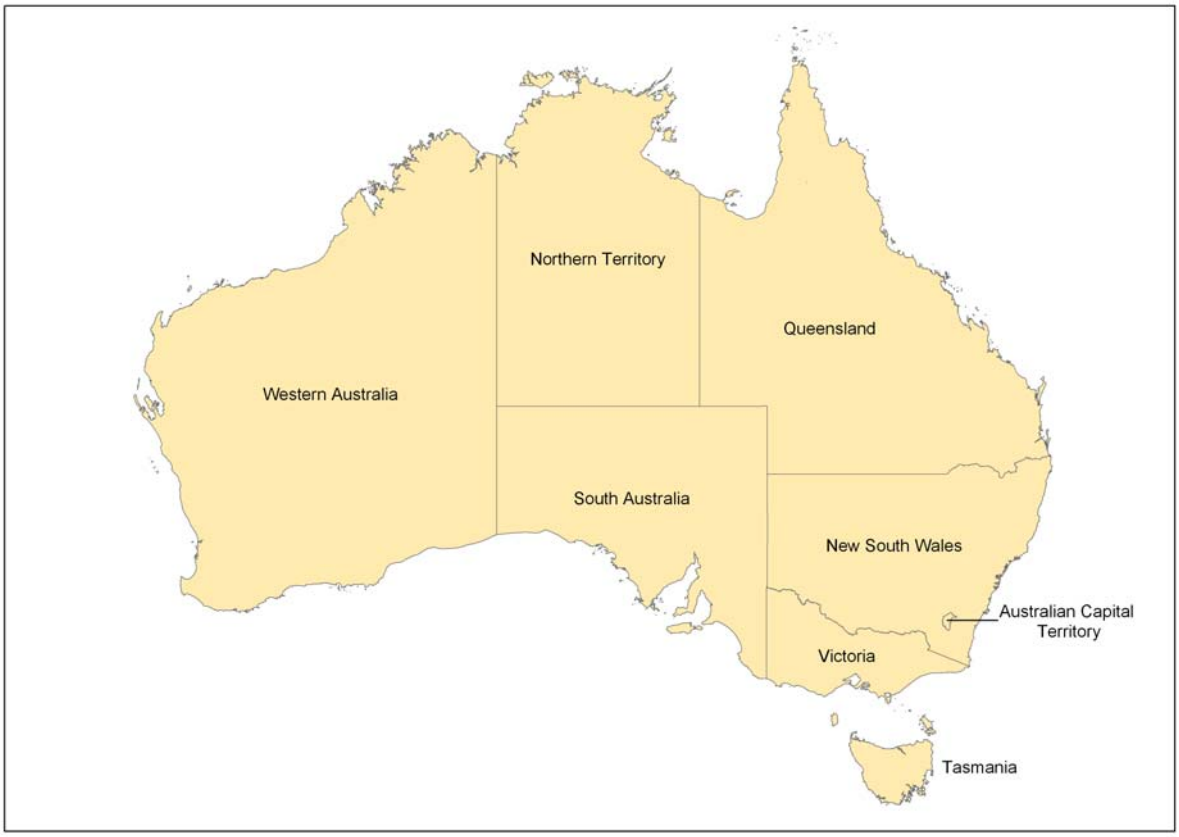
Australian Government
Bureau of Rural Sciences

Australian climate and agricultural monthly update

February 2010



Extract from *Australian climate and agricultural monthly update – February 2010* information accurate at date of publishing.

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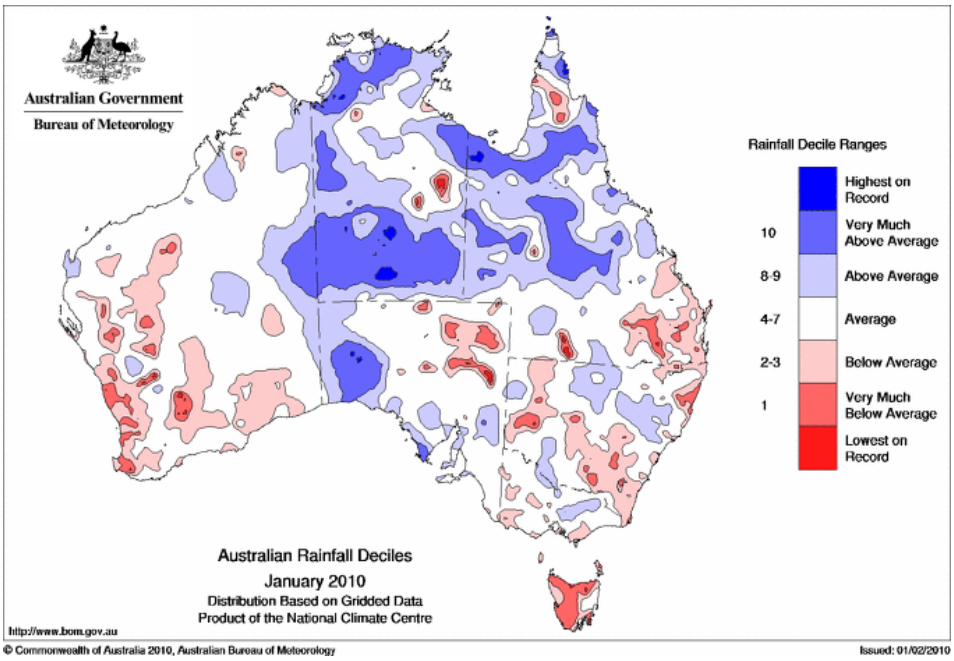
1.0 Climate

1.1 Rainfall

Spatial rainfall analyses are based on historical monthly rainfall data provided by the Bureau of Meteorology. For further information on rainfall data and the interpretation of percentile analyses go to http://www.bom.gov.au/climate/austmaps/.

Rainfall over the last month (January 2010)



Rainfall percentiles for January 2010

Rainfall for Australia during January 2010 was 17 per cent above the long-term average (twenty-third highest of 111 years).

Queensland and the Northern Territory recorded 46 per cent and 61 per cent above average rainfall respectively, because of the widespread heavy rainfall in late January caused by tropical cyclone Olga in late January.

