Rainfall Trend Graphs

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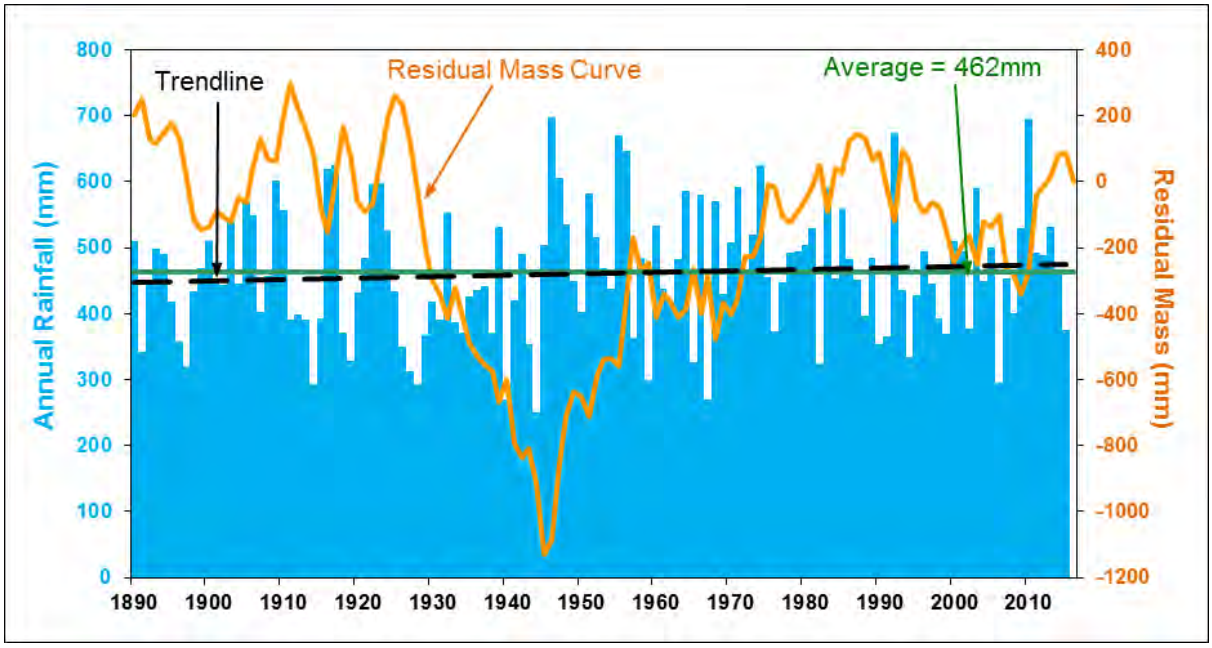
Monthly rainfall data is available on the Bureau of Meteorology website. Records for Coomandook only have a minor number of data gaps in the period from the late 1980s up until the present.

Rainfall trend analysis is calculated using the cumulative variation / deviation from the mean rainfall (also called a residual rainfall or residual mass curve). In periods where mostly above average rainfall occurs, graphs show a positive or increasing variation from the mean. A falling curve represents periods receiving below average rainfall.

The figure below shows annual rainfall since 1890 for Meningie and the calculated 'Residual Mass Curve' (i.e. residual accumulative rainfall trends). In broad terms, more recent trends indicate a rising trend (wetter cycle) during the 1950s and again in the 1970s up until the early 1990s. This was followed by a drying trend until the 2000s which included the 'Millennium Drought' extending from 2006-09. A rising trend then resulted from the wet summer of 2010/11 and the wet spring of 2016.

Rainfall Trend Graph



Rainfall Deciles

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Dry Periods 1990 to 2018

The table below highlights some of the very dry periods that have occurred since 1990 at Coomandook. This is for the time period since regular watertable monitoring commenced in this region. It shows the months that have experienced Decile 1 and 2 monthly rainfall (i.e. the lowest 20% of rainfall totals on record). These dry periods if sustained over time, can produce a falling trend in the watertable record.

Wet Periods 1990 to 2018

The table highlights some of the wetter periods that have occurred since regular watertable monitoring commenced in the region. Months with decile 9 and 10 rainfall after 1990 are shown for Coomandook (i.e. the highest 20% of rainfall totals on record). These wet periods are likely to have an impact on local groundwater flow systems producing a rising trend over time.

Year	DRY Month	Rainfall (mm)
1993	April	0.8
	May	19.8
1994	March	0.0
	April	7.6
	May	12.6
2002	February	0.4
	April	5.8
	August	21.4
2006	June	15.2
	August	3.4
	October	1.4
	November	10.2
2008	February	1.8
	March	2.8
2009	January	0.8
	February	0.0
2014	August	10.8
	September	17.8
	October	10.0
2018	February	1.0
	September	10.0
	October	14.2

Year	WET Month	Rainfall (mm)
1991	June	72.6
1992	August	90.6
	September	78.4
	November	71.4
	December	63.0
1993	January	55.4
	December	58.4
1995	July	86.8
1996	January	49.0
	June	86.0
1997	September	71.0
1998	April	78.8
2000	February	58.8
2003	May	74.2
	June	77.2
2004	November	48.4
2005	June	107.6
	October	74.5
2008	December	65.4
2009	September	75.4
	November	70.4
2010	March	64.0
	August	86.6
	December	51.2
2011	February	49.0
	March	71.2
2013	June	103.8
2016	September	123.8
	December	76.4
2017	January	49.2