

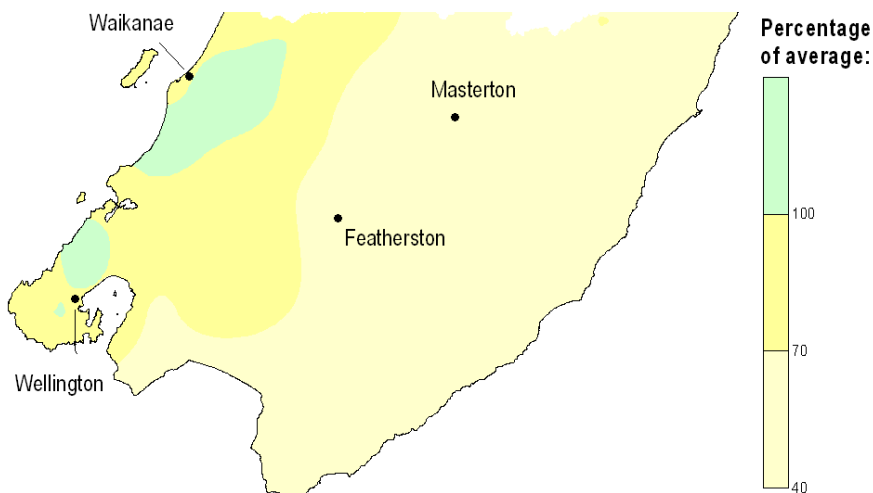


June 2011 hydrological summary

Environmental Monitoring and Investigations Department

Rainfall in June 2011

June was a relatively dry month in most parts of the Wellington region. Only four of the 40 Greater Wellington monitoring sites recorded higher than average rainfall for June and these sites were all in western parts of the region (see map at right). The Wairarapa was particularly dry for this time of year with less than half the normal June rainfall occurring at some sites (eg, the central Wairarapa Valley and the south coast near Ngawi). The monitoring site 'Mangatarere at Valley Hill' logged its lowest June total since records began in 1997 and the 'Ruamahanga River at Mt Bruce' site has only had two drier Junes in the past 27 years.



Rainfall in June 2011 as a percentage of the long-term average for this month

While rain fell on more days in June than not, there were no particularly notable downpours or storm events; maximum daily totals for the month at sites in the foothills and lowlands were generally no more 20 mm.

