NAMS
NATIONAL AGRICULTURAL MONITORING SYSTEM

Climate and Agricultural Update

National Report

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Contacts

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Contributors

The information contained in this report is regularly sourced from the following organisations:

ORGANISATION

Bureau of Meteorology	http://www.bom.gov.au/
Bureau of Rural Sciences	http://www.brs.gov.au/
Department of Primary Industries, New South Wales	http://www.dpi.nsw.gov.au/
Snowy Hydro Limited	http://www.snowyhydro.com.au/
Australian Bureau of Agricultural and Resource Economics (ABARE)	http://www.abare.gov.au/
Department of Agriculture and Food, Western Australia	http://www.agric.wa.gov.au/
Goulburn-Murray Water	http://www.g-mwater.com.au/
Queensland Department of Primary Industries and Fisheries	http://www.dpi.qld.gov.au/
New South Wales Department of Water and Energy	http://www.naturalresources.nsw.gov.au/
Meat and Livestock Australia	http://www.mla.com.au/

Department of Primary Industries and Resources SA Government of South Australia Primary Industries and Resources SA	http://www.pir.sa.gov.au/
Department of Primary Industries, Victoria, Australia Victoria The Place To Be	http://www.dpi.vic.gov.au/
Murray-Darling Basin Authority MURRAY–DARLING BASIN AUTHORITY	http://www.mdba.gov.au/

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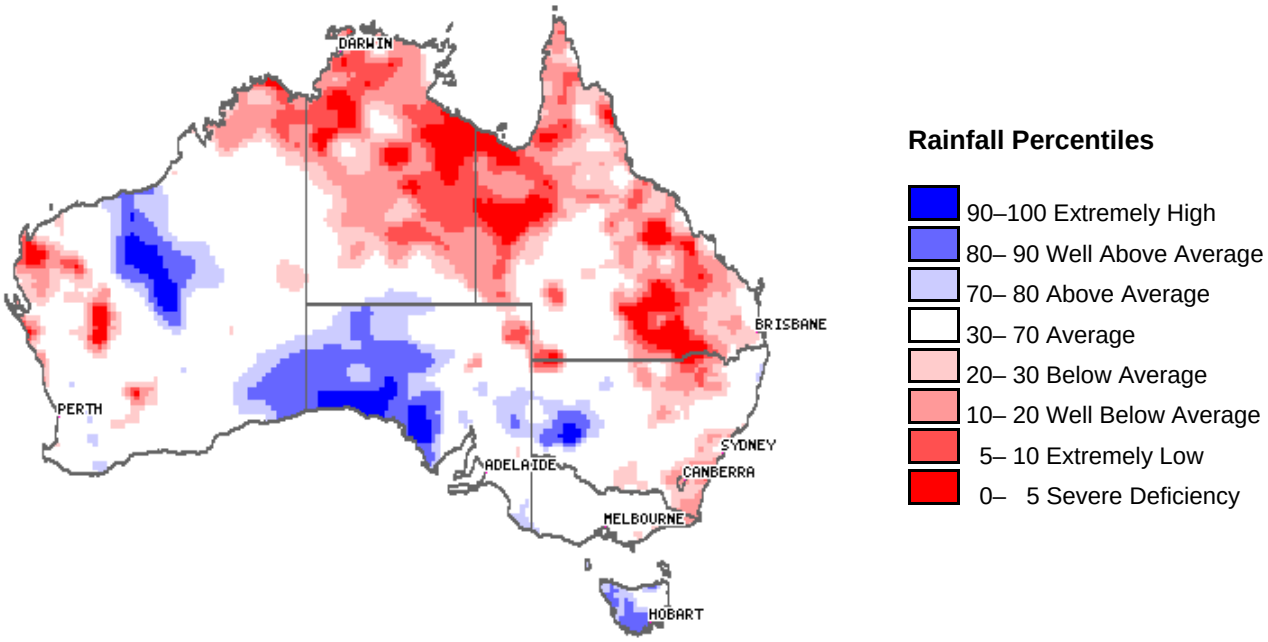
1.0 Rainfall and temperature

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/.

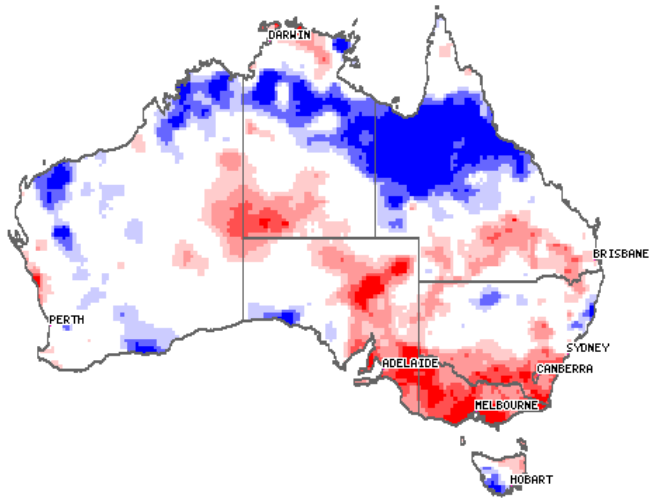
Rainfall over the last month (March 2009)



Rainfall percentiles for March 2009

Rainfall in March 2009 was 56 per cent below average for the continent (thirteenth lowest on record). Most of tropical Australia experienced below average to severely deficient rainfall. Rainfall was 70 per cent below average in Queensland (sixth lowest on record) and 78 per cent below average in the Northern Territory (ninth lowest on record). Both states had their driest March since 1991. In contrast, above average rainfall was recorded in western Tasmania, western South Australia, western New South Wales and central Western Australia

Ongoing or emerging rainfall situations

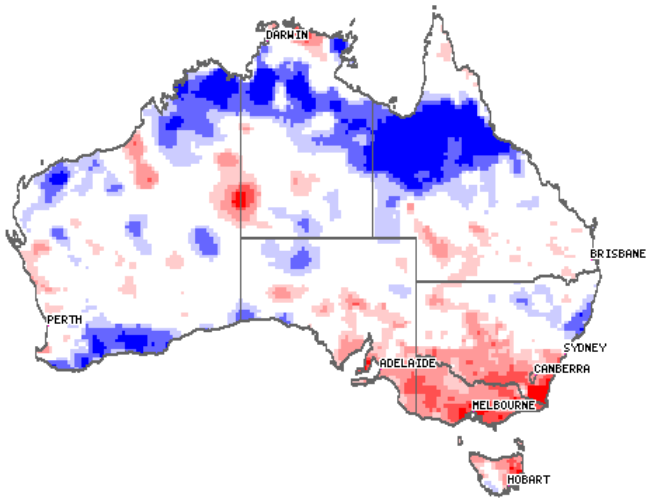


Rainfall Percentiles

- 90–100 Extremely High
- 80– 90 Well Above Average
- 70– 80 Above Average
- 30– 70 Average
- 20–30 Below Average
- 10– 20 Well Below Average
- 5– 10 Extremely Low
- 0– 5 Severe Deficiency

Rainfall percentiles for the last three months
January 2009–March 2009

Presence of a persistent monsoonal trough during the last three months over northern Australia led to above average to extremely high rainfall in the northern parts of Queensland, the Northern Territory and Western Australia. However, the 3-month rainfall deficiencies increased in the southern and central parts of the continent. Notable areas of below average rainfall are evident in central Australia, Victoria, the eastern half of South Australia, southern New South Wales and southern Queensland.



