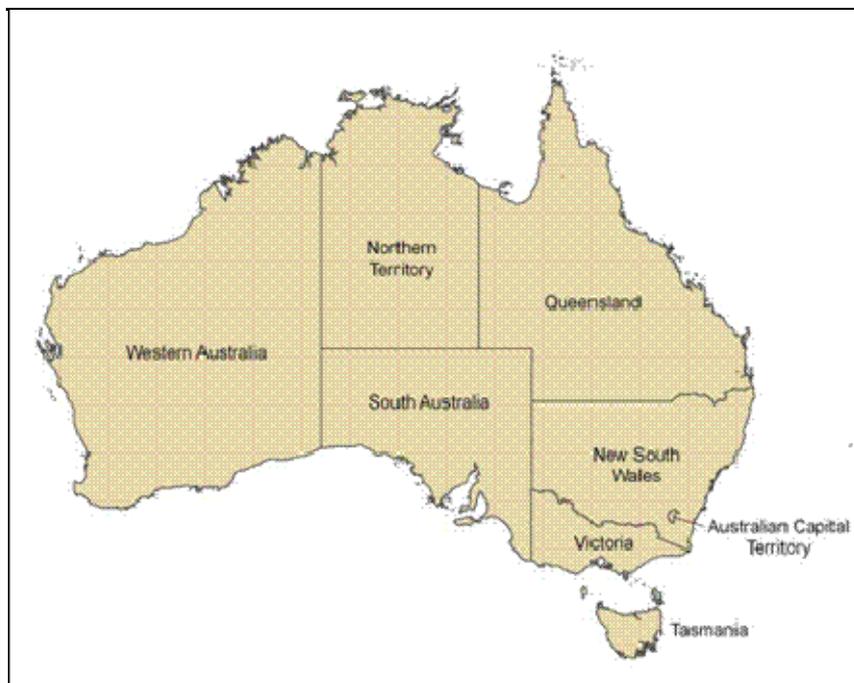




# Climate and Agricultural Update

## National Report

Issued May 2008



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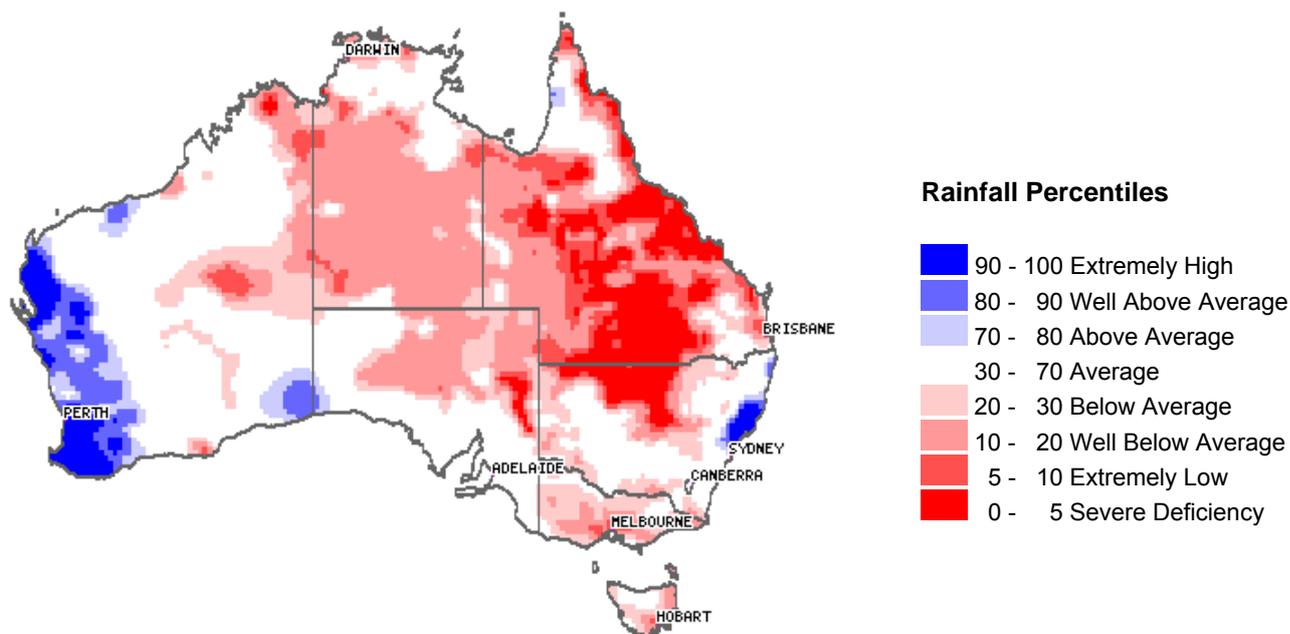
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# 1.0 Rainfall and temperature