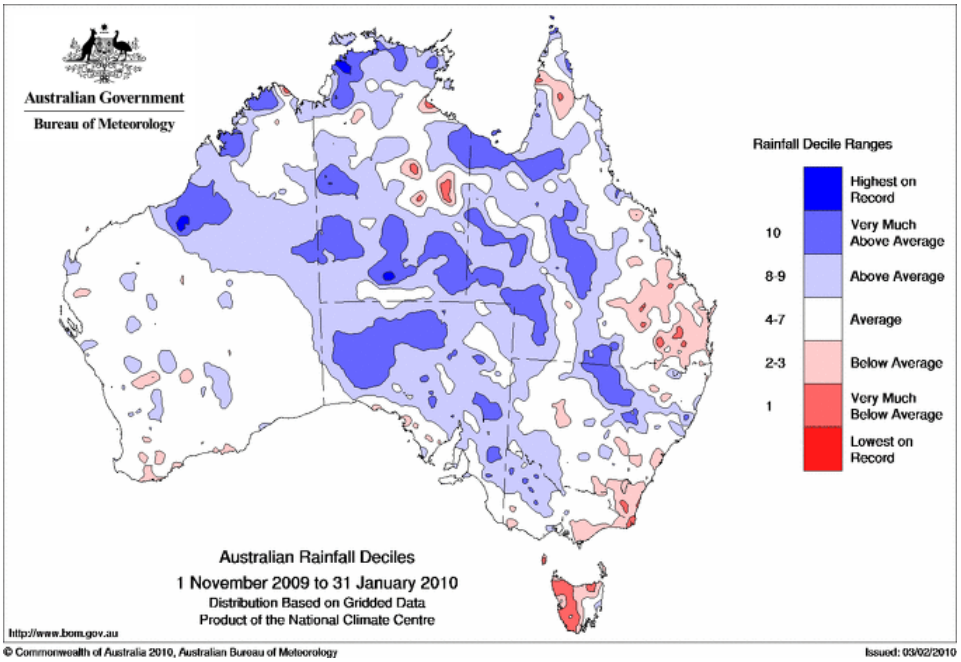
Above average to well above average rainfall was recorded across northern and central Queensland, most of the Northern Territory, western South Australia (including the Eyre Peninsula) and in some eastern areas of Western Australia. Remnants of tropical cyclone Olga provided above average rainfall in a band from south-western Queensland to northern New South Wales.

Rainfall across the northern half of the country is expected to provide favourable production opportunities for both livestock and summer crop producers.

Below average rainfall was received in the south-west and some inland areas of Western Australia, south-east Queensland, far north-east New South Wales and in a band stretching from north-east South Australia to south-east New South Wales.

Tasmania experienced its sixth-driest January on record (57 per cent below average).

Ongoing or emerging rainfall situations



Rainfall percentiles for the last three months

November 2009 – January 2010

Above average rainfall received during the past three months (November 2009 – January 2010) in South Australia and most of northern and central Australia, has eased rainfall deficiencies in these areas. However, deficiencies remained across areas of Tasmania, south-east Queensland and south-eastern New South Wales due to a lack of rainfall during January 2010.

Tasmania has experienced its fourth dry month in succession, leading to the October 2009 to January 2010 period being the fourth driest on record.

Ongoing rainfall deficiencies in Tasmania are likely to adversely affect production opportunities, particularly for livestock producers.

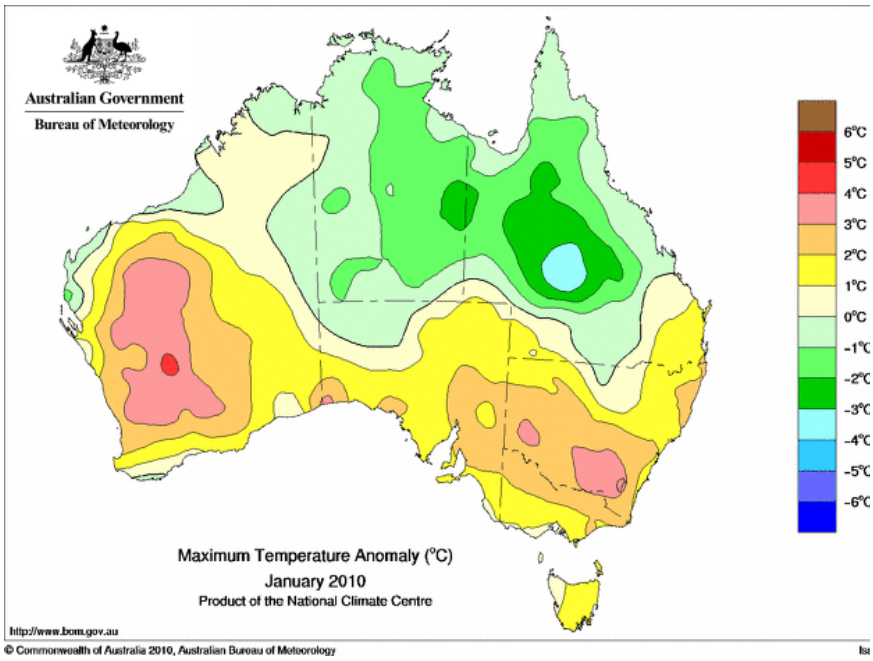
1.2 Temperature

Spatial temperature analyses are based on historical monthly temperature data provided by the Bureau of Meteorology. These temperature anomaly maps show the departure of the maximum and the minimum temperature from the long-term average. Temperature anomalies are calculated with respect to the reference period 1961 to 1990. For further information on temperature anomalies go to: http://www.bom.gov.au/climate/austmaps/

Mean maximum temperature

The maximum temperature in January 2010 for Australia was 0.51°C above average (nineteenth highest of 61 years). Maxima were above average across the southern half of the country, most notably in the southern part of Western Australia (which had its third-highest January maximum temperature) and inland southern New South Wales. Above average temperatures during January reportedly damaged some horticultural crops in south-western and south-eastern Australia.

In contrast, below average maximum temperatures were recorded across the north-east of Western Australia, the Northern Territory and most of Queensland, with some areas near Longreach reaching 3°C below average.

