

Issued  
7 July  
2022

# Auckland Hydrology Situation Report

Research and  
Evaluation Unit

RIMU



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## Regional summary

The New Zealand Drought Index for the Auckland Region is below the lowest category of Dry. Regional monthly rainfall for June was approximately 25% above average. Two sites are below the normal range for soil moisture and the remaining eight are in the Normal or High range. River flows are all above the mean annual low flow (MALF). Groundwater level status is similar to previous reports, although groundwater level increases have been observed in many bores across the region. Most sites in the southern aquifers at a Low or Very Low status, including shallow volcanic aquifers.

## Current drought index

The New Zealand Drought Index (NZDI) is used to determine the severity of drought conditions across the country. The latest NZDI value for Auckland was 0.05 (5 July 2021), which is below the lowest NZDI category of Dry (0.75-1.00). A chart of the NZDI for the Auckland region is shown in Figure 1.

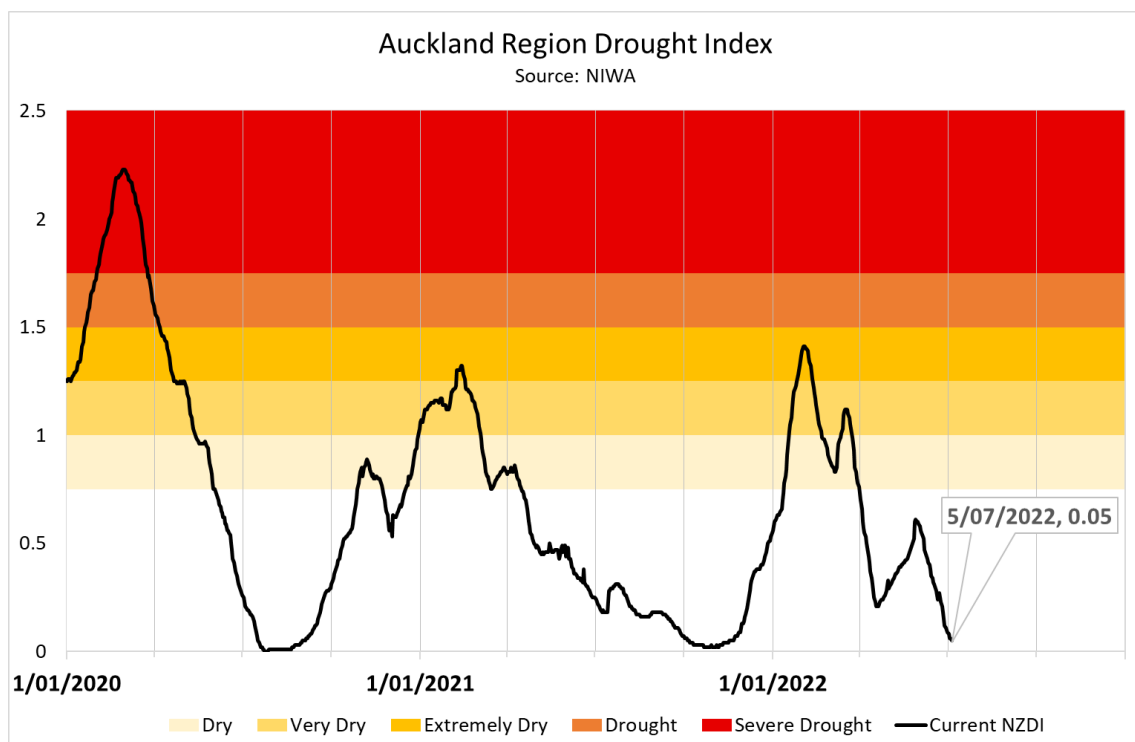
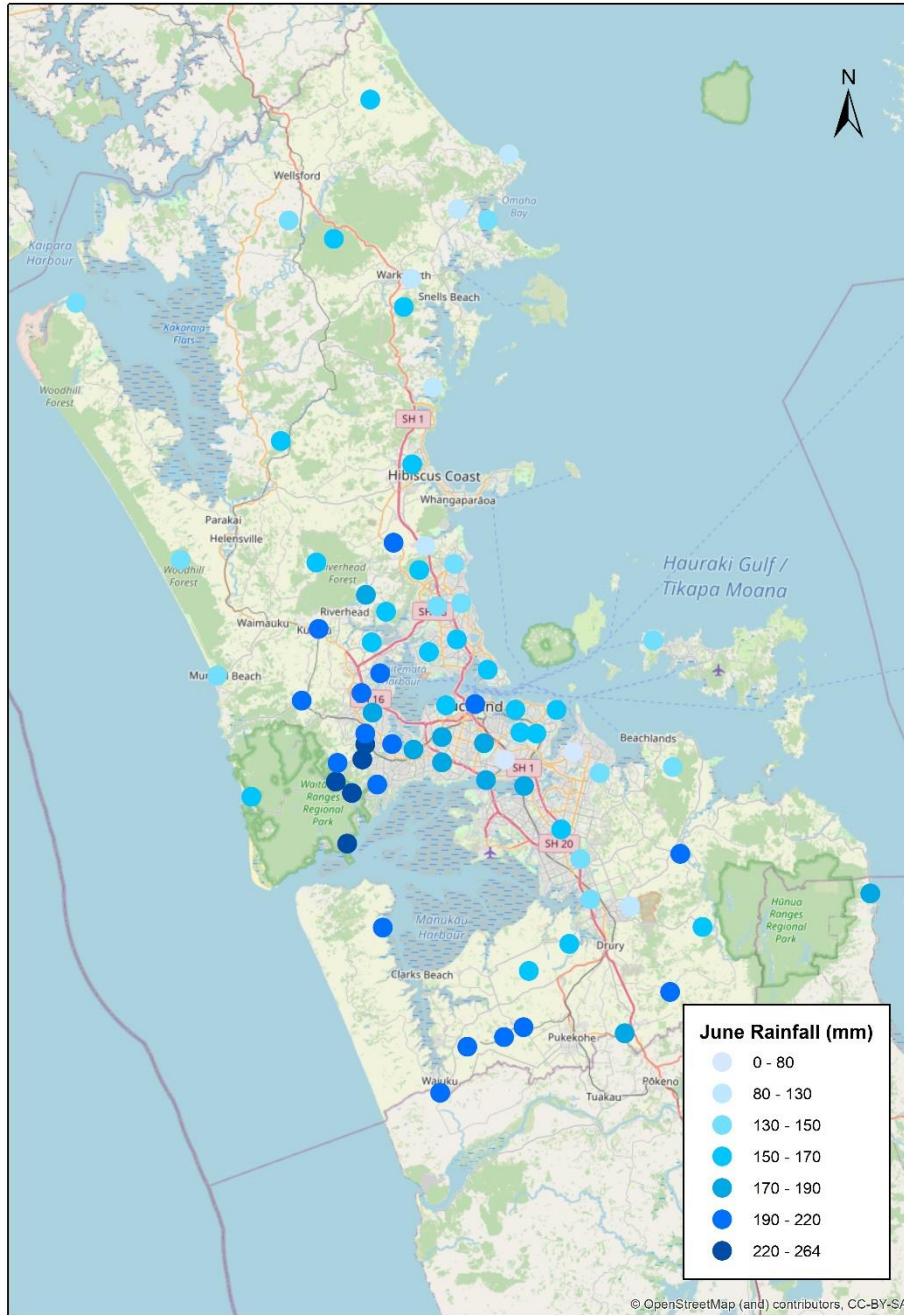


Figure 1: Auckland Region Drought Index 2020-2022 (data source: NIWA).