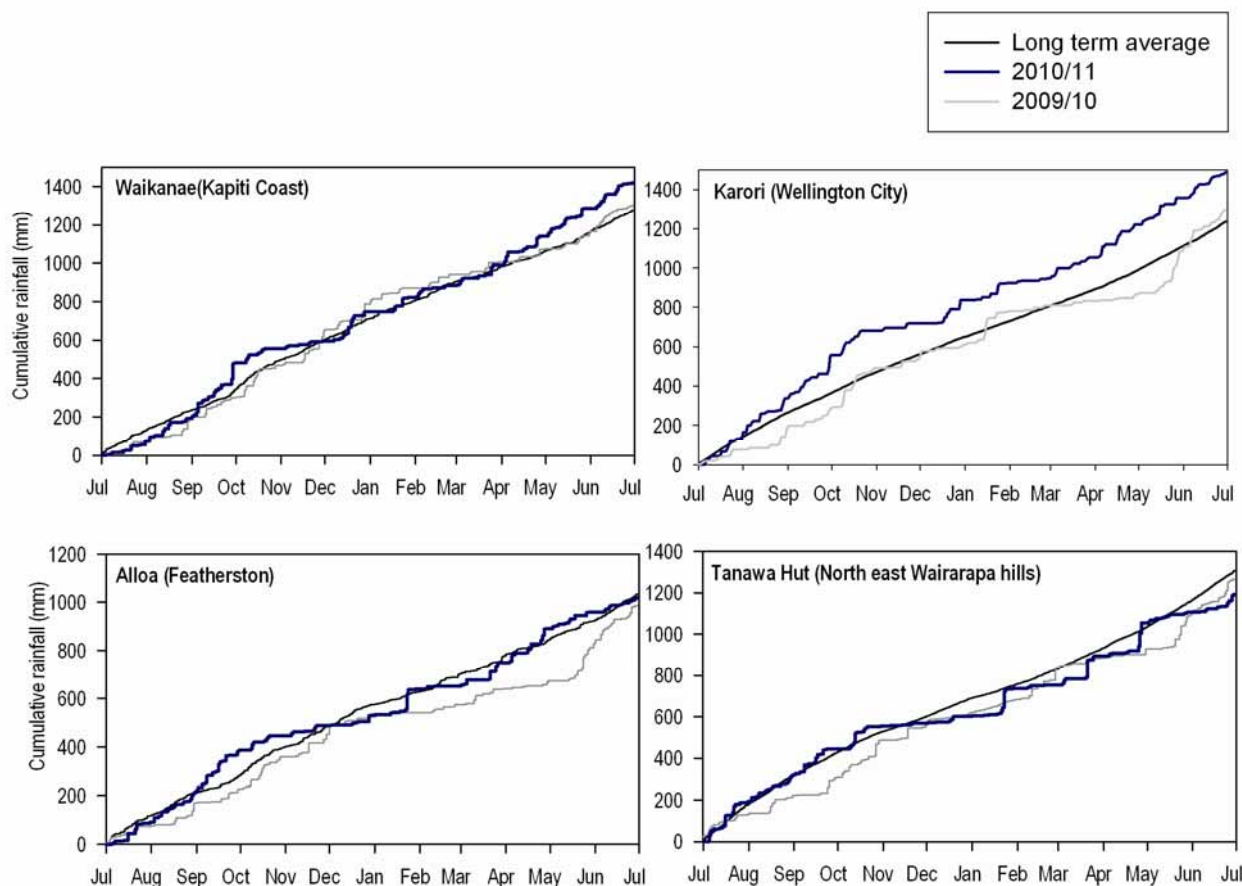
Rainfall since mid-winter 2010

Rainfall for the full year from July 2010 to June 2011¹ was variable across the region when compared to long-term averages (see following table). Areas that received 10% more rain than normal were mainly in the west and included the Kapiti Coast, the Hutt Valley and around Wellington City. The eastern hill country in the Wairarapa received around 10% less rain than normal but the most significant rainfall deficit for an individual monitoring site occurred at Ngawi on the southern Wairarapa coast (81%) Rainfall in the Tararua Range was close to average.

Rainfall statistics for the year since July 2010 for selected monitoring sites in the Wellington region

	Rainfall for June at monitoring site (mm)	Rainfall for period July 2010 to the end of June 2011 (mm)	Percentage of long-term average for year- to-date from July 2010
Waikanae	133.5	1,402	112%
Karori	134.8	1,486	120%
Kaitoke	181.0	2,269	98%
Wainuiomata	139.0	1,708	88%
Featherston ('Alloa')	60.8	1,019	99%
NE Wairarapa ('Tanawa Hut')	87.0	1,189	91%
Tararua Range ('Angle Knob')	458.0	7,202	104%

¹ The 'water' year runs from July to June so that it begins and ends during mid-winter when there is generally plenty of water in the hydrological system.