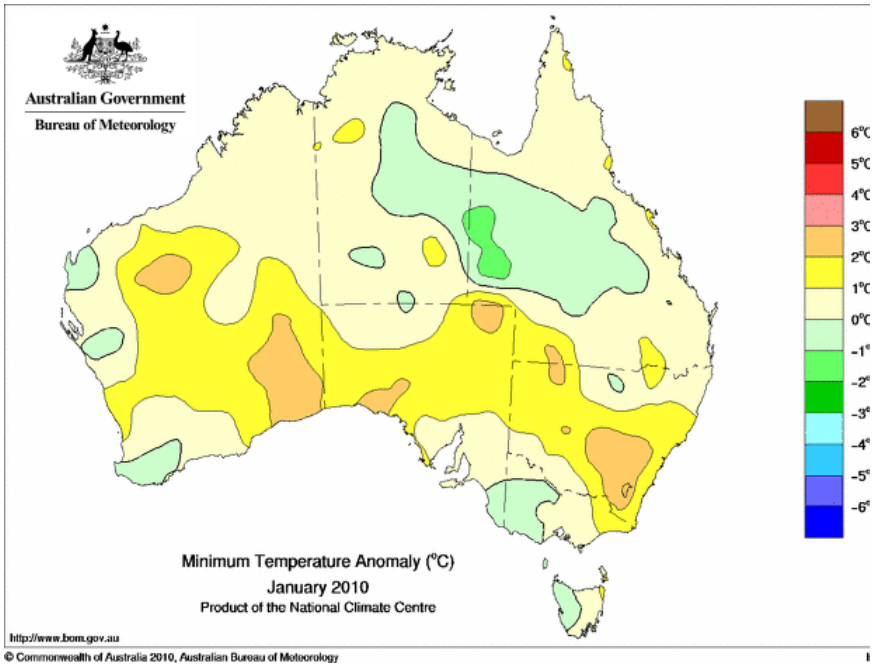


Monthly mean maximum temperature anomalies

January 2010

Mean minimum temperature

January's minimum temperature for Australia was 0.57°C above average (seventeenth highest of 61 years). Minimum temperatures of 1 to 3°C above average were recorded in southern parts of Western Australia and parts of South Australia and New South Wales. In eastern Northern Territory and western and central Queensland minimum temperatures were 1 to 2°C below average. Areas in western Victoria, south-east South Australia, north-west Tasmania and some coastal areas of Western Australia also recorded below average minimum temperatures.



Monthly mean minimum temperature anomalies

January 2010

1.3 Climate Outlook

El Niño Southern Oscillation (ENSO)

On 3 February 2010, the Bureau of Meteorology announced that central Pacific Ocean temperatures had remained well above El Niño thresholds over the past month. However, surface temperatures in the central and eastern Pacific continued to cool during January 2010. The Southern Oscillation Index declined rapidly over the past week, after rising through most of January and continues to remain at negative values typical of an El Niño event, currently at -13.

For further information on the Bureau of Meteorology interpretation of the El Niño–Southern Oscillation, go to: http://www.bom.gov.au/climate/enso/.

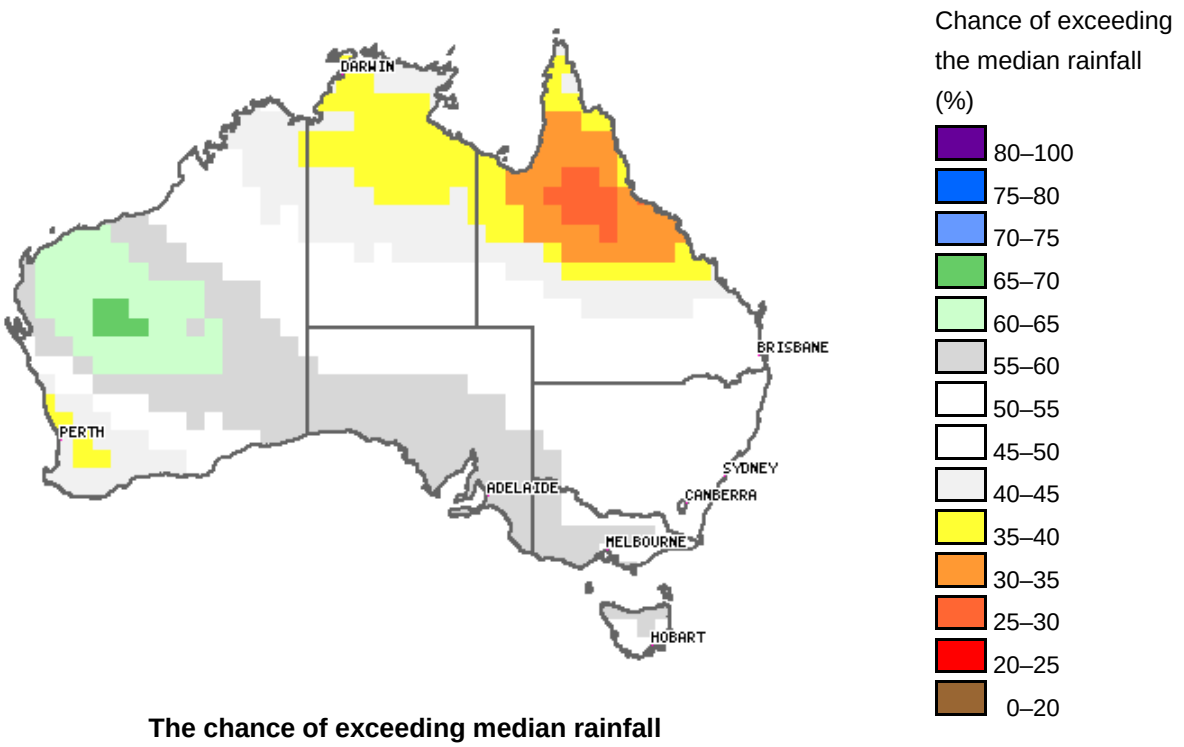
Rainfall outlook

The Bureau of Meteorology provides seasonal outlooks that are statements about the probability of wetter or drier than average weather over a three month period. The outlooks are based on the statistics of chance (the odds) taken from Australian rainfall, temperature and sea surface temperature records for the tropical Pacific and Indian Oceans. They are not categorical predictions about future rainfall and they do not indicate the expected rainfall amount for the three month outlook period.

There is a reduced chance of exceeding the median rainfall for late summer to mid-autumn 2010 (February to April) across northern Queensland, the north of the Northern Territory and south-west of Western Australia. Drier conditions could affect warm season pasture growth in these agricultural areas.

In contrast, there is an increased chance of above average rainfall for north-western and central Western Australia. Increased rainfall across these areas may improve production conditions for livestock producers.

Across the rest of the country there is about an equal chance of receiving either above or below the median rainfall between February and April 2010.



The chance of exceeding median rainfall
February to April 2010

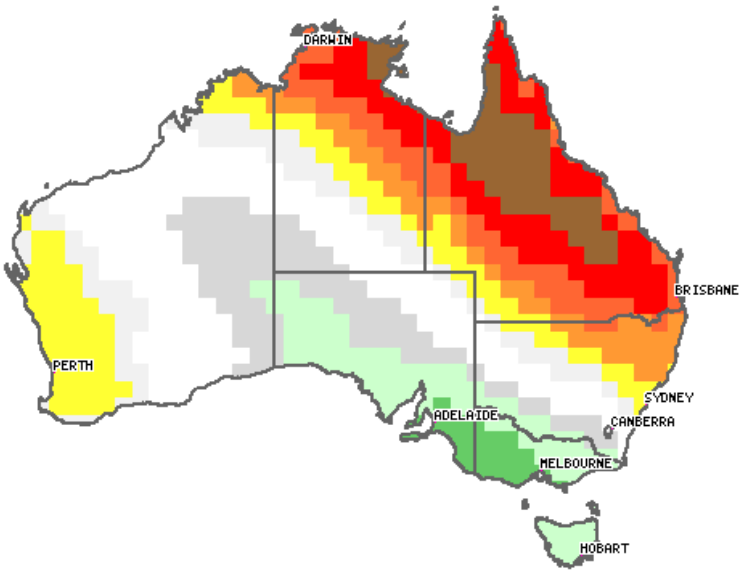
Temperature Outlook

There is a high chance (60 to above 80 per cent) of exceeding the median maximum temperature between February and April 2010 across north-eastern and eastern Australia. Similarly, there is a 60 to 65 per cent chance of warmer daytime temperatures across south-west of Western Australia. In contrast, there is a 60 to 70 per cent chance of cooler than average days across the south-eastern part of the country.