### Rainfall

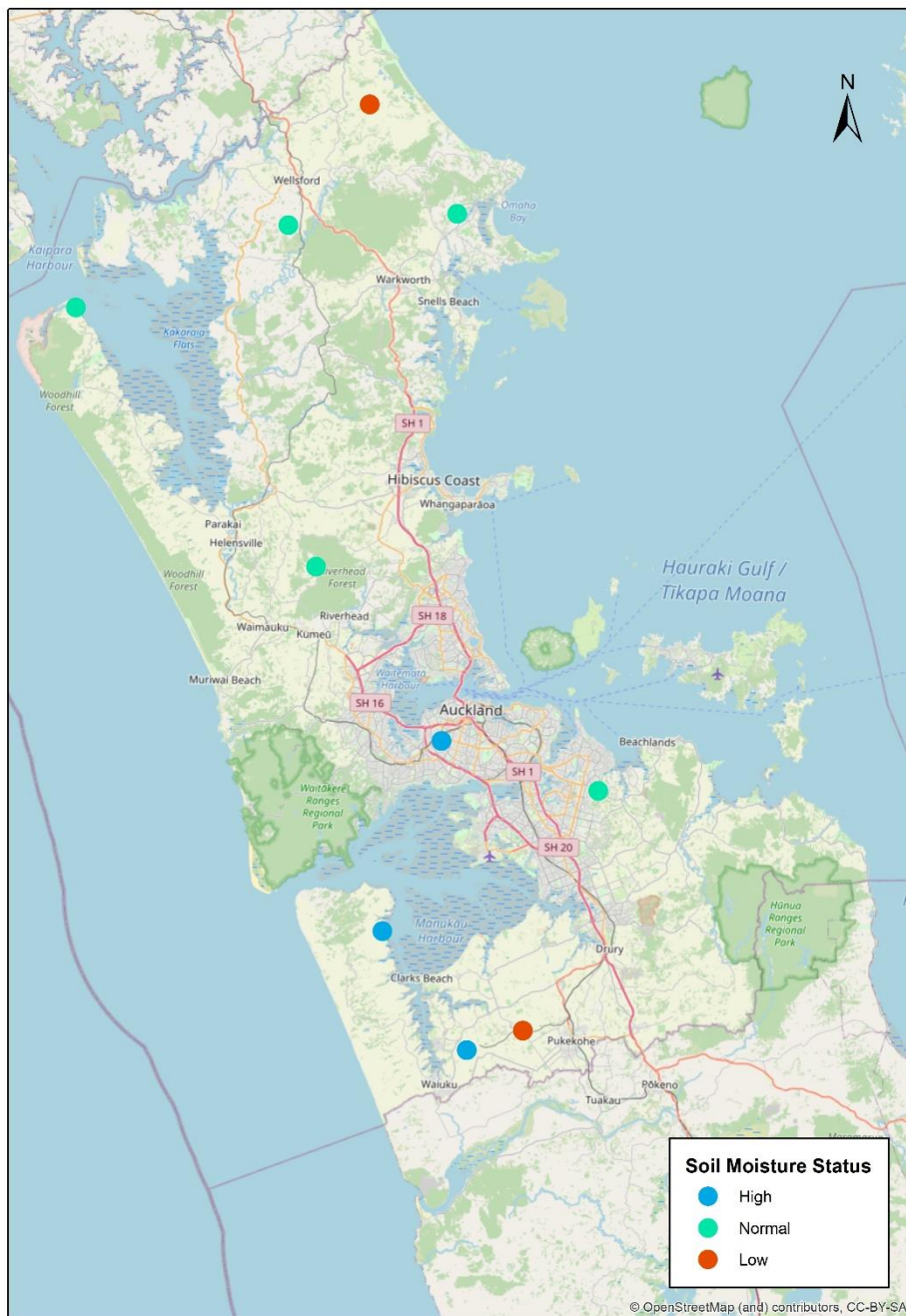
Rainfall for June 2022 ranged from 88mm to 264mm with a regional average of 173mm, approximately 25% above the long-term regional average (Figure 2).



**Figure 2: Total rainfall (mm) for June 2022.**

### Soil moisture

Soil moisture varies across the region but only two sites are below the normal range. Soil moisture sites are shown in Figure 3.



**Figure 3: Soil moisture category relative to long-term statistics on 7 July 2022.**

### River flows

All river monitoring sites are above the mean annual low flow (MALF). The locations of sites and the flow relative to MALF are shown in Figure 4.