Rainfall Percentiles

- 90–100 Extremely High
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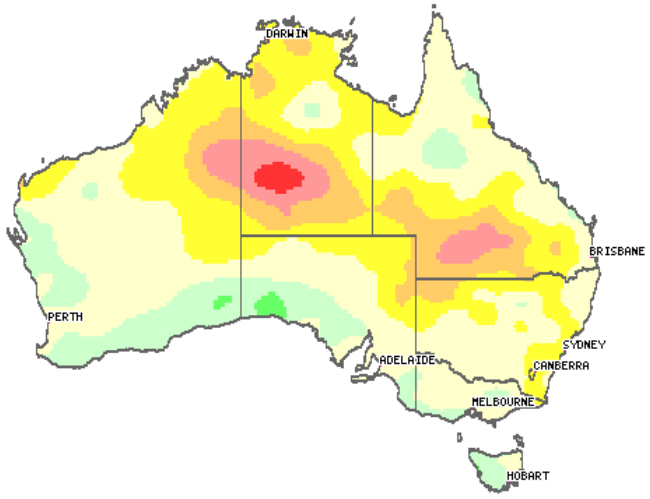
- 70– 80 Above Average
- 30– 70 Average
- 20– 30 Below Average
- 10– 20 Well Below Average
- 5– 10 Extremely Low
- 0– 5 Severe Deficiency

Rainfall percentiles for the last 12 months
April 2008–March 2009

For the 12 month period from April 2008 to March 2009, above average rainfall was recorded across northern Australia and in the west and south of Western Australia. 12-month rainfall deficiencies eased slightly in central South Australia due to well above average rainfall late in 2008 and above average rainfall in March 2009. Rainfall was well below average across the south-east of the continent, with areas in southern Victoria and north-eastern Tasmania in the lowest tenth percentile range.

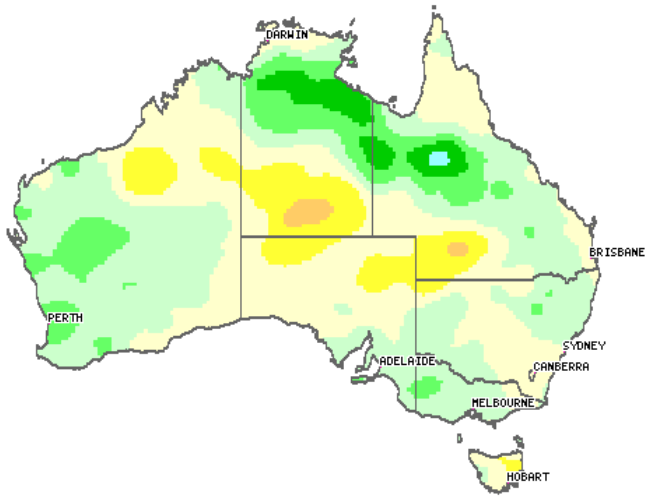
1.2 Maximum and minimum temperature anomalies

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 1961–1990. For further information on temperature anomalies go to: http://www.bom.gov.au/climate/austmaps/.

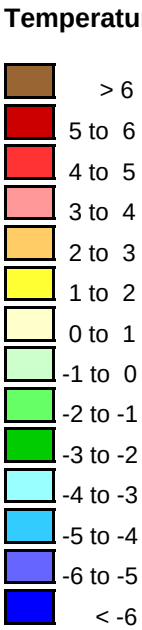


Monthly mean maximum temperature anomalies
March 2009

Maximum temperatures in March 2009 averaged over Australia were 0.95 °C above the long-term average for the month (eleventh highest on record). Maximum temperatures were 2–4 °C above average in southern Queensland, central Northern Territory and northern Western Australia. In contrast, maximum temperatures were 0–2 °C below average along much of the southern coastline between Carnarvon and Melbourne.

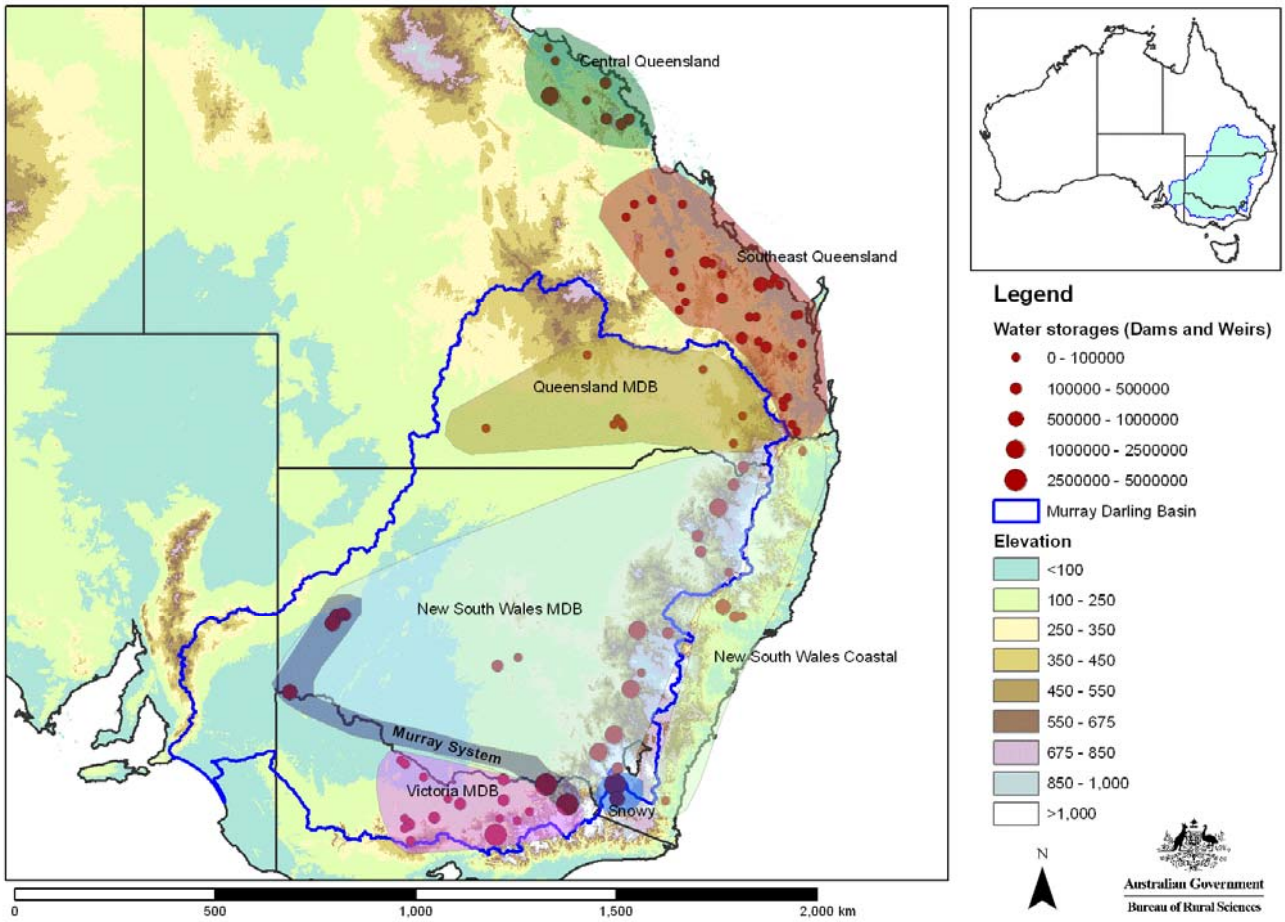


Monthly mean minimum temperature anomalies
March 2009



Minimum temperatures in March 2009 averaged over Australia were 0.11 °C below the long-term average for the month. Minimum temperatures were 0–2 °C above average from north-western Western Australia through to south-western Queensland. In contrast, minimum temperatures were 1–2 °C below average in south-western Western Australia and south-eastern Australia, while the northern Northern Territory and central Queensland experienced minimum temperatures 1–4 °C below average.