The maximum temperature outlook pattern is broadly consistent with the rainfall outlook pattern in the north-east of the country and indicates that production conditions may be broadly favourable in areas of central and southern Australia during the next three months.

Average minimum temperatures during February to April 2010 are likely to be above average (60 to 80 per cent chance) across northern Australia, with the highest probabilities (80–100 per cent) occurring in the far north of the country. There is an increased likelihood (60 to 75 per cent chance) of cooler night-time temperatures occurring in south-eastern Australia.

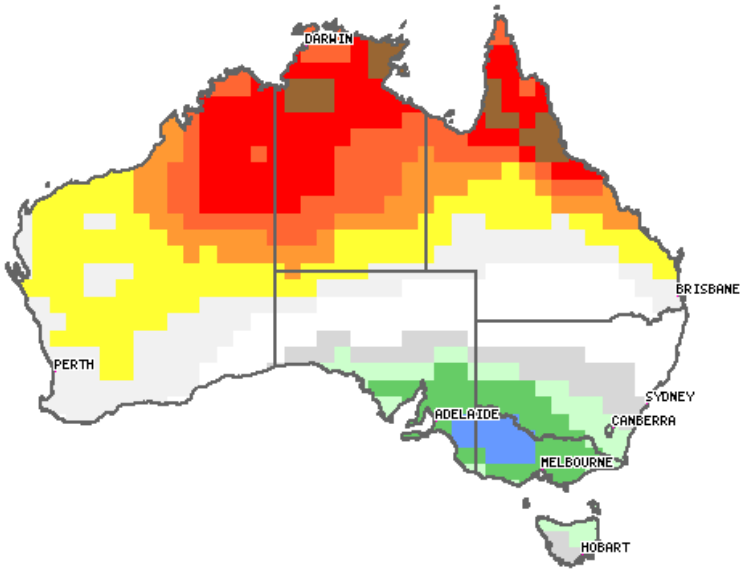
For further information on Bureau of Meteorology seasonal outlooks, go to:
http://www.bom.gov.au/climate/ahead/.



Chance of exceeding the median temperature (%)

- 80–100
- 75–80
- 70–75
- 65–70
- 60–65
- 55–60
- 50–55
- 45–50
- 40–45
- 35–40
- 30–35
- 25–30
- 20–25
- 0–20

The chance of exceeding median maximum temperatures February to April 2010



Chance of exceeding the median temperature (%)

- 80–100
- 75–80
- 70–75
- 65–70
- 60–65
- 55–60
- 50–55
- 45–50
- 40–45
- 35–40
- 30–35
- 25–30
- 20–25
- 0–20

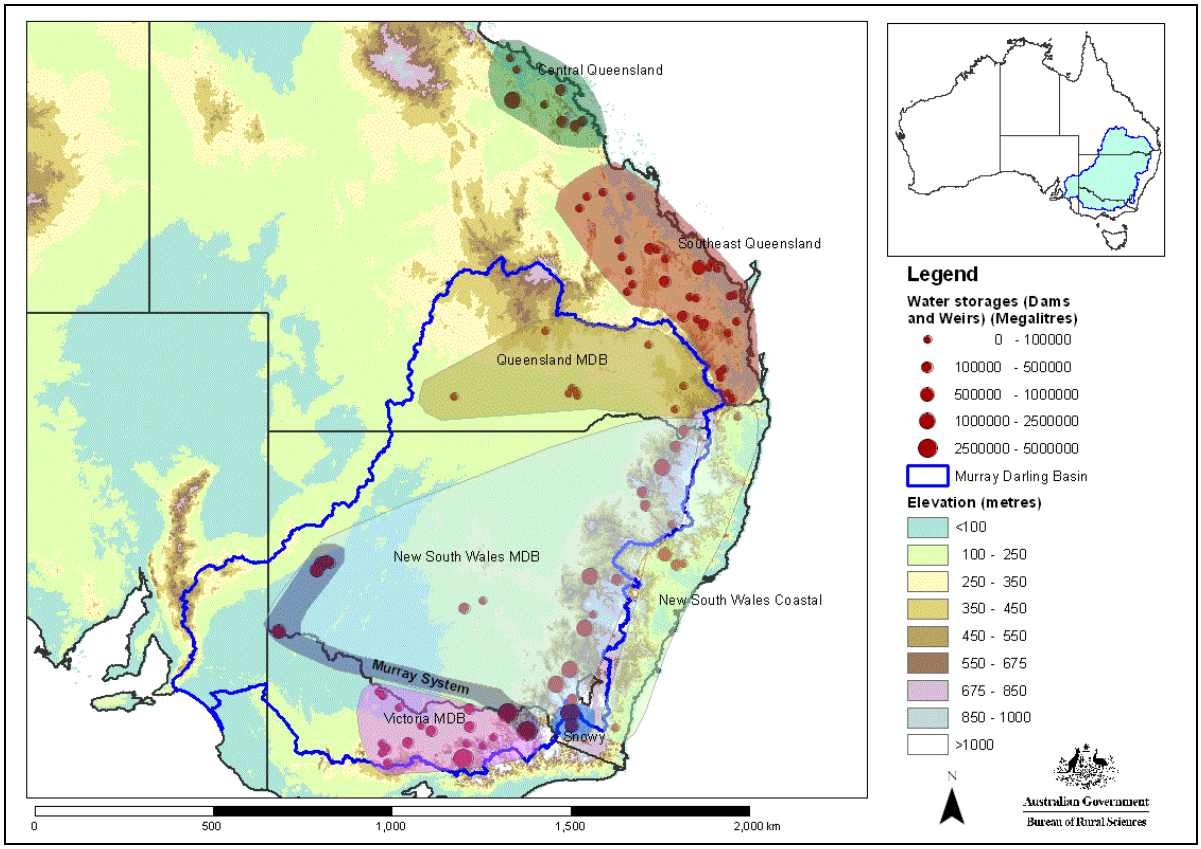
The chance of exceeding median minimum temperatures February to April 2010