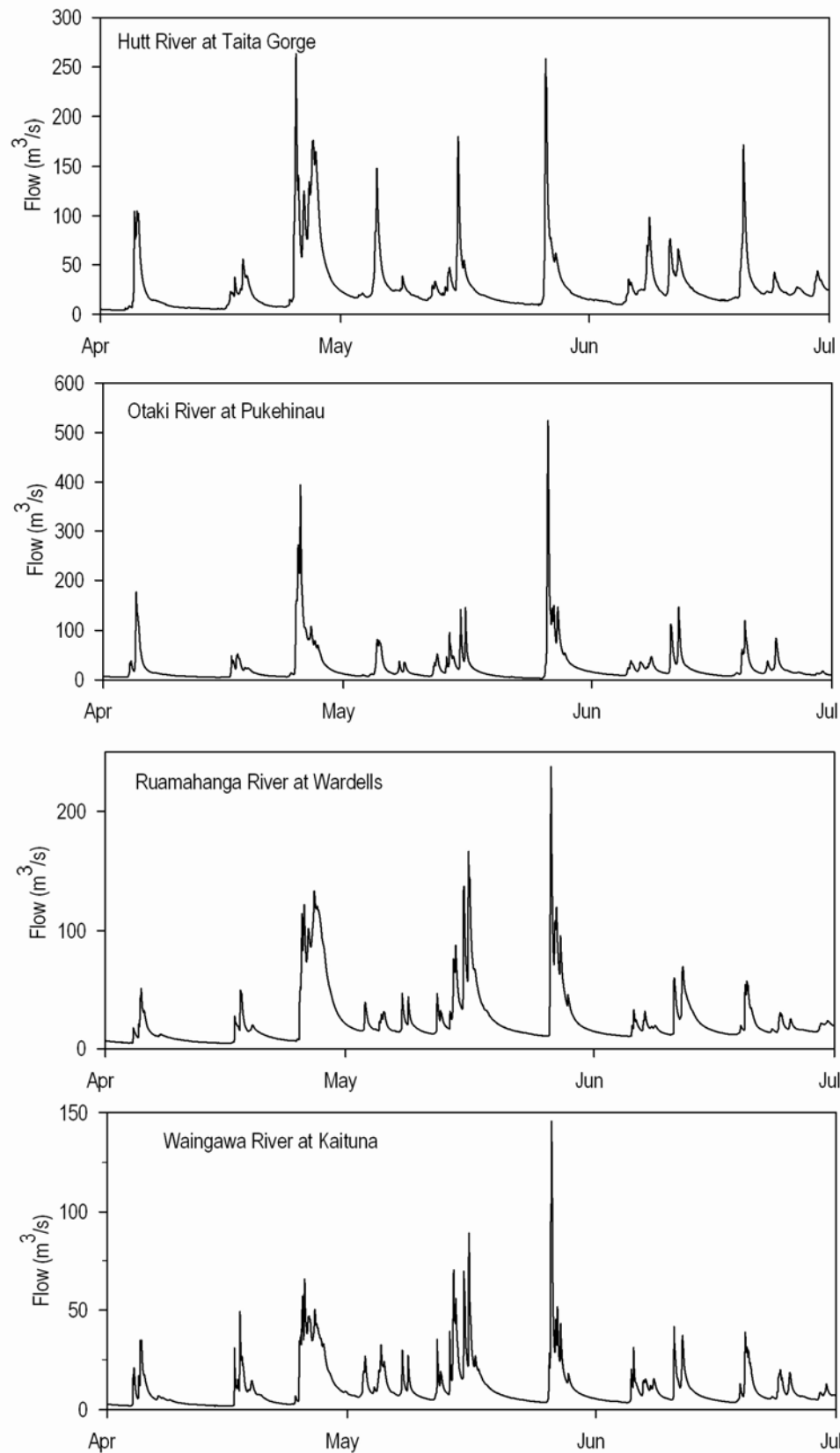
Cumulative rainfall for the period July 2010 to June 2011 at selected sites in the Wellington region

River flows during June 2011

River and stream flows across the region were relatively subdued in June compared with those that normally occur at this time of year (see table below and graphs on the next page). This reflects the general lack of rainfall in June in most areas. While small freshes occurred at regular intervals, there were no significant high flow or flooding events.

River flow statistics for June 2011 at selected flow monitoring locations in the Wellington region

	Average river flow for June 2011 (m ³ /s)	Percentage of long-term June average	Peak (instant) flow during June (raw data)
Otaki River at Pukehinau	21.8	67%	146 m ³ /s on 11/6
Hutt River at Taita Gorge	27.1	93%	172 m ³ /s on 20/6
Wainuiomata River at Manuka Track	0.75	63%	3.10 m ³ /s on 29/6
Waingawa River at Kaituna	8.88	75%	42.7 m ³ /s on 10/6
Waiohine River at Gorge	22.1	80%	107 m ³ /s on 20/6
Ruamahanga River at Wardells	19.4	60%	69.5 m ³ /s on 12/6
Ruamahanga River at Waihenga	59.4	53%	149 m ³ /s on 20/6



River flows recorded during the period April to June 2011 at selected monitoring locations in the Wellington region

Climate outlook – July to September 2011

NIWA's climate outlook for July to September 2011 indicates that the recent La Niña event has dissipated. Mild conditions are likely to persist through the winter and rainfall, soil moisture and river levels for the period July–September are likely to be near normal across the Wellington region. (see <http://www.niwa.co.nz/our-science/climate/publications/all/seasonal-climate-outlook>).

More information

This summary is based on data from selected monitoring locations in the Wellington region. Greater Wellington monitors rainfall, river flows, groundwater levels and soil moisture at many locations that may not be mentioned in this summary report. Maps of site locations and up-to-date data can be found at www.gw.govt.nz/monitoring.

Disclaimer: This report is based on data that have not yet been quality checked. In particular, flow data may be subject to change following adjustment of rating curves. Greater Wellington accepts no responsibility for any interpretation or use of the provisional data in this report.