua Climate



RIVER FLOW

Percentage of average May flows
for areas in the region:

Northern Coast – Mahia	63%
Northern HB – Hangaroa River	66%
Northern HB – Wairoa River	75%
Northern HB – Waiau River	59%
Mohaka	49%
Esk-Central Coast	62%
Tūtaekuri	72%
Karamu	89%
Ngaruroro – Kuripapango	51%
Ngaruroro – Chesterhope	67%
Southern Coast	82%
Tukituki – Tukipo River	102%
Tukituki – Tukituki River	63%
Porangahau	131%
Hawke's Bay Region	74%



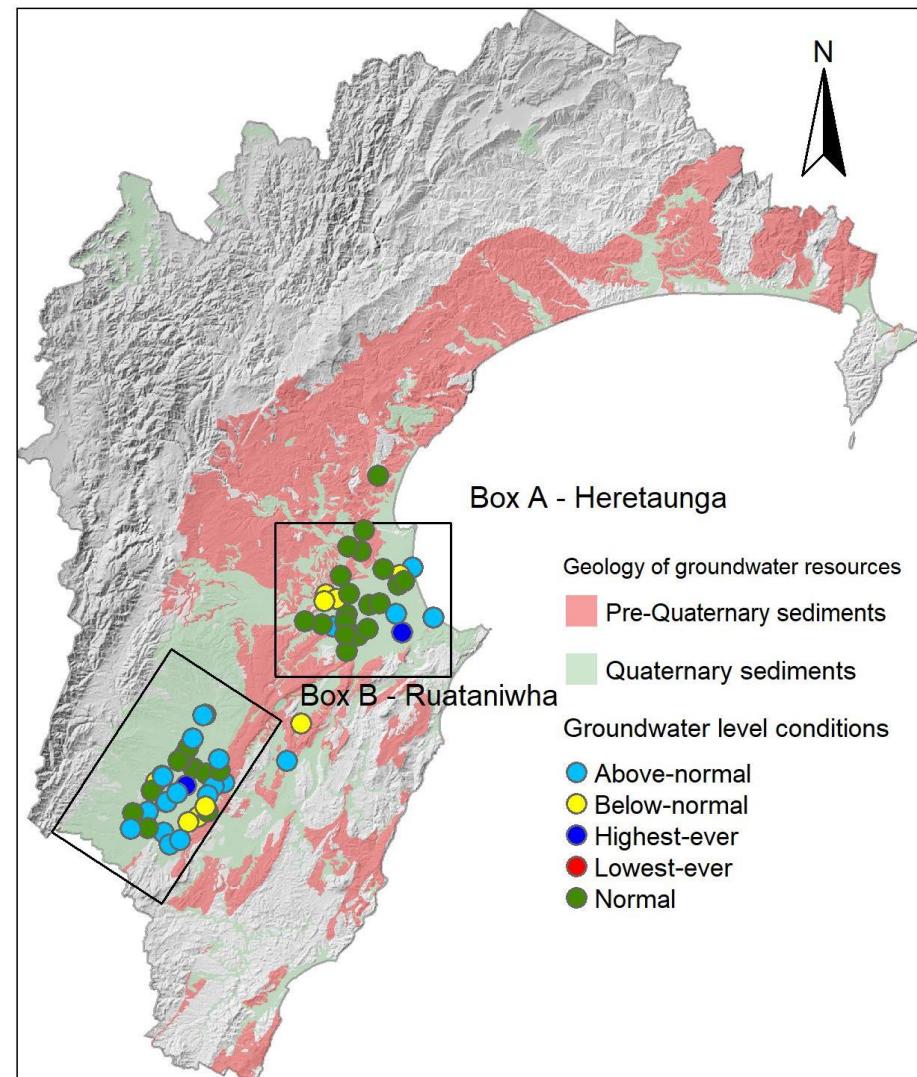
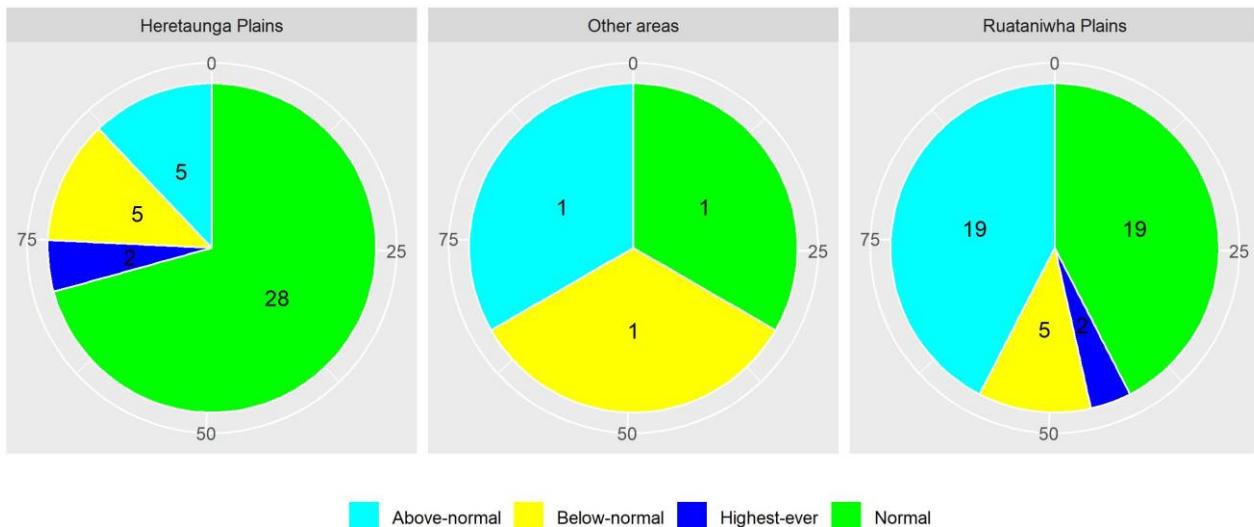
GROUNDWATER & SOIL MOISTURE

Soil Moisture: Above normal.