2.0 Water

2.1 Water storages

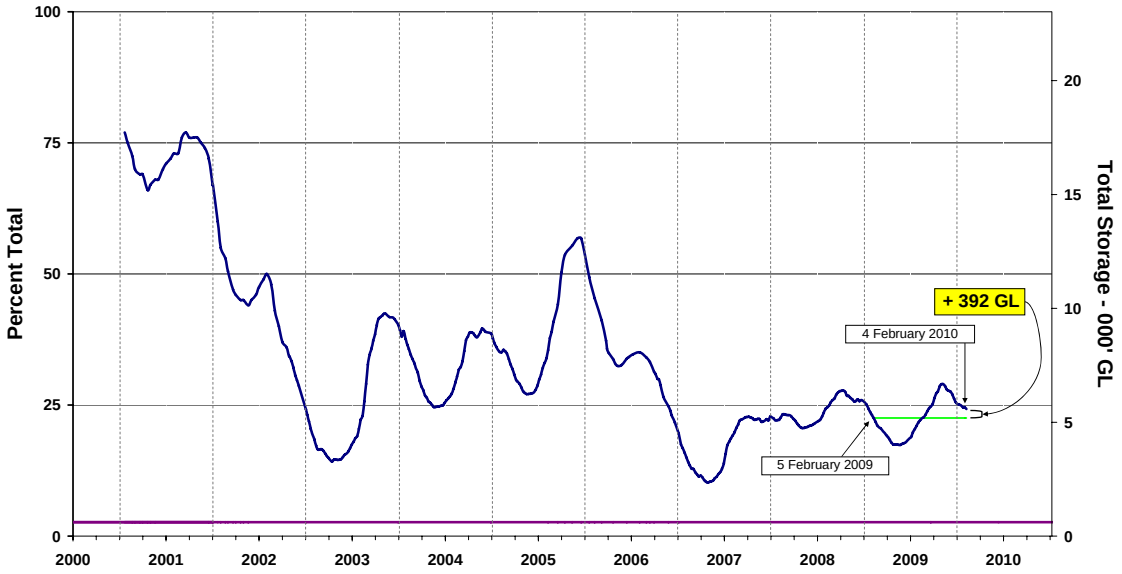
Water storage changes for January 2010 and the previous 12 months are summarised in the table and graphs below (current at 4 February 2010).

Region	Total capacity (GL)	Current volume (GL)	Current volume (%)	Monthly change (GL)	Monthly change (%)	Annual change (GL)
Murray Darling Basin (MDB)	23 020	5 574	24	-198	-1	+392
Snowy Scheme	5 744	1 895	33	-113	-2	+378
Murray Darling Basin Authority (MDBA)	7 621	1 868	22	-269	-4	+404
Queensland MDB	185	83	45	+41	+22	-22
Central Queensland	3 155	2 841	90	+532	+17	-136
South-east Queensland	3 517	1 731	49	+121	+3	-338
New South Wales MDB	13 884	2 870	21	-106	-1	-283
Coastal New South Wales	1 073	776	72	-8	-1	+59
Victoria MDB	**8 903**	**2 610**	**29**	**-133**	**-1**	**+694**

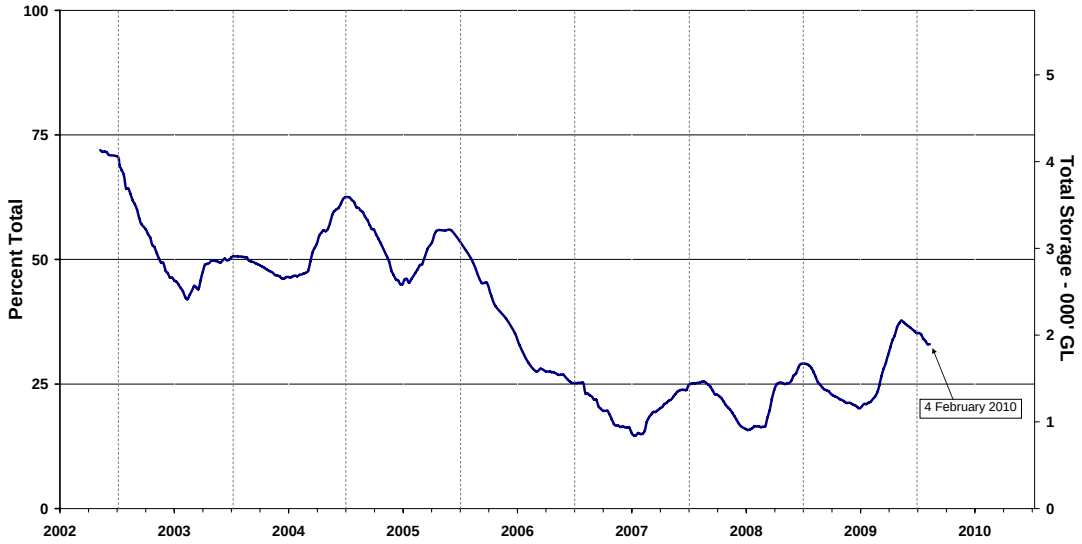


Water storages in Queensland, New South Wales and Victoria
Note: the blue line indicates the extent of the Murray–Darling Basin.
The shaded areas denote the coverage of the individual reporting regions.

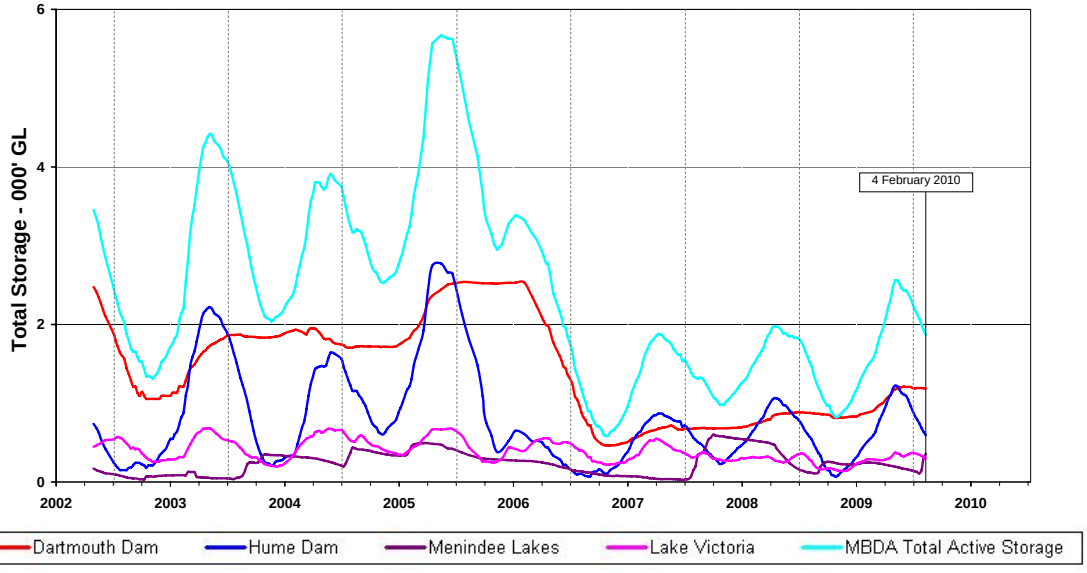
MDB (New South Wales, Victoria and Queensland)