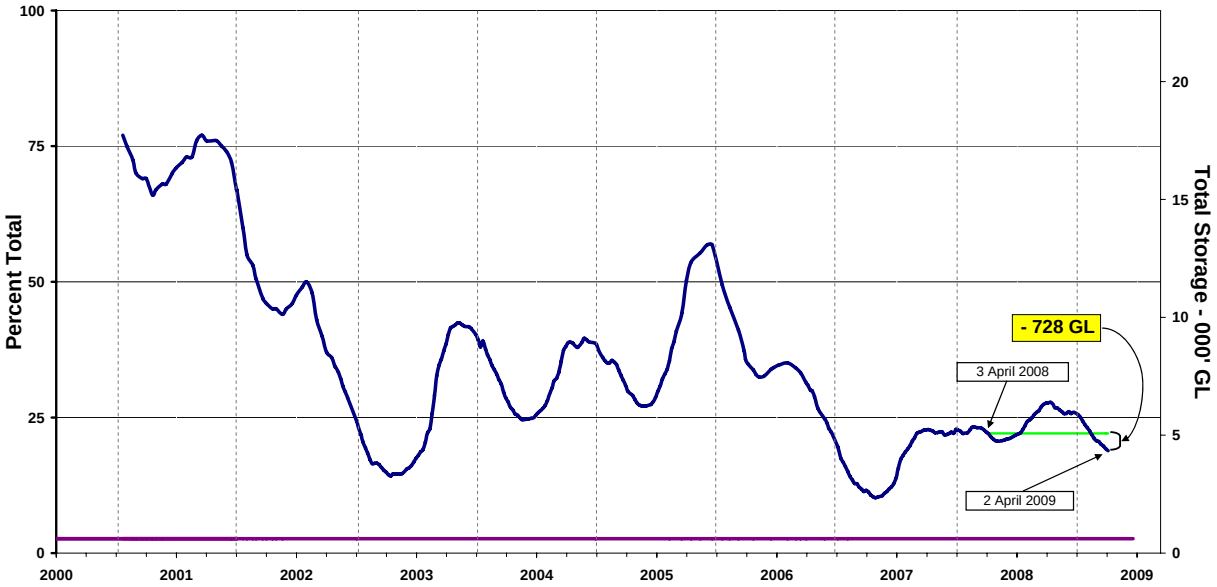
2.0 Water storages and announcements



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

Water storages (current to 2 April 2009)

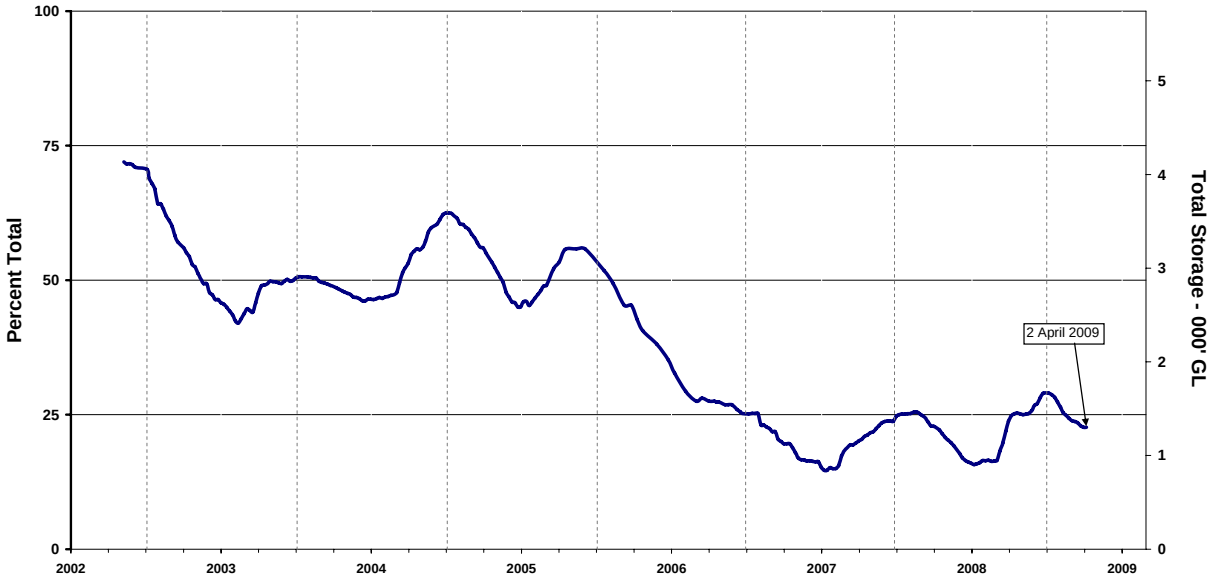
Water storage in the MDB (New South Wales, Victoria and Queensland)



Water storage levels in the Murray-Darling Basin from 1 January 2001 to 2 April 2009. The green line shows the storage level at the same time last year and the purple line shows the dead storage (not calculated).
Source: Bureau of Rural Sciences

Over the past month storage levels within the Murray-Darling Basin (MDB) have decreased. Storage levels generally fall at this time of the year because of the seasonal irrigation drawdown. Storage levels for irrigated agriculture on 2 April 2009 were at 4348 gigalitres (GL) (18.9 per cent of a total capacity of 23 020 GL), a decrease of 381 GL (1.6 per cent of total capacity) over the month. Current storage levels are approximately 599 GL less than at the same time last year.

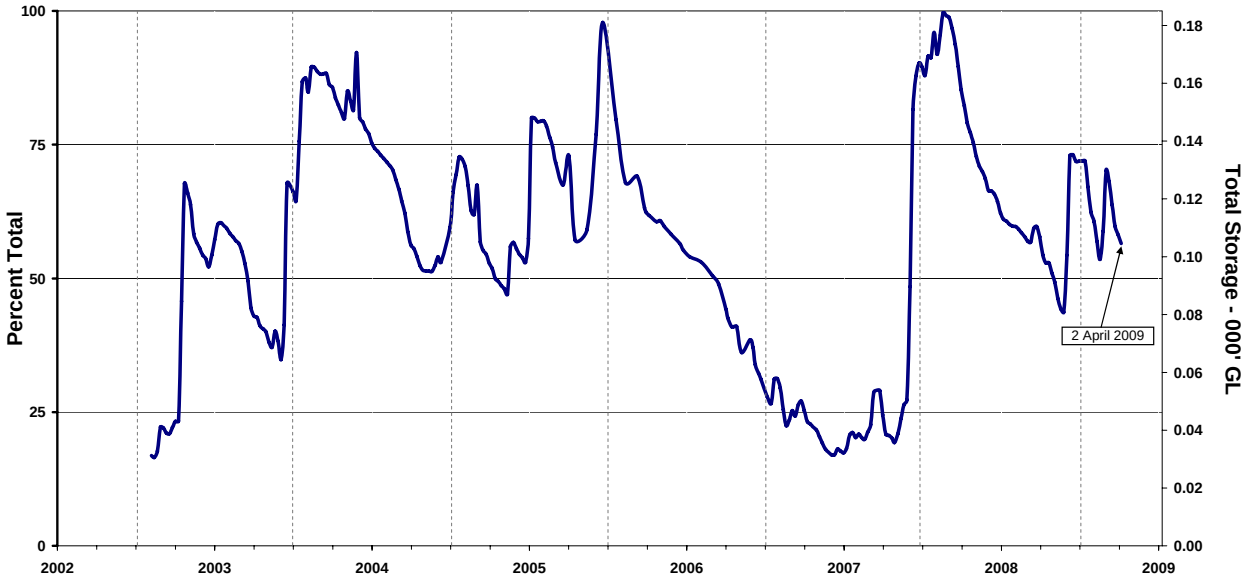
Water storage in the Snowy Scheme



Water storage levels in the Snowy Scheme from 6 November 2002 to 2 April 2009.
Source: Bureau of Rural Sciences

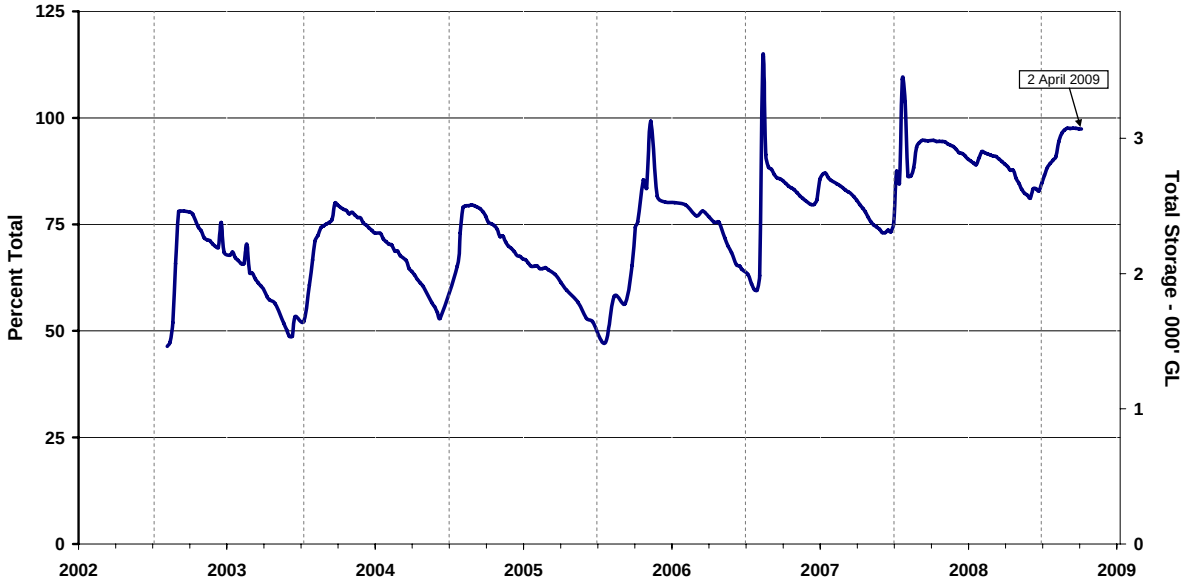
The figure 'Water storage in the MDB' (above top) does not include the capacities of Lake Eucumbene, Tantangara Reservoir and Lake Jindabyne (collectively the Snowy Scheme) which are reserved for hydro-electricity generation and irrigation purposes. Current levels in the Snowy Scheme storages are 1303 GL (22.7 per cent of a total capacity of 5744 GL) (see figure above). This is a decrease of 7 GL (0.1 per cent) from the same time last year.