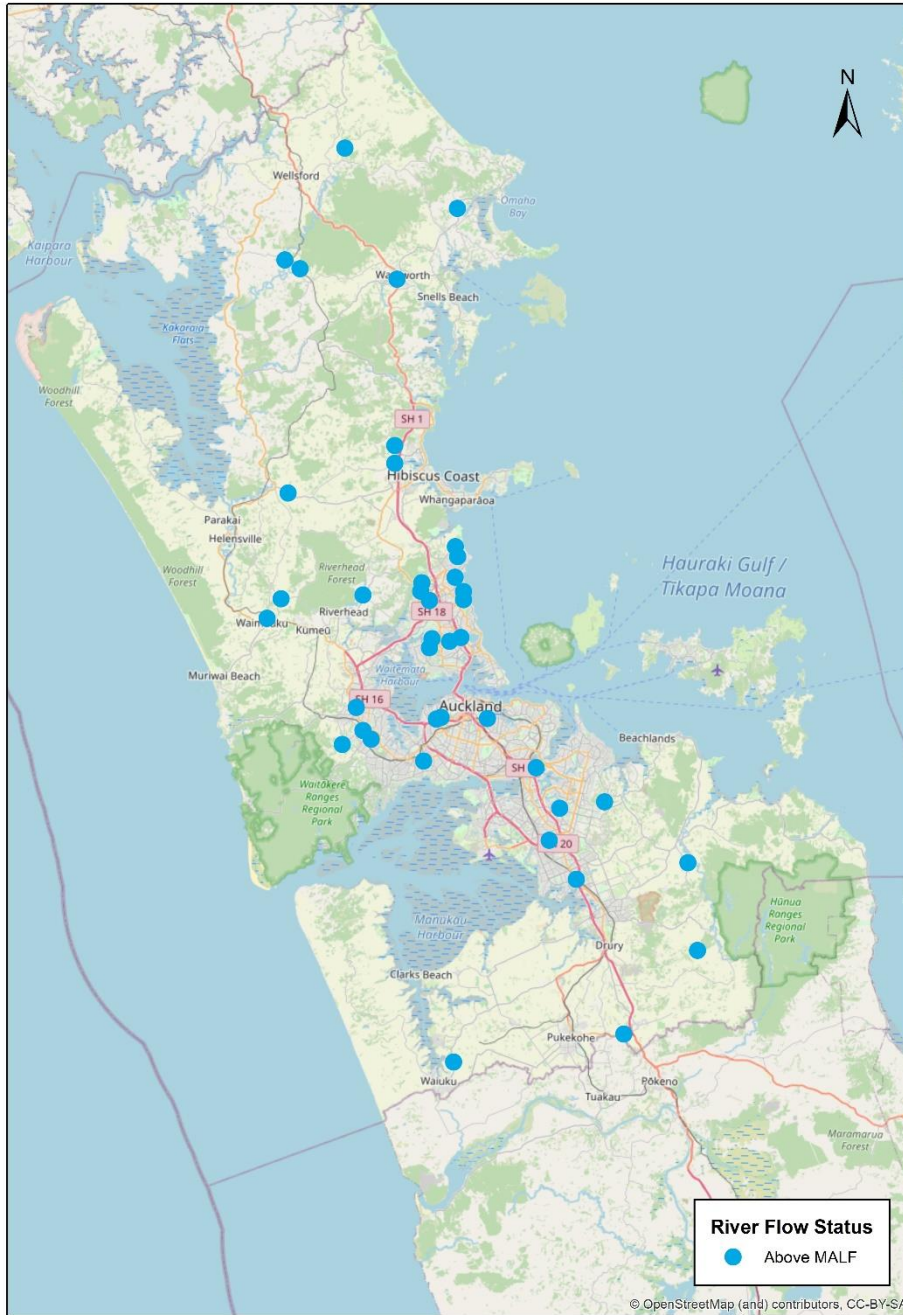
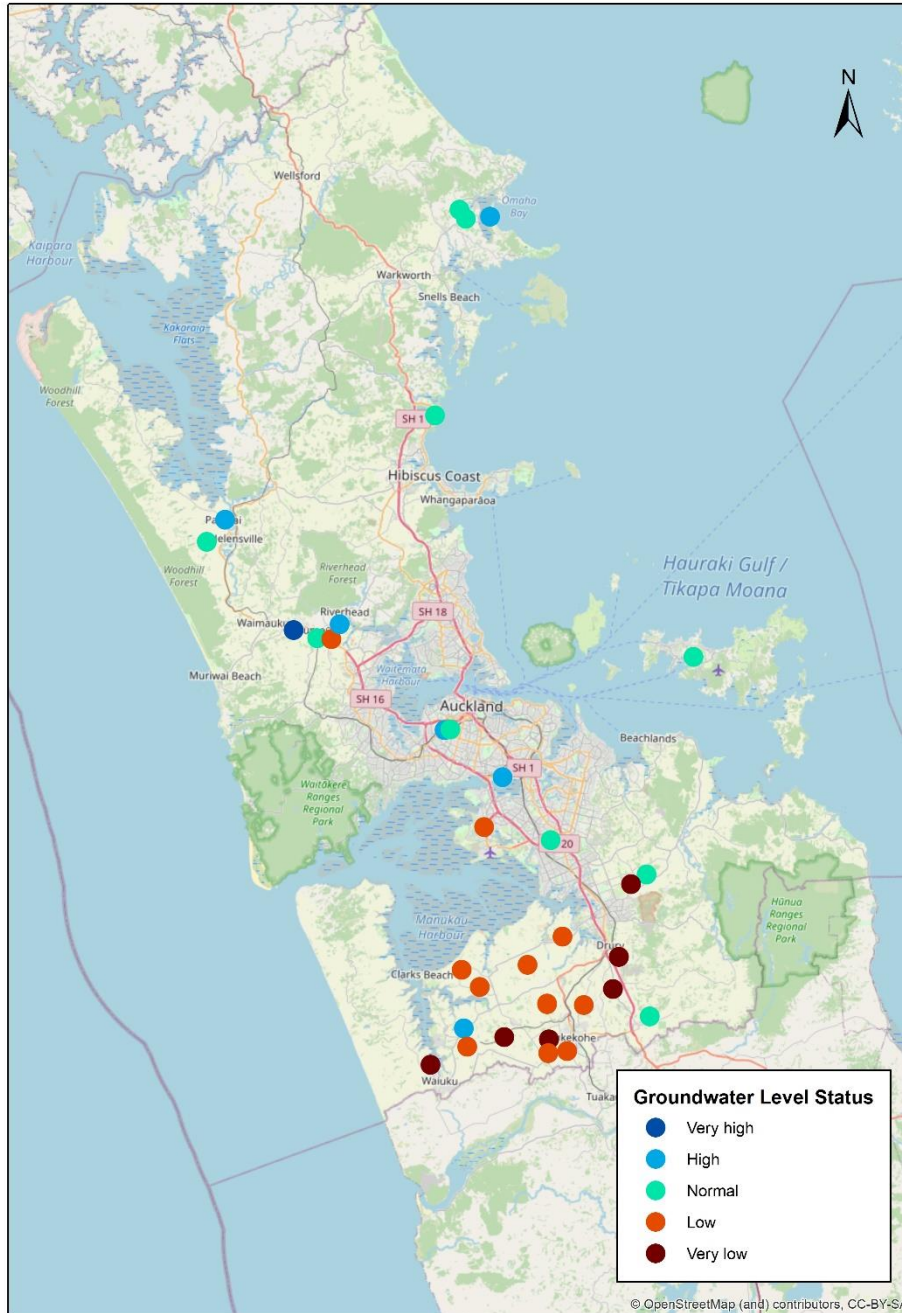


Figure 4: River flow on 7 July 2022 relative to the mean annual low flow (MALF).

## Aquifer water levels

Groundwater conditions remain similar to previous reports, although increases have occurred across the region with a result in a slight upward shift in status of several aquifers. Groundwater levels in the Low and Very Low categories have persisted in deep Waitemata sandstones and Kaawa sand/shellbeds, and groundwater levels are lower than normal in some shallow volcanic aquifers as well. Groundwater monitoring sites and groundwater level category are shown in Figure 5.



**Figure 5: Groundwater levels relative to long-term statistics for 7 July 2022.**

## Disclaimer

This report contains provisional data and is intended for informational purposes only. For detailed questions concerning hydrometric data, please email [EnvironmentalData@aucklandcouncil.govt.nz](mailto:EnvironmentalData@aucklandcouncil.govt.nz).

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