## 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 (April 2008)*



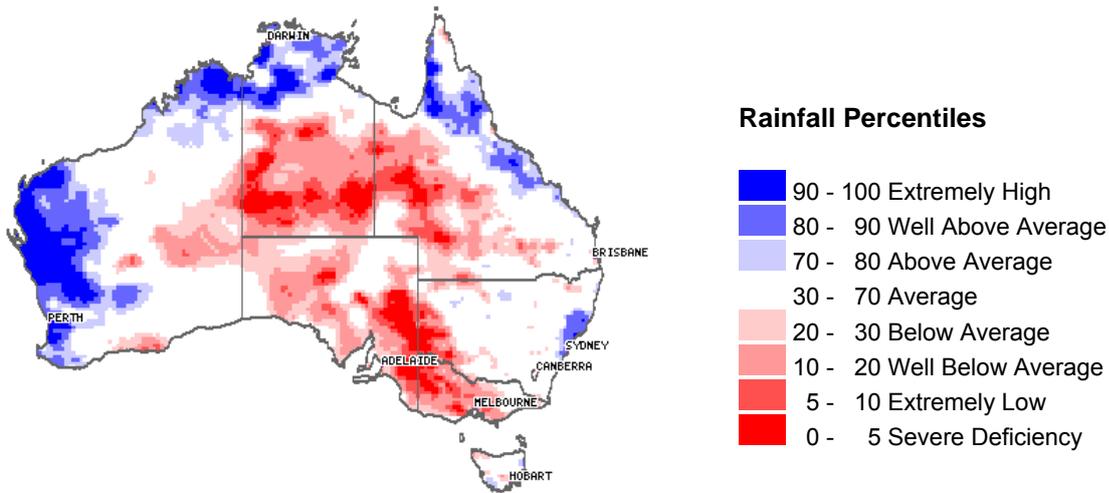
**Rainfall percentiles for April 2008**

April was a dry month in most of Australia, particularly in the tropics as the wet season came to an early end. Over Australia it was the 14th driest April from 109 years of record (58 per cent below average). All states and territories had below average rainfall for the second successive month. Tasmanian monthly rainfall was 34 per cent below average, whilst Queensland (85 per cent below average) had its third driest April on record, and its driest since 1951.

The rainfall over most of the agricultural land was below average to average. Rainfall in the lowest 10 percentile range covered most of Queensland, extending into a large area in northern inland New South Wales (NSW) and was scattered in small patches over the remaining states and territories. Below average rainfall was recorded in a vast area of the interior, including most of the Northern Territory (NT) south of Katherine, the interior of Queensland west of Roma, northern South Australia (SA), eastern Western Australia (WA) and an area of NSW extending north-west from Dubbo. In most of these areas rainless April months are not unheard of.

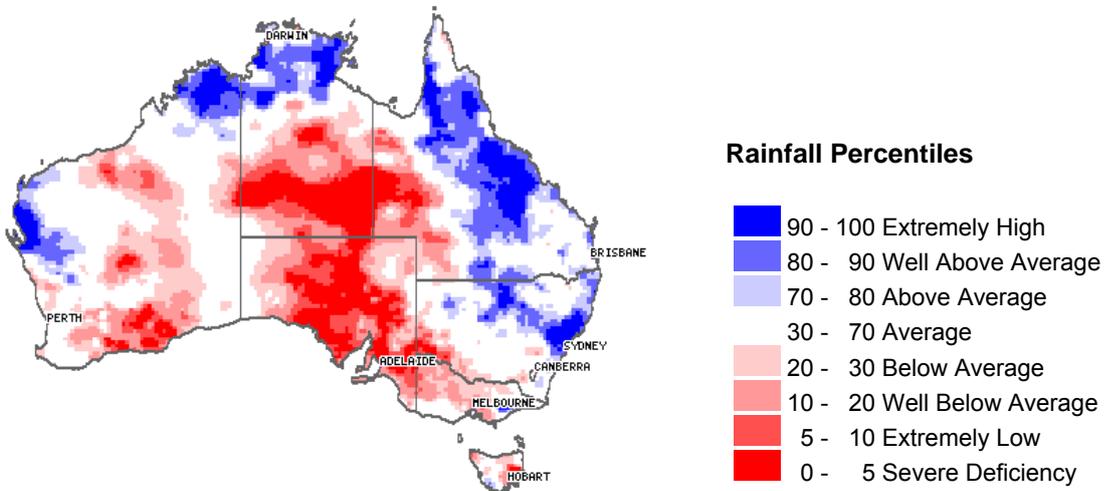
The only substantial areas with above average rainfall for April were the western areas of WA, west of the Esperance-Kalgoorlie-Karratha line, and the NSW coast between Sydney and the Queensland border. Both regions had persistent rain with some areas in the highest 10 percentile range. Highest April rainfall records were set in Perth, Taree (NSW) and around Shark Bay.