Water storage in Queensland



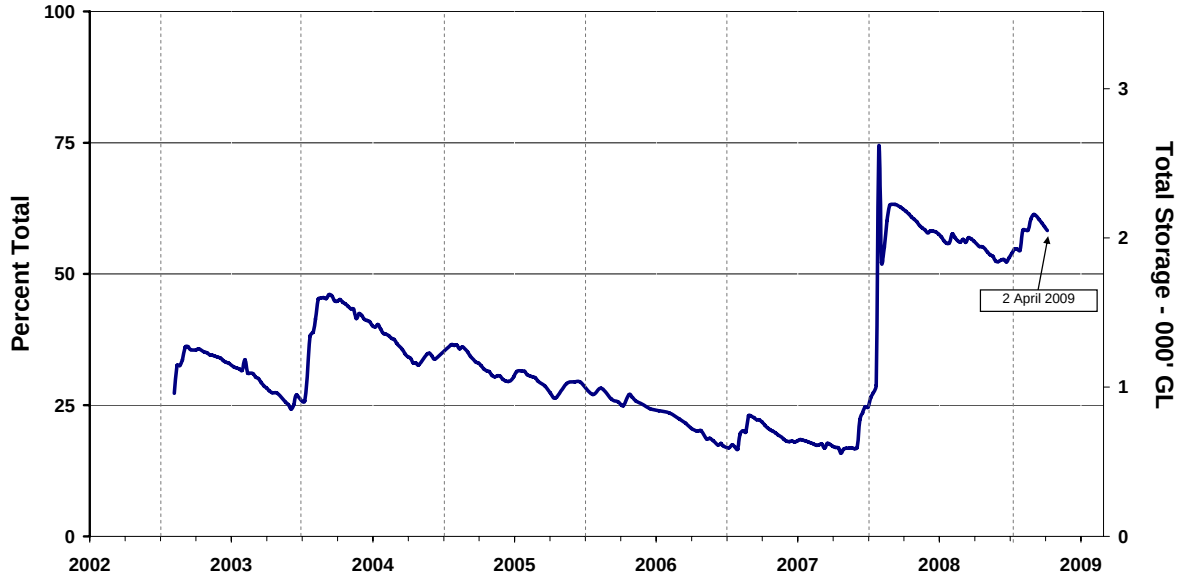
Water storage levels in Queensland MDB from 3 February 2003 to 2 April 2009.
Source: Bureau of Rural Sciences

Storage levels in Queensland MDB decreased by 21 GL to 105 GL (56.5 per cent of a total capacity of 185 GL) over the last month (see figure above). This storage level is approximately 48 GL lower than at the same time last year.



Water storage levels in central Queensland from 3 February 2003 to 2 April 2009.
Source: Bureau of Rural Sciences

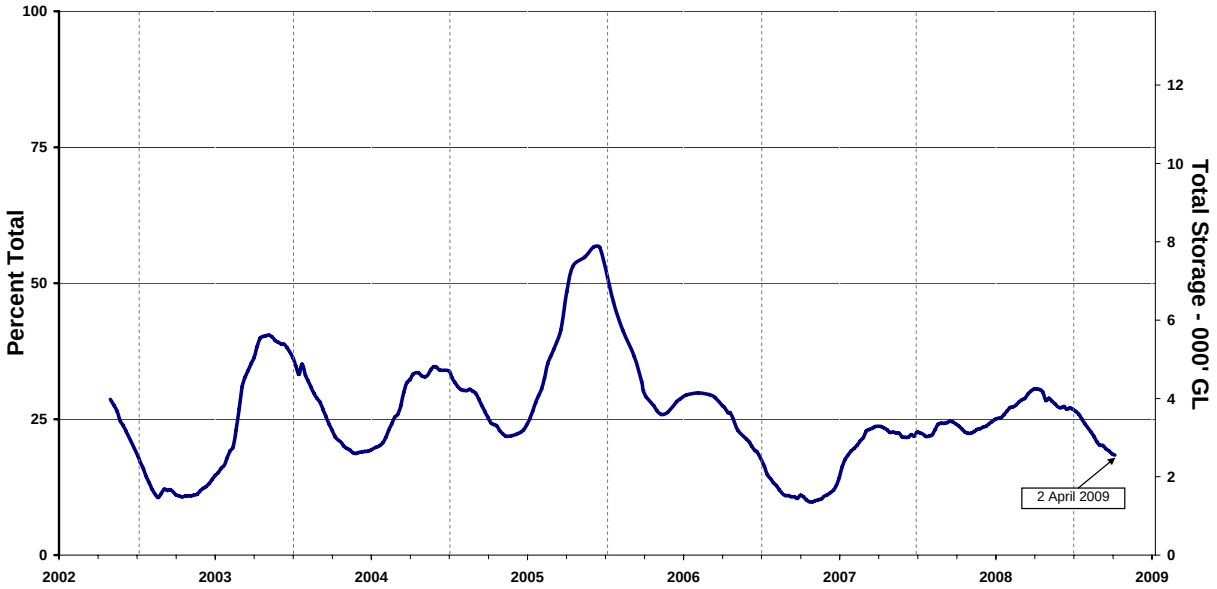
In central Queensland, storage levels decreased by 4 GL to 3072 GL (97.4 per cent of a total capacity of 3155 GL) over the last month (see figure above). This storage level is approximately 84 GL higher than at the same time last year.



Water storage levels in south-east Queensland from 3 February 2003 to 2 April 2009.
Source: Bureau of Rural Sciences

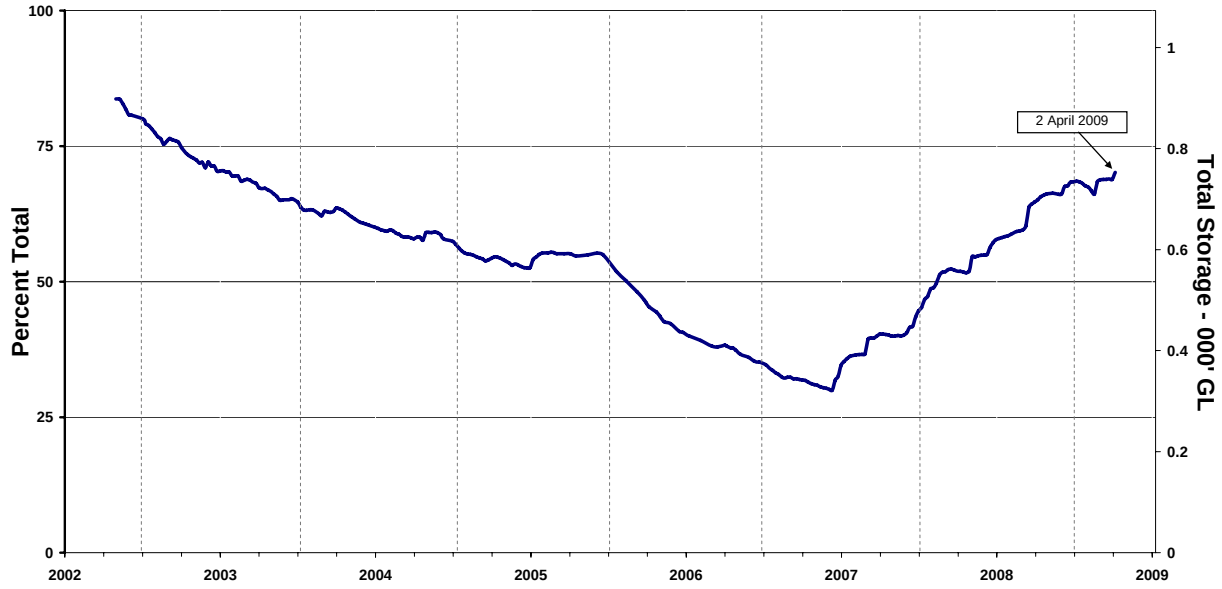
In south-east Queensland, storage levels decreased by 97 GL to 2050 GL (58.3 per cent of a total capacity of 3517 GL) over the last month (see figure above). This storage level represents a decrease of 128 GL (3.6 per cent) compared to the same time last year.