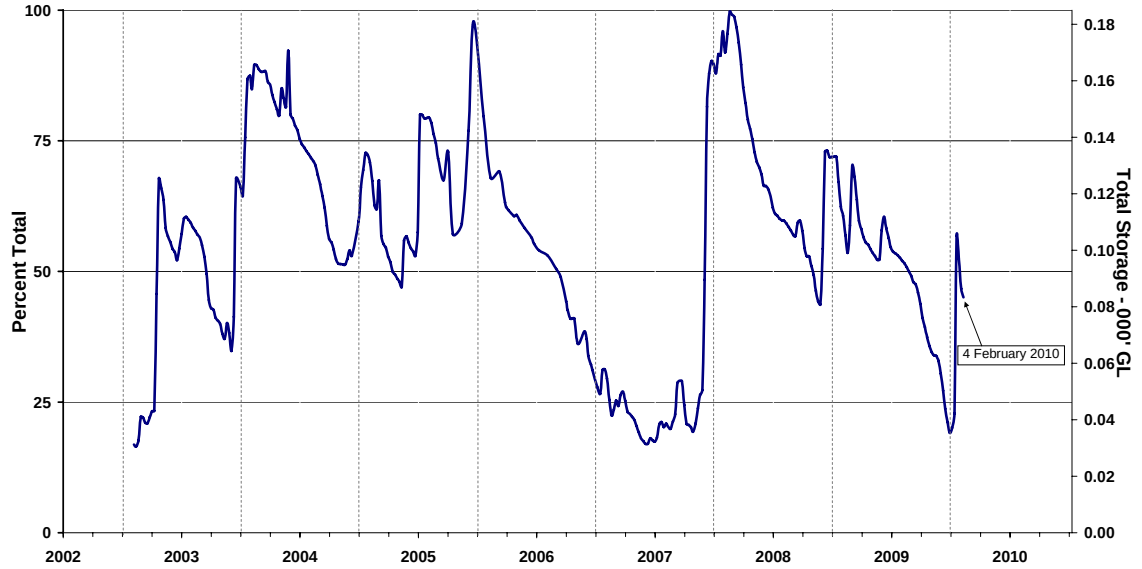
Snowy Scheme



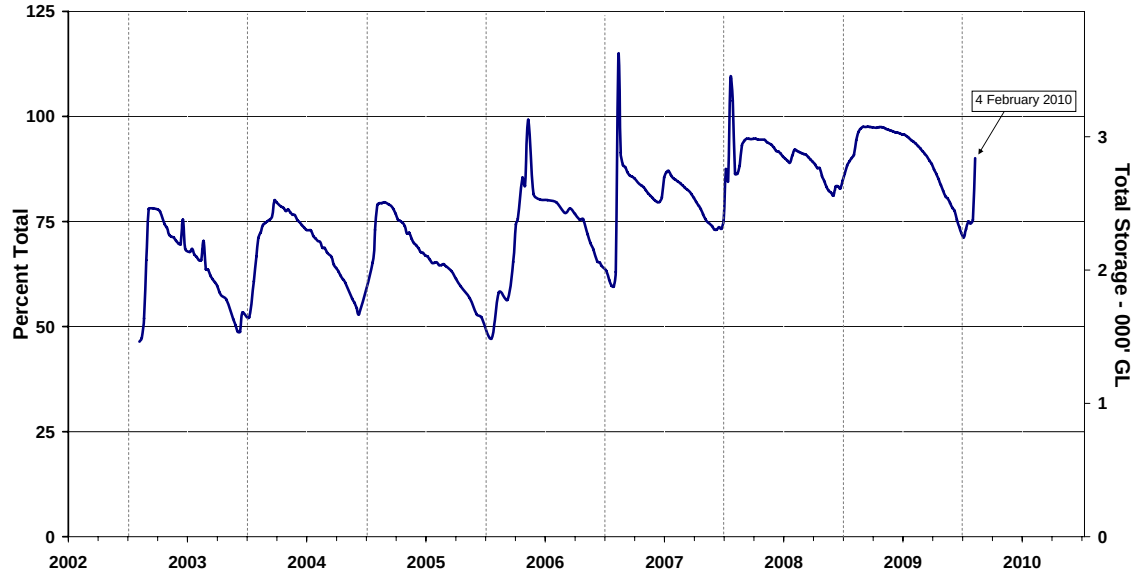
MDBA



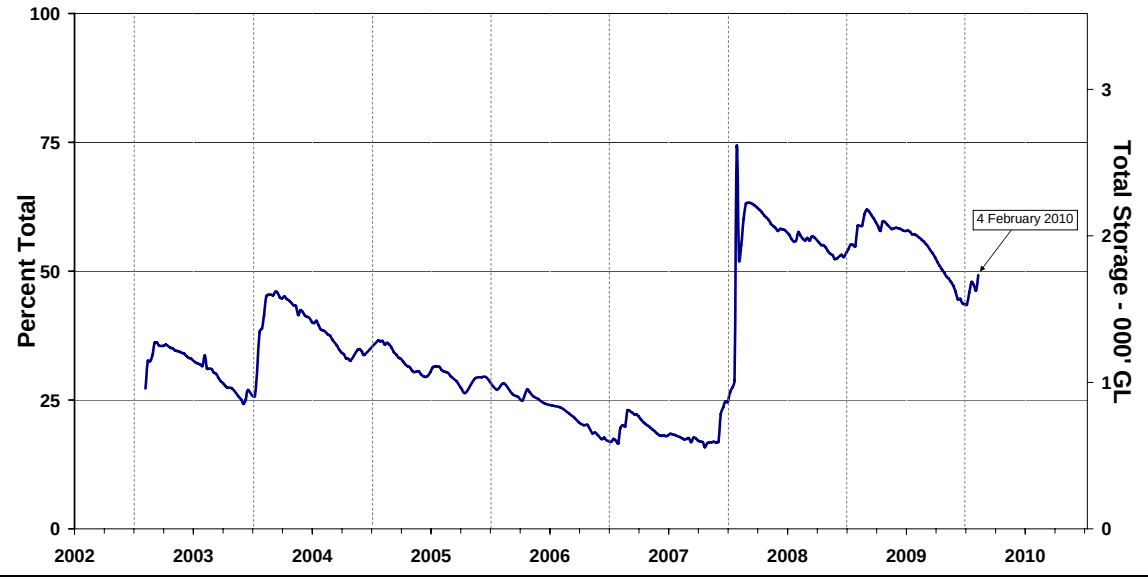
Queensland MDB



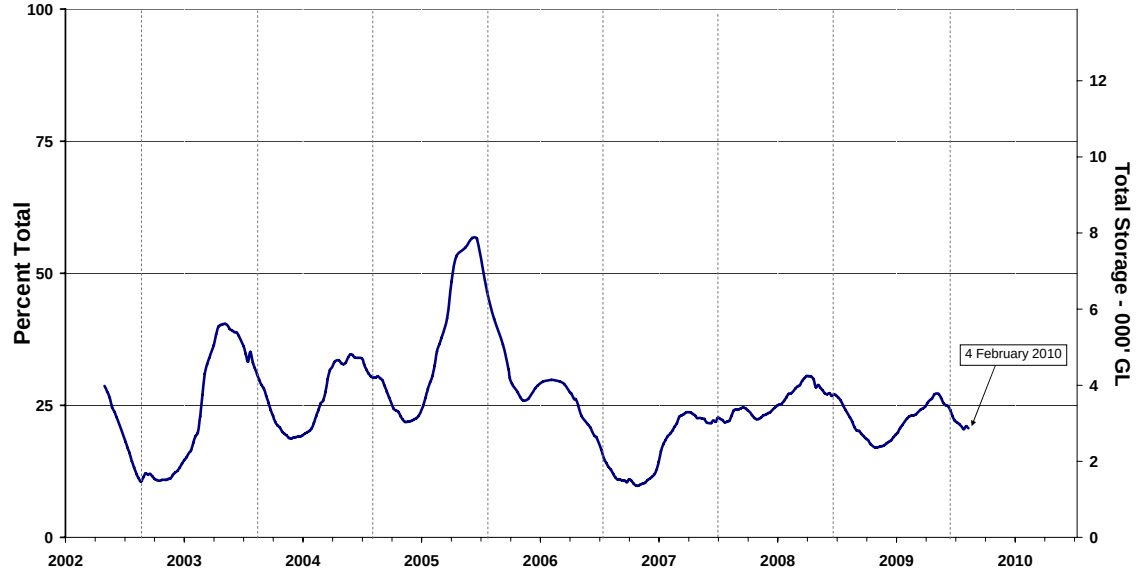
Central Queensland



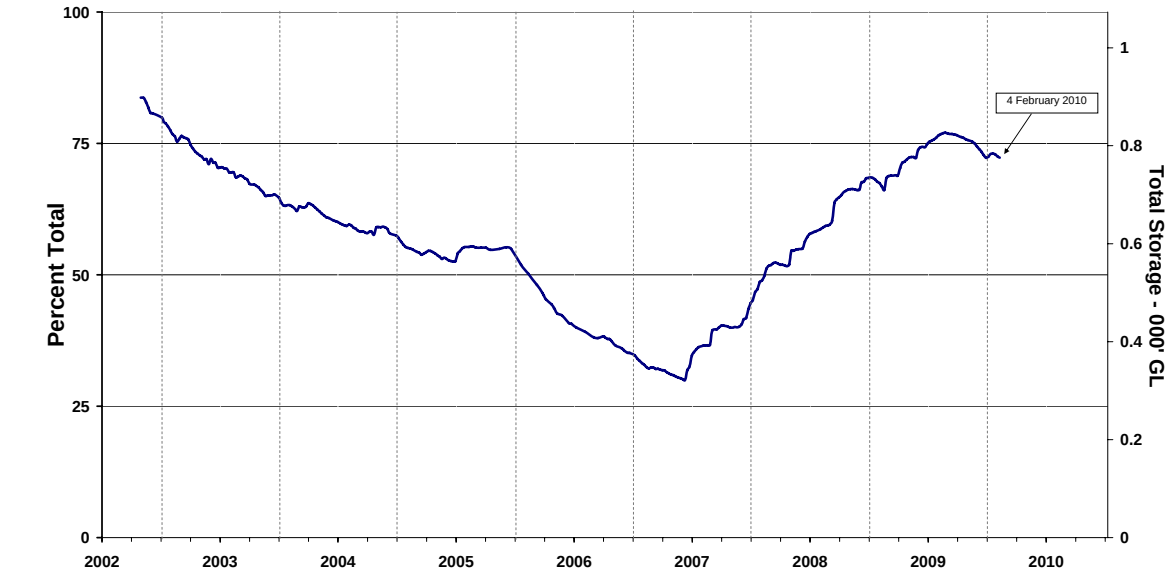
South-east Queensland



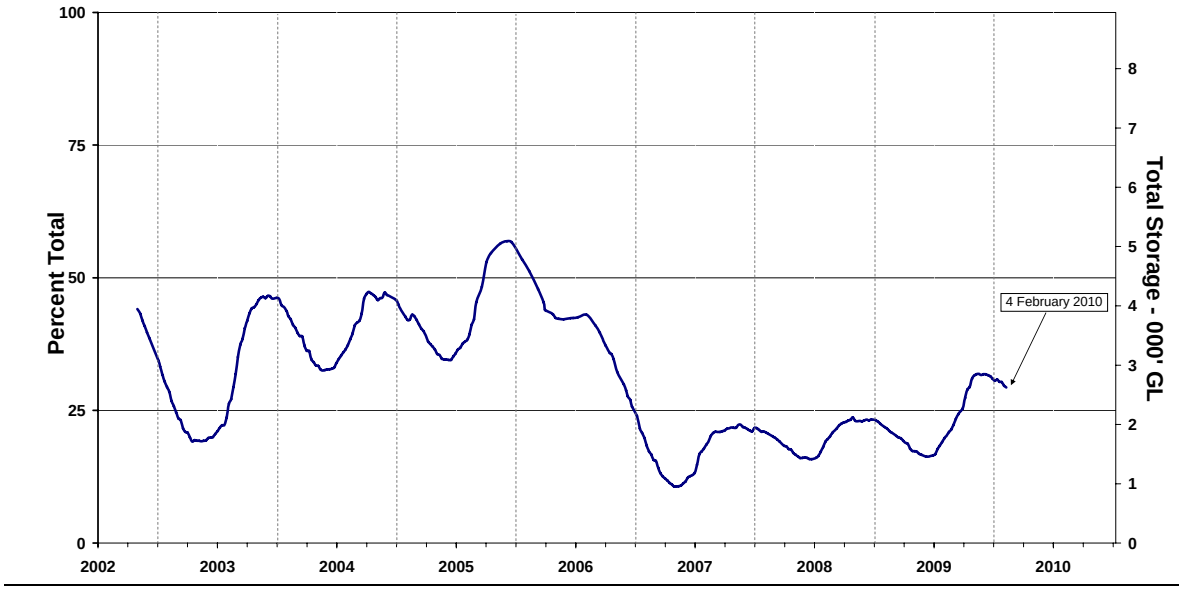
New South Wales MDB



Coastal New South Wales



Victoria MDB



For further information on water storages, go to:

- Snowy Scheme:
  http://www.snowyhydro.com.au/lakeLevels.asp?pageID=360&parentID=6
- Queensland:
  http://www.sunwater.com.au/pdf/water/CurrentStorageSummary.pdf
- New South Wales:
  http://www.statewater.com.au/indexes/index.asp
- Northern Victoria:
  http://www.g-mwater.com.au/water-resources/storage-levels/
- Murray–Darling Basin Authority:
  http://www.mdba.gov.au/

2.2 Water allocations

The water allocations and changes over the last month for all licence holders in New South Wales, Victoria and South Australia water systems are summarised in the table following.