## Ongoing or emerging rainfall situations



**Rainfall percentiles for the last three months  
(February – April 2008)**

Over the last 3 months, rainfall was below average over most of western Queensland, the NT south of Katherine, most of Victoria and SA and in the south west of NSW. There were patches of below average rainfall in the southern coast areas and in the east of WA. In contrast, the 3-month rainfall was above average in the west and north of WA, in the north of the NT and in the north-eastern parts of Queensland. Above average rainfall was also recorded north of Sydney.

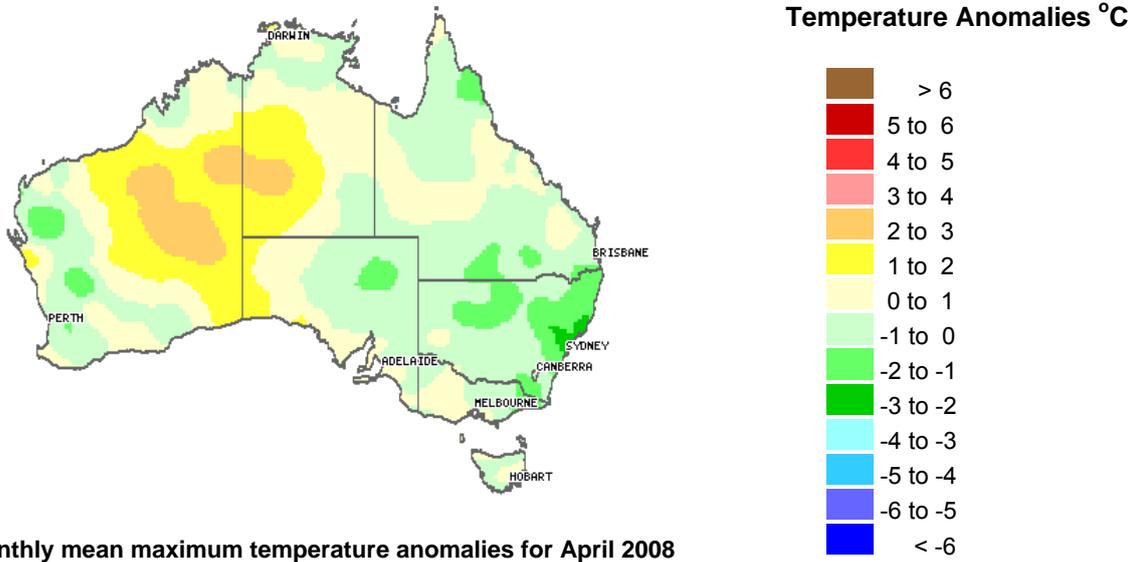


**Rainfall percentiles for the last 12 months  
(May 2007 – April 2008)**

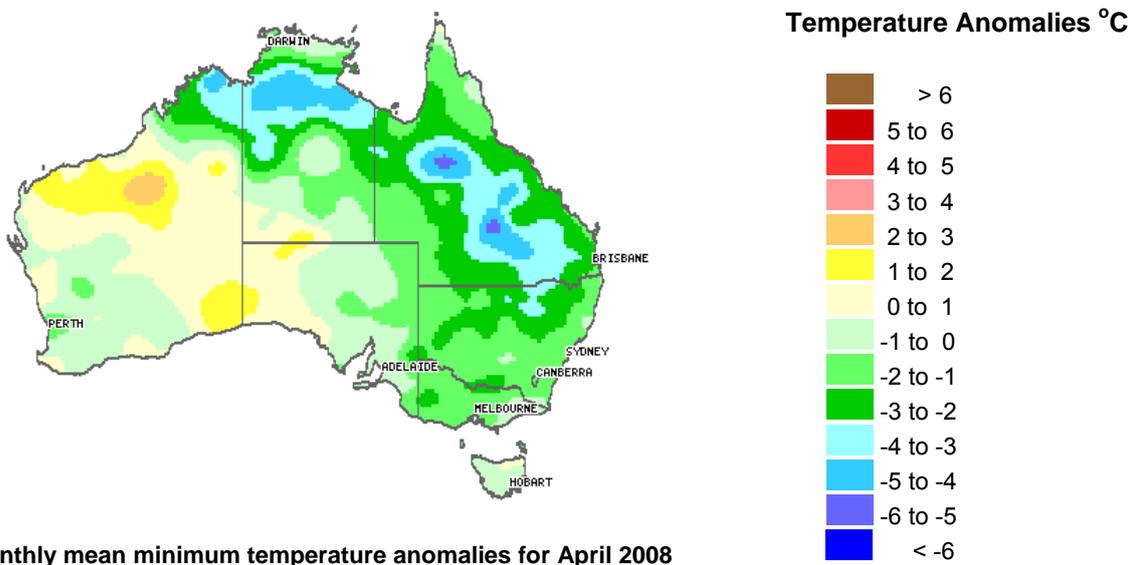
Twelve-month rainfall deficiencies persisted last month over the southern and central parts of WA, and in the west of Queensland. The deficiencies strengthened slightly over southern SA, while the recent rainfall eased the deficiencies in the northern part of the WA wheatbelt. The pattern of below average rainfall in the southern and central parts of the country, as well as in SA, Victoria and Tasmania indicates that long-term droughts persist in these areas. The remainder of the country recorded average to above average rainfall.