Water storage in New South Wales



Water storage levels in New South Wales MDB from 28 October 2002 to 2 April 2009.
Source: Bureau of Rural Sciences

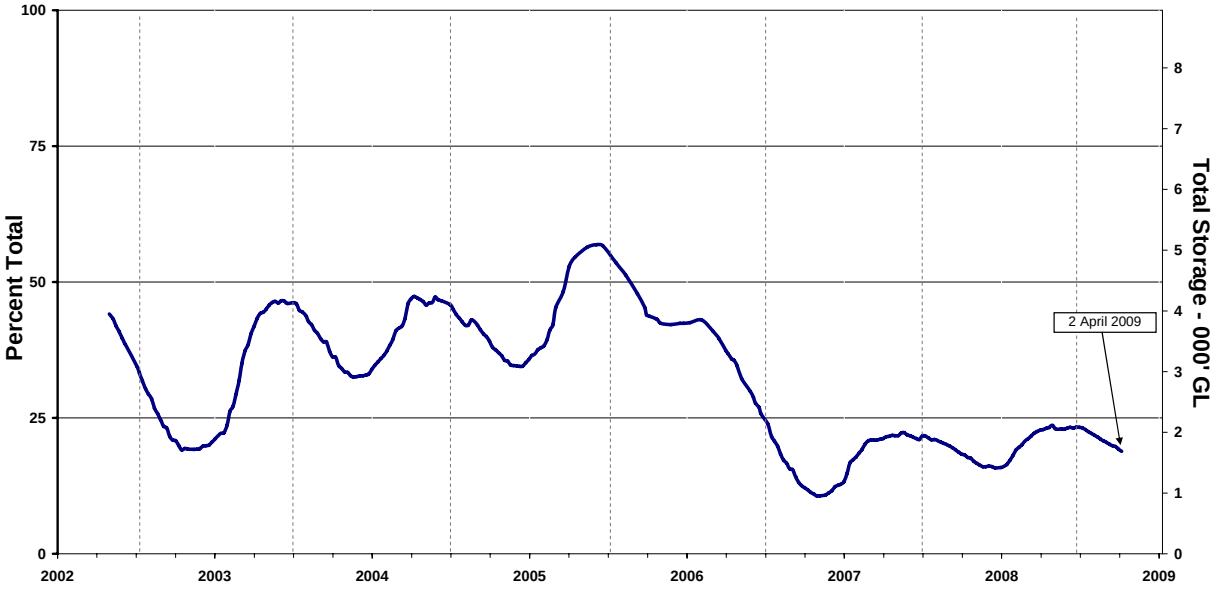
Storage levels in the New South Wales MDB decreased by 345 GL to 2553 GL (18.4 per cent of a total capacity of 13 884 GL) over the last month (see figure above). This storage level is approximately 740 GL less than at the same time last year.



Water storage levels in coastal New South Wales from 28 October 2002 to 2 April 2009.
Source: Bureau of Rural Sciences

In coastal New South Wales, storage levels increased by 14 GL to 753 GL (70.1 per cent of a total capacity of 1073 GL) over the last month (see figure above). This storage level is approximately 196 GL higher than at the same time last year.

Water storage in Victoria

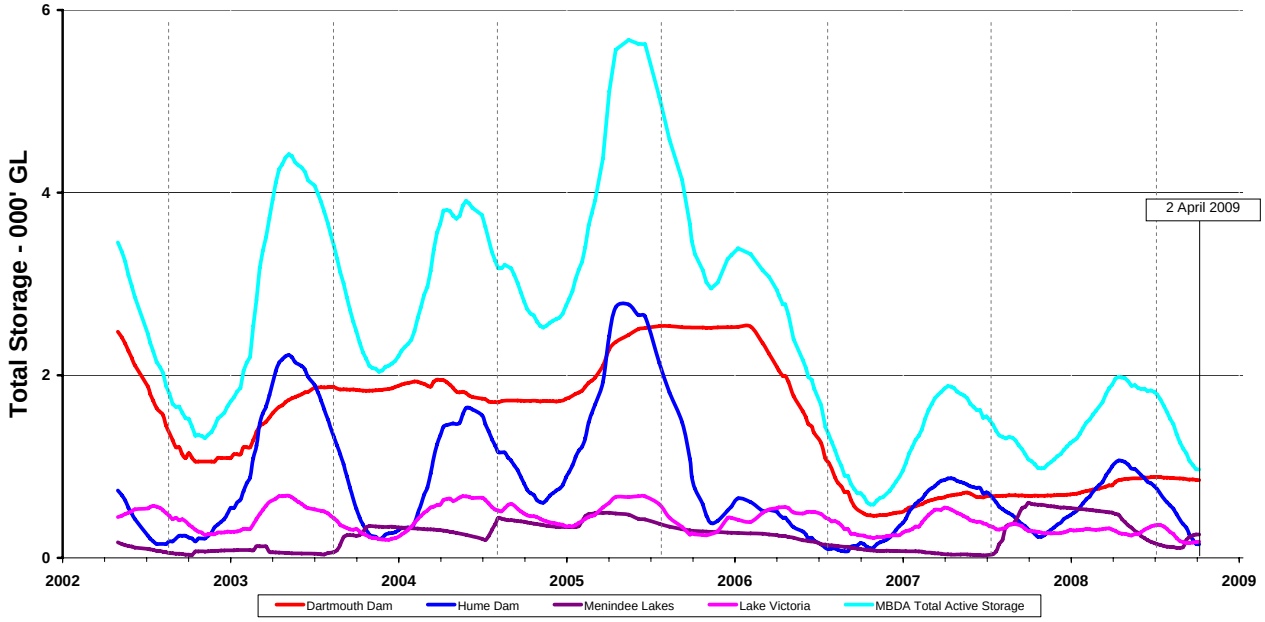


Water storage levels in Victoria MDB from 28 October 2002 to 2 April 2009.
Source: Bureau of Rural Sciences

Storage levels in Victoria MDB decreased by 116 GL to 1680 GL (20.2 per cent of a total capacity of 8950 GL) over the last month (see figure above). This storage level is approximately 60 GL higher than at the same time last year.