Current state of Groundwater levels:

This report compares groundwater levels in May with historic readings to evaluate current conditions. To assess these conditions, we have grouped groundwater levels at each well relative to their monthly percentiles.

Groundwater levels measuring between their monthly minimum and 25th percentile are considered below-normal, groundwater levels measuring between the 25th and 75th percentiles are classed as normal, and groundwater levels measuring between the 75th-maximum are considered above-normal. Wells with less than 5 years of record are excluded from the analysis.



AIR QUALITY

Great way to start – no exceedances.

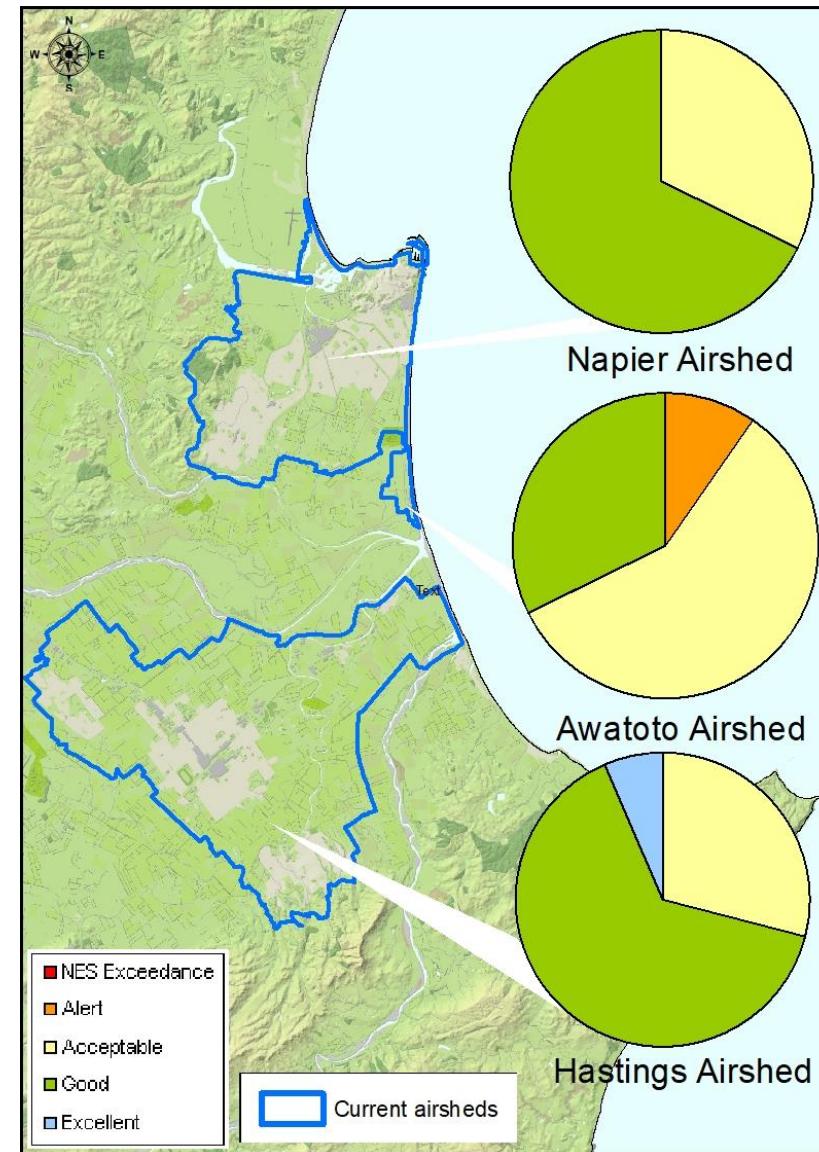
PM₁₀ exceedances:

The National Environmental Standard (NES) for particulate matter (PM₁₀) of 50 micrograms per cubic metre (24 hour average) was not exceeded in the Napier, Hastings and Awatoto airsheds during May 2022.

The monitoring sites are located at:

- Marewa Park in the Napier airshed.
- St Johns College in the Hastings airshed.
- Waitangi Road in the Awatoto airshed.

Further information is available at www.hbrc.govt.nz



LONGER FORECAST

It's a tenacious La Niña that still holds on. It may weaken to neutral conditions during winter but raise its head again later in the year. It could be accompanied by a negative Indian Ocean Dipole, which is predicted to develop for spring, and together they make it unlikely we'll face drought conditions by year's end. Hopefully they aren't famous last words.

The forecast for winter bears the signature of La Niña conditions. Northeasterlies are expected to keep featuring due to higher than normal sea level pressure to the east of us and lower to the west and over the north Tasman Sea. Rainfall is likely to be normal or above normal – this time there are no models busting out with a below normal forecast. Temperatures should remain warmer than usual, helped along by warm sea temperatures that, like the La Niña, won't quit.

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