## 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 maxima and minima 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/>

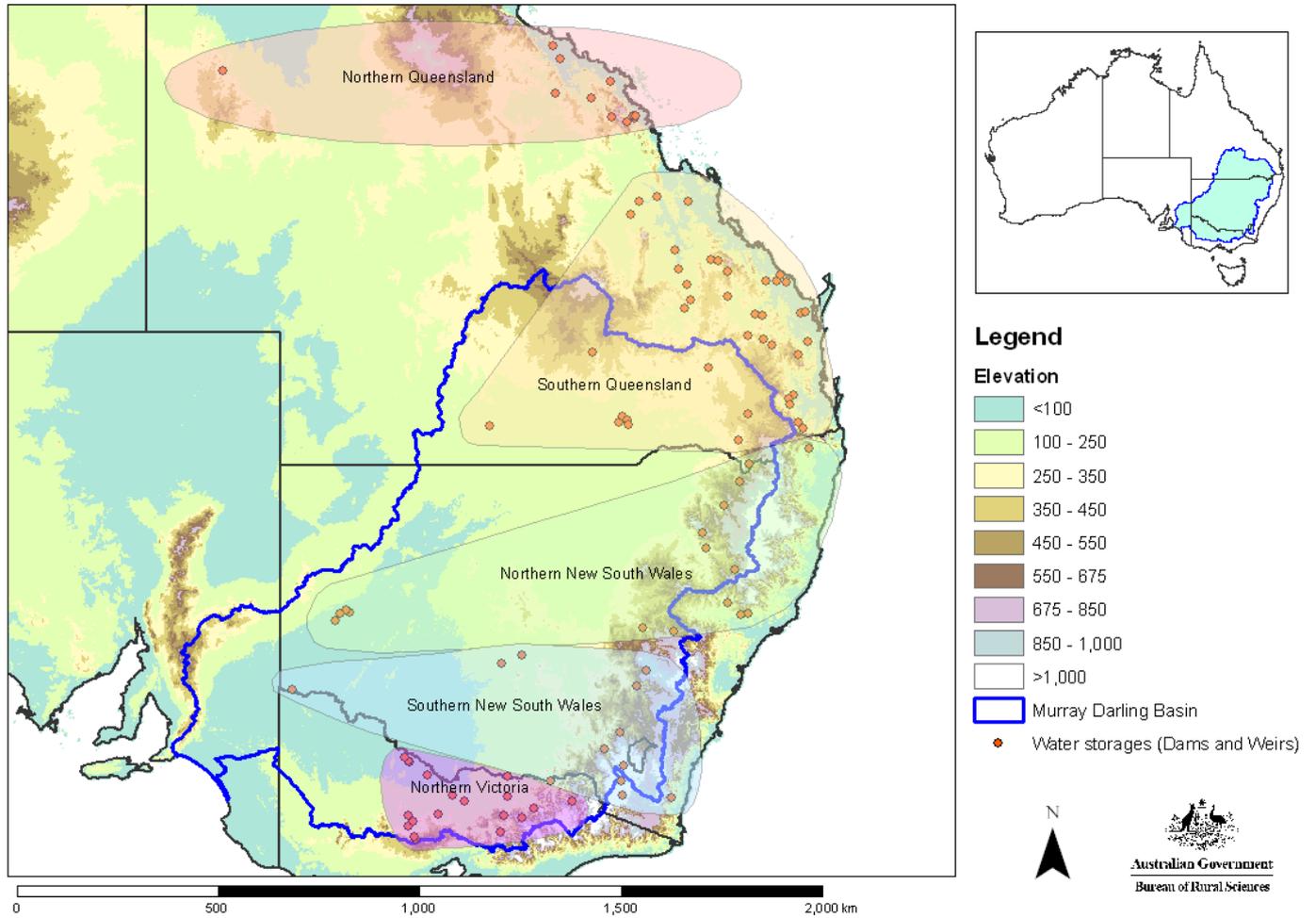


Averaged over Australia, maximum temperature for the month was 0.21°C above the long-term (1961-90) average. The most extensive areas with maxima of 1–3 °C above average were in the interior of WA, western SA and the southern two-thirds of the NT. The remainder of the country experienced mostly below average maxima with patches of 1–3 °C below average in the coastal and central parts of NSW, central south of Queensland, north east of SA and western WA. There was a major cold outbreak at the end of the month with snow falling to quite low elevations (for April) in southern and central NSW.



It was notably cool overnight over the east and north of Australia. Overnight minimum temperatures averaged over Australia were the third