Murray-Darling Basin Authority water storages

- During March 2009, average to above average rainfall and average temperatures were recorded across the southern half of the Murray-Darling Basin. However, conditions were dry and temperatures were above across the northern half of the Basin. The longer-term rainfall deficits persist across the higher yielding catchments of the Victorian Alps and Snowy Mountains.
- Murray system inflows during March fell to about 40 GL which is lower than the March historic minimum of 50 GL recorded in 2007.
- Murray-Darling Basin Authority (MDBA) active storages declined during March to 940 GL (11 per cent capacity) which is slightly lower than this time last year (1058 GL) and well below the long-term average of 4400 GL.
- The total volume of water in all Basin storages managed by the MDBA, or by State governments, decreased over the last month. Elsewhere in the Basin, storage levels remain low. At the start of April 2009, Basin storages held about 4348 GL, or 18.9 per cent of capacity. Storage in the Snowy Mountains' reservoirs (managed by Snowy Hydro) remains low, with Lake Eucumbene at only 19.7 per cent capacity.
- There is also a small volume of water (about 255 GL) in Menindee Lakes under New South Wales control. Inflows into the Darling River, Border Rivers and upper Barwon catchment is expected to provide approximately 200 GL of inflow into the Menindee Lakes. At 2 April 2009, about 135 GL had arrived at Menindee Lakes. This water will be used to secure town water supply for Broken Hill for at least 21 months, secure water for Lower Darling permanent plantings for 2009–10 and underwrite water for critical human needs in the Murray Valley.
- Storage in Hume Dam, which continues to provide for the bulk of downstream water requirements, decreased by 195 GL to 123 GL (or 4 per cent capacity) during March 2009.
- Storage in Dartmouth Dam decreased by 11 GL during March 2009 to 868 GL (22 per cent of capacity). Incremental releases of 500 to 3000 ML/day will be made during early April 2009. This increase in release will transfer additional water to Hume Dam, to allow flows to be maintained downstream of the dam. The majority of the water that now remains in Dartmouth Dam will provide a reserve for critical human needs and also meet individual carryover requirements of irrigators for 2009–10.
- The storage in Lake Victoria has been gradually increasing since mid-March, rising from 160 GL to around 175 GL (or 26 per cent capacity). This increase in storage is a result of decreasing river losses and reductions in flow to South Australia. The flow to South Australia is currently being reduced from 4000 to 2900 ML/day.
- The trend of MDBA water storages at 2 April 2009 is shown in the figure below.



Water volumes in the Murray-Darling Basin Authority Storages from 28 October 2002 to 2 April 2009.
Source: Murray-Darling Basin Authority

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 announcements

Announcements for New South Wales (current as at 17 March 2009)

- On 17 March 2009, the New South Wales Department of Water and Energy announced that there would be changes to water allocations in the Macquarie-Cudgegong river valleys. General security licence holders along the Macquarie-Cudgegong Rivers can now access up to 10 per cent of their licensed water entitlement. The water allocations for all New South Wales Southern Murray-Darling Basin licence holders remain unchanged for the 2008–09 water year, as summarised in the table below.

Water system	High Security Licences (%)	Change (%)	General Security Licences (%)	Change (%)
NSW Murray Valley	95	0	9	0
Murrumbidgee Valley	95	0	21	0
Lower Darling	100	0	50	0
Macquarie Valley	100	0	10	+5
Hunter Valley	100	0	100	0
Lachlan Valley	30	0	0	0
Border Rivers	100	0	0	0
Peel Valley	100	0	80	0

- The increase in allocations to the Macquarie Valley is the result of recent heavy rainfall and localised storms generating flows into the lower Bogan River and part of the lower Macquarie River.
- These flows allowed provision of enough water to meet stock and domestic needs and make more water available to region's general security irrigators and benefit the local environment.
- Although the irrigation season is drawing to a close, this extra water can be carried over for use in the next water year.
- A further 1600 megalitres of water will be credited to the Environmental Water Account held in Burrendong Dam and will be released when conditions are right to deliver the most benefit to downstream riverine and wetland environments.
- The water allocation for town water supply and stock and domestic licence holders remains at 100 per cent of their licensed water entitlement, while high security licence holders have an allocation of one megalitre per unit share.
- The Macquarie-Cudgegong Water Sharing Plan remains suspended.
- The Department of Water and Energy reminds licence holders that all temporary trades, including interstate trades, need to be lodged with State Water by close of business on 31 May 2009.
- While the Water Sharing Plans remain suspended in both valleys, the carryover rules that applied in 2008–09 will apply again in 2009–10.
- The Department of Water and Energy will continue to monitor water availability closely and review allocations as new resources become available.

Announcements for Victoria (current as at 1 April 2009)

- On 1 April 2009 Goulburn-Murray Water (G-MW) announced the updated season allocations (see below).

Water system	High-reliability share (%)	Change (%)
Murray	35	0
Broken	0	0
Goulburn	33	+2
Campaspe	0	0
Loddon	0	0
Bullarook Creek	0	0

- On 1 April 2009, G-MW announced an increase of 1 per cent high-reliability water shares (HRWS) in the Goulburn system, to 33 per cent final seasonal allocation. This increase is in addition to the 1 per cent increase announced by the G-MW on 16 March 2009. No other allocations were possible, with the Murray system remaining at 35 per cent HRWS. The allocations for all other water systems in Northern Victoria remain at zero.
- The Resource Manager for the G-MW, Graeme Hannan, explained that inflow from the rainfall event in mid-March and system operating efficiencies resulted in this minor allocation improvement in the Goulburn system. No change was possible in the Murray system because of high river transmission losses and poor inflows.
- Goulburn-Murray Water will update the allocation outlook for 2009–10 on Friday 15 May 2009.

Announcements for South Australia (current as at 16 March 2009)

- On 16 March 2009, the South Australian Minister for the River Murray announced that River Murray irrigation allocations would remain at 18 per cent due to continued dry conditions and low inflows across the Murray-Darling Basin,. Inflow conditions had deteriorated since the end of last year as a result of well below average rainfall and above average temperatures.
- During the past two months, none of the MDB states have received improvements in water allocations from the River Murray shared resource and low inflows are likely during March 2009.
- Future improvements will be limited because of the extremely dry conditions currently being experienced across the Upper Murray system.
- Allocation updates will continue to be issued on the fifteenth of each month or the first business day thereafter, if it falls on a weekend.

For further information on water announcements, go to:

Murray-Darling Basin Authority
http://www.mdba.gov.au/

Goulburn-Murray Water
http://www.g-mwater.com.au/news/media-releases/

New South Wales Department of Water and Energy
http://www.naturalresources.nsw.gov.au/

South Australian Department of Water, Land and Biodiversity Conservation
http://www.dwlbc.sa.gov.au/media.html