For further information on water announcements, go to:

- New South Wales Office of Water, Department of Environment, Climate Change and Water
  http://www.water.nsw.gov.au/
- Goulburn-Murray Water
  http://www.g-mwater.com.au/news/media-releases/
- South Australian Department of Water, Land and Biodiversity Conservation
  http://www.dwlbc.sa.gov.au/media.html
- Murray-Darling Basin Authority
  http://www.mdba.gov.au/

	Allocations 1 February 2010 (%)	Increase from January 2010 (%)	Closing allocations 2008–09 (%)
NSW Murray Valley			
High security	97	nil	95
General security	13	nil	9
NSW Murrumbidgee Valley			
High security	95	nil	95
General security	18	+3	21
NSW Lower Darling			
High security	100	nil	100
General security	100	+75	50
NSW Macquarie Valley			
High security	100	nil	100
General security	0	nil	10
NSW Hunter Valley			
High security	100	nil	100
General security	100	nil	100
NSW Lachlan Valley*			
High security	10	nil	30
General security	0	nil	0
NSW Border Rivers			
High security	100	nil	100
General security	0	nil	0
NSW Peel Valley			
High security	100	nil	100
General security	100	nil	80
Victoria Murray Valley			
High reliability	63	nil	35
Victoria Goulburn			
High reliability	56	+1	33
Victoria Campaspe and Loddon			
High reliability	0	nil	0
Victoria Bullarook			
High reliability	11	nil	0
Victoria Broken			
High reliability	1	+1	0
South Australia Murray Valley			
High security	48	nil	18

* Lachlan River is subject to Critical Water Planning Measures

3.0 Production

3.1 Crops

Summer Crops

Australia

The current regional outlook shows the forecast median yield for Australia's sorghum-cropping region at the end of January 2010 is 2.41 t/ha, which is slightly above the long-term median of 2.35 t/ha. However, total production is likely to decline since sorghum plantings were below average in most areas due to a lack of widespread planting rains (Seasonal Crop Outlook Sorghum – February 2010, Queensland Government Department of Primary Industries).

- http://www.dpi.qld.gov.au/fieldcrops/

Queensland

At the end of January, current soil water conditions and the seasonal rainfall outlook indicate a close to average sorghum crop yields for the 2009–10 summer growing season across most the Queensland cropping region. The forecast medians for the central and south-western Queensland cropping regions are 2.03 t/ha and 2.30 t/ha, respectively (compared to their respective long-term medians of 2.00 t/ha and 2.34 t/ha). However, most areas in south-eastern Queensland show sorghum yield outcomes below the long-term expectation, with widespread rainfall needed to improve this outlook (Seasonal Crop Outlook Sorghum – February 2010, Queensland Government Department of Primary Industries).

- http://www.dpi.gov.au/fieldcrops/

New South Wales

Summer crop sowings are estimated at 243 885 ha (excluding rice) compared to last season when about 277 212 ha was harvested. Hot, dry conditions until late December stressed most summer crops and increased water use. Rainfall at the end of December saved many crops and boosted yield potential. Harvest is about to commence on early sown sorghum and the early sown sunflower crop. Sunflower yield potential is estimated at 1.73 t/ha. Sorghum sowings of around 82 620 ha are well down on earlier forecasts of 125 300 ha as a result of dry conditions in the main planting period. Most crops will now be taken through for grain.

- http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0008/316646/NSW-Grains-Report-January-2010.pdf

The northern New South Wales sorghum cropping region currently has a yield expectation of 3.19 t/ha, which is above the long-term yield expectation for the region and is the main contributor to the slightly above median result forecast for the entire north-eastern Australia cropping region (Seasonal Crop Outlook Sorghum – February 2010, Queensland Government Department of Primary Industries).

- http://www.dpi.gov.au/fieldcrops/

3.2 Livestock

Beef cattle

Rainfall during January 2010, combined with rain in late 2009, has improved production conditions for graziers, reducing supply of cattle entering the market and strengthening the demand from producers wishing to re-stock. However, export demand for beef products remains low in many regions and demand in the short term will depend on continued improvement of local production opportunities.

- http://www.mla.com.au/TopicHierarchy/News/MarketNews/2010/Better+start+to+2010+for+cattle+markets.htm

New South Wales throughput in saleyards was 37 per cent lower during January 2010 compared with January last year and 28 per cent less than in 2008.

- http://www.mla.com.au/TopicHierarchy/News/MarketNews/2010/Cattle+market+wrap.htm

Sheep and lambs

Demand remains high from processors, feeders and re-stockers (based on good availability of pasture and grain). The intense competition is keeping sheep prices at record high levels across all states, with ewe prices almost double the same time last year.

- http://www.mla.com.au/TopicHierarchy/News/MarketNews/2010/Better+start+to+2010+for+cattle+markets.htm

The current limited supply of wethers and ewes, combined with renewed confidence in prime lamb enterprises, has maintained high mutton prices. High demand for breeding ewes has increased ewe prices by 85 per cent year-on-year. In addition, purchases by re-stockers have increased by 77 per cent year-on-year.

- http://www.mla.com.au/TopicHierarchy/News/MarketNews/2010/Lamb+and+sheep+market+wrap.htm

For further information on crops and livestock, go to:

- Australian Bureau of Statistics:
  http://www.abs.gov.au/
- Australian Bureau of Agricultural and Resource Economics:
  http://abareconomics.com/
- Meat and Livestock Australia:
  http://www.mla.com.au/
- Department of Agriculture and Food Western Australia:
  http://www.agric.wa.gov.au/
- New South Wales Department of Primary Industries:
  http://www.dpi.nsw.gov.au/aboutus/news/
  http://www.dpi.nsw.gov.au/aboutus/resources/periodicals/newsletters/grains-report-nsw
- Primary Industries and Resources South Australia:
  http://www.pir.sa.gov.au/grains/cpr/
- Queensland Department of Primary Industries and Fisheries:
  http://www/dpi/gov.au/fieldcrops/
  http://www.longpaddock.qld.gov.au/QueenslandDroughtMonitor/
- The Land Farmonline:
  http://theland.farmonline.com.au/
- Victorian Department of Primary Industries:
  http://www.dpi.vic.gov.au