3.0 Crop and livestock production

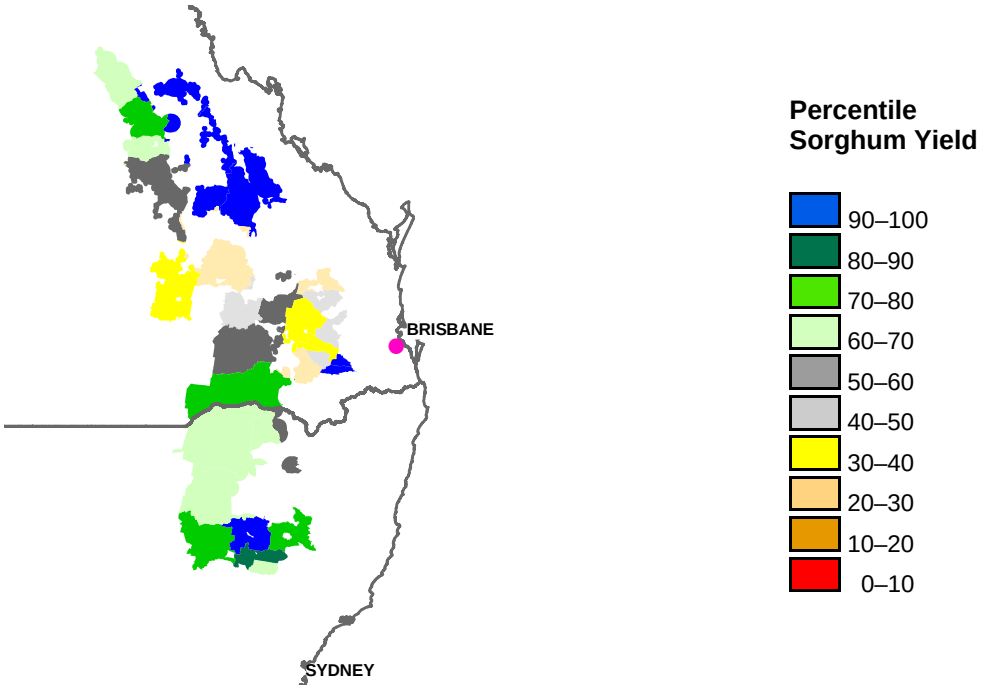
3.1 Crops

Winter Crops

- South Australia: The final estimate for the wheat crop is 2.35 million tonnes (Mt) from 2.04 million hectares sown, which is below average. Barley yields are estimated to be around 1.8 Mt from 1.21 million hectares. For the coming season, a reduction in the area sown to cereals is likely on the Eyre Peninsula, but most districts report no significant change to crop area and type (http://www.pir.sa.gov.au/__data/assets/pdf_file/0005/95891/feb09cpr.pdf).
- Victoria: The area sown to wheat in Victoria in 2008–09 was approximately 1.6 million hectares. Wheat yield for the season is estimated to have fallen to 1.5 Mt, 20 per cent lower than the previous year. The area sown to barley in 2008–09 was around 950 000 hectares, 3 per cent higher than the previous year. The estimated barley yield in 2008–09 is 869 000 tonnes, 35 per cent below the previous five-year average of 1.3 million tonnes (http://www.abareconomics.com/interactive/09acr_Feb/htm/victoria.htm).
- Western Australia: The winter harvest delivered 8 Mt of wheat, assisted by a much improved growing season in the northern agricultural region. Yields in the southern agricultural region were variable, with some areas experiencing good yields and quality, while others were hard hit by frost and a wet harvest. Low rainfall districts experienced well above average wheat yields, primarily due to good subsoil moisture and timely in-crop rain. Barley delivered around 2.5 Mt and the quality was reported to be reasonable despite the rain during harvest. Apart from the southern areas around Esperance, there was insufficient summer rain in most of the wheatbelt to boost stored soil moisture for winter cropping. Although grain price forecasts are encouraging growers to maintain planting programs similar to last year, deficient soil moisture may result in a decline in cropping area (http://www.agric.wa.gov.au/content/LWE/CLI/SeasonalUpdateMar09.PDF).
- New South Wales: Preliminary estimates are for sowing 5 million hectares of winter crops in 2009, comprising 4.35 million hectares of winter cereals and 0.65 million hectares of pulses and oilseeds. Reasonable soil moisture profiles following summer rainfall are boosting confidence in northern areas for the 2009 winter crop and preparations are well advanced. Soil moisture levels across most of the central and southern districts are extremely low to non-existent and soaking rains of 75–100 mm will be required to begin preparations for planting in these areas. Early forecasts are for plantings of 3.10 million hectares of wheat. The outlook for winter pulses remains positive and is underpinned by their rotational benefits for both disease and weed control. Forecast sowings of 415 600 hectares are down 3 per cent on last year's pre-sowing forecast. Chickpeas remain the dominant pulse crop accounting for around 57 per cent of the state's total pulse plantings (New South Wales Department of Primary Industries Grains Report http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0005/277187/Grains-report-april-2009.pdf).

Summer Crops

Predicted sorghum yields for the coming season are provided by the Queensland Department of Primary Industries and Fisheries, as shown in the figure below. The forecast is based on a sorghum stress index model that incorporates water availability, climate data and a soil moisture profile. The following figure shows median shire sorghum yield forecasts across Australia based on climate data up to the end of the forecast month and projecting forward based on the long-term median calculated over all available years.



Predicted sorghum yields for the 2008–09 cropping season at 1 April 2009 ranked relative to all years

- Australia: Generally below average to extremely low rainfall recorded across the cropping regions in eastern Queensland led to reduced soil moisture and adversely affected modelled crop yields. The predicted median sorghum yield for Australia is 2.47 tonnes per hectare (t/ha). This is 0.14 t/ha higher than the national long-term median and 0.05 t/ha lower than the prediction for March 2009 (Queensland Department of Primary Industries and Fisheries http://www.dpi.qld.gov.au/cps/rde/dpi/hs.xsl/26_8099_ENA_HTML.htm).
- Queensland: Predicted sorghum yields for Queensland are 2.27 t/ha, higher than the long-term median of 2.18 t/ha. This is 0.06 t/ha lower than the prediction for March 2009 (Queensland Department of Primary Industries and Fisheries http://www.dpi.qld.gov.au/cps/rde/dpi/hs.xsl/26_8099_ENA_HTML.htm).
- New South Wales: Predicted sorghum yields for New South Wales are 3.16 t/ha, above the long-term median of 2.82 t/ha. This is 0.01 t/ha lower than the prediction for March 2009 (Queensland Department of Primary Industries and Fisheries http://www.dpi.qld.gov.au/cps/rde/dpi/hs.xsl/26_8099_ENA_HTML.htm).
- New South Wales: Grain sorghum production is forecast at 708 661 tonnes from an estimated 156 025 hectares. Yield is expected to average around 4.54 t/ha with a wide spatial variation depending on the sowing time and the in-crop rainfall. Last year an estimated 841 755 tonnes were harvested from 181 465 hectares. Maize crop harvest is expected to produce an average yield of 7.43 t/ha. Soybeans harvest is expected to produce an average yield of 2.72 t/ha, about 75 per cent up from last year. The expected yield for soybeans is likely to fall following the major rainfall event on the northern coast during late March/early April, where late sown crops are coming under heavy disease pressure (New South Wales Department of Primary Industries Grains Report http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0005/277187/Grains-report-april-2009.pdf).
- New South Wales: Picking the 72 800 hectare cotton crop has commenced in the northern river valleys. Forecasts are for above average yields of between 8.5 and 9 bales per hectare for irrigated crop and around 4 bales per hectare for the dryland crop. At this early stage, fibre quality appears good (New South Wales Department of Primary Industries Grains Report http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0005/277187/Grains-report-april-2009.pdf).
- Total Australian wine grape production is forecast to fall by 13 per cent to 1.6 million tonnes in 2008–09, as a result of ongoing shortages of water for irrigation and high temperatures in early 2009 (http://theland.farmonline.com.au/news/nationalrural/viticulture/general/wine-grape-production-slashed-by-drought-and-heat/1474373.aspx?src=enews).

3.2 Livestock

Beef cattle

- The seasonal increase in cattle numbers to market in the last month has been influenced by cooler weather and reduced pasture growth during early autumn. Producers have also been prompted to offload stock in the north of New South Wales, where rainfall has been below average for this time of year (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Cattle+market+alert.htm).
- Processors were increasingly active during March and as a result there was stronger demand for suitable lines. The weekly average slaughter level rose by 10 per cent compared to March 2008. Calves sent to slaughter during March numbered 39 000 head rising by 9 per cent compared to March 2008. 55 per cent more calves were slaughtered in March 2009 than in February 2009 (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Mondays+livestock+summary.htm).
- There was a cheaper trend in cattle direct to slaughter in New South Wales and Queensland. This was due to the rising Australian dollar that weakened export demand and drying off of conditions influencing an influx in numbers direct to slaughter as well as reduced restocker activity (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Cattle+market+alert.htm).
- Dearer trends direct to slaughter have been evident in the south of the eastern states as suitable lines have been in short supply (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Cattle+market+alert.htm).
- The Eastern Young Cattle Indicator (EYCI) started the year at 332.75 ¢/kg carcase weight (cwt). The indicator fell by 34.5 ¢/kg in mid February as a result of lower feed supplies and economic instability. Improving seasonal conditions and an improved overseas outlook increased restocker, feeder and processor activity which in turn contributed to a 23.25 ¢ increase, with the EYCI finishing March at 321.5 ¢/kg cwt (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Mondays+livestock+summary.htm).
- It is expected that calf numbers in Tasmanian markets will decrease by at least 30 per cent compared to last year. The reduced numbers are as a result of the ongoing drought which has substantially reduced calving rates. A large proportion of herds have been dispersed completely (Meat and Livestock Australia, Market News http://www.mla.com.au/NR/exeres/BE6DD35E-78FC-4B4F-BE52-2D02E03CC958.htm).

Sheep and lambs

- Lamb throughput at MLA's National Livestock Reporting Service (NLRS) reported a 49 per cent rise in saleyards during March based on a year-to-year basis. A drier and hotter season combined with higher physical market prices due to increased competition between buyers has encouraged more lambs onto the market (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Mondays+livestock+summary.htm).
- Lamb slaughter during March in New South Wales, South Australia and Victoria rose 15 per cent compared to March last year. Strong saleyard and over-the-hooks (OTH) rates have encouraged lamb sales as buyers compete for supply in anticipation of a shortfall in coming months (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Mondays+livestock+summary.htm).
- Total sheep slaughter during March across New South Wales, South Australia and Victoria rose 23 per cent on a year-to-year basis, to 657 355 head. This increase was partly due to Easter falling earlier last year (reducing kill days during the month) and the higher prices for that time of year. With increasing demand from processors, restockers and live exporters, most buyers have been trying to secure any supplies they can, as they anticipate a shortfall in coming months (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Mondays+livestock+summary.htm).
- Australia's declining sheep supply is limiting Australia's access to the lucrative livestock export market in the Middle East. The national sheep flock has declined to an estimated 79 million head, the lowest since 1920 (Farm Online, Stock Journal http://sj.farmonline.com.au/news/nationalrural/livestock/sheep/sheep-shortage-costs-aust-valuable-export-markets/1474582.aspx).
- A dearer trend at physical markets comes as a result of an anticipated shortage of lambs and ongoing competition between processors, restockers and feeders (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Sheep+and+lamb+market+alert.htm).

- The quality of lambs has been mixed with a large percentage of lightweight lambs arriving at markets. Deteriorating seasonal conditions, particularly in the southern parts of the states, have also prompted producers to offload sheep (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Sheep+and+lamb+market+alert.htm).
- Trade lamb prices have increased on the same time last year in New South Wales and Victoria to 438 ¢/kg cwt and 437 ¢/kg cwt respectively. Heavy lamb prices increased in New South Wales on last year's prices to average at 437 ¢/kg cwt (an increase of 114 ¢/kg). Due to dwindling supplies and increasing competition, current over the hook (OTH) rates in Western Australia have increased by 95 ¢/kg cwt for trade lambs and 89 ¢/kg cwt for heavy lambs compared to the same time last year (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/Lamb+and+sheep+market+wrap.htm).
- The national mutton indicator finished at 204 ¢/kg cwt, 20¢/kg above the same time last year. Demand for mutton remains high with live exporters, processors and even some restockers looking to secure numbers from a diminishing supply. Average mutton prices in South Australia were close to 220¢/kg cwt, 20¢/kg higher than the same time last year (Meat and Livestock Australia, Market News http://www.mla.com.au/TopicHierarchy/News/MarketNews/2009/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/

Primary Industries and Resources South Australia
http://www.pir.sa.gov.au/grains/cpr/

Queensland Department of Primary Industries and Fisheries
http://www.dpi.qld.gov.au/fieldcrops/

The Land Farmonline
http://theland.farmonline.com.au/

Victorian Department of Primary Industries
http://www.dpi.vic.gov.au

4.0 Climate Outlook

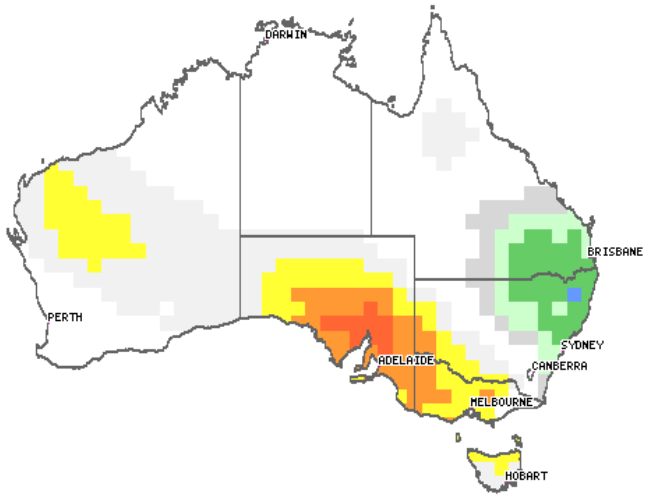
4.1 El Niño Southern Oscillation (ENSO)

In the statement released on 1 April 2009, the Australian Bureau of Meteorology announced that the climate pattern across the equatorial Pacific has moved further away from the La Niña like conditions that had persisted since late 2008. Almost all ENSO indicators are now well within their neutral range. The equatorial Pacific Ocean surface warmed throughout March and is now near normal, as is the Southern Oscillation Index (SOI) which dropped sharply from +15 in February to a 30-day value of +1 on 30 March. Sub-surface equatorial waters also warmed across the tropical Pacific during March, but still remain cooler than normal in the central and eastern Pacific. Trade winds eased during March and are weaker than normal across most of the tropical Pacific. Most international coupled climate models predict further warming of Pacific Ocean sea surface temperature (SST) during the next few seasons, but with SSTs remaining within the ENSO-neutral range. A small number of models favour the development of El Niño conditions during the southern winter or spring, with none suggesting a return to La Niña conditions. Given that March-June is the preferred El Niño genesis period, Pacific conditions and model predictions will be monitored closely for indications of an El Niño event. The Indian Ocean Dipole is neutral, as it is typical for this time of year. It will be monitored through autumn for any signs of an emerging event.

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

4.2 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.



The chance of exceeding median rainfall April–June 2009 (June quarter)

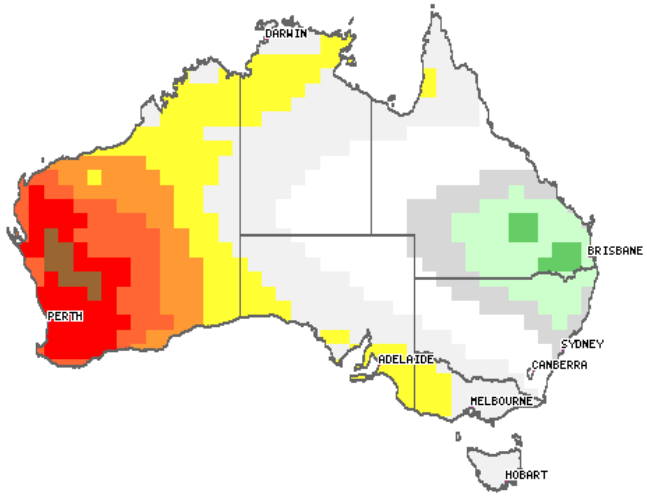
Chance of Exceeding the Median Rainfall (%)

- 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 national rainfall outlook for the June quarter suggests higher than average rainfall across north-eastern New South Wales and south-eastern Queensland. In contrast, lower than average rainfall is more likely to occur in a region extending from central Western Australia, south eastwards across the continent into northern Tasmania.

The pattern of seasonal rainfall odds across Australia is mainly a result of warm conditions in the Indian Ocean in February, while the Pacific Ocean had little contribution to this forecast.

4.3 Temperature Outlook



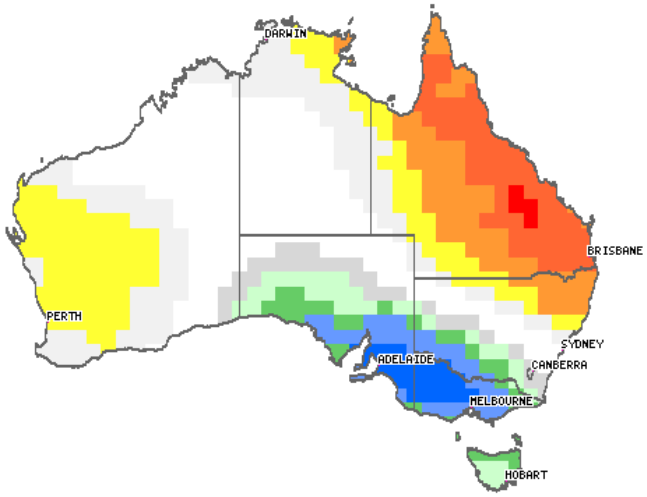
3 Month Temp. Max Outlook (%)

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 April–June 2009 (June quarter)

The national temperature outlook for the June quarter suggests that day-time temperatures will be above average in the north, west and south of the continent and below average in the east. The chance of exceeding the median maximum temperature is highest in the far west of Western Australia (80–100 per cent) and lowest in south-eastern Queensland (30–35 per cent).

The pattern of seasonal temperature odds across Australia is mostly a result of warm conditions in the Indian Ocean in February, with the Pacific Ocean having very little effect.



3 Month Temp. Min Outlook (%)

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 April–June 2009 (June quarter)

The national temperature outlook for the June quarter suggests that night-time temperatures are likely to be above average in the north-east and south-west of the continent and below average in the south-central and south-eastern regions. The chance of exceeding the median minimum temperature is highest in central Queensland (75–80 per cent) and lowest in south-eastern South Australia and south-western Victoria (20–25 per cent).

History shows that the oceans' effect on minimum temperatures in the April to June period is moderately consistent over large parts of the country.

For further information on the Bureau of Meteorology seasonal outlooks go to

http//www.bom.gov.au/climate/ahead/