lowest on record for April (1.09°C below average). Most of Queensland was at least 2°C below normal, reaching – 5°C in some inland locations (such as Tambo and Richmond) and the statewide average of –2.72°C was the lowest since 1951. The exceptionally cool conditions also covered much of the northern tropics, with anomalies of 3–5 °C below average extending across the NT from the Gulf into the WA Kimberley. NSW (–2.06°C) also ranked fifth-lowest. Warm minima, reaching up to 2°C above average were largely confined to central and south-eastern WA.

## 2.0 Water storages and announcements

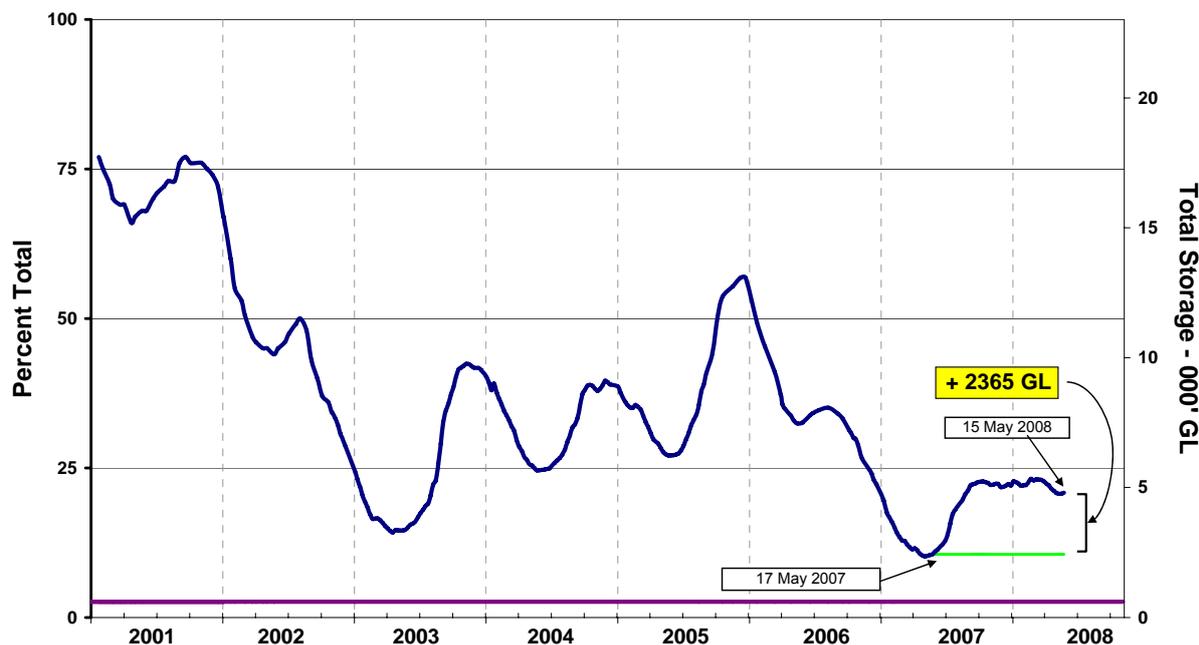


**Water storages within Queensland, New South Wales and Victoria. The blue line indicates the extent of the Murray-Darling Basin. The shaded areas denote the various reporting regions.**

**Source: Bureau of Rural Sciences.**

## 2.1 Water storages (current to 15 May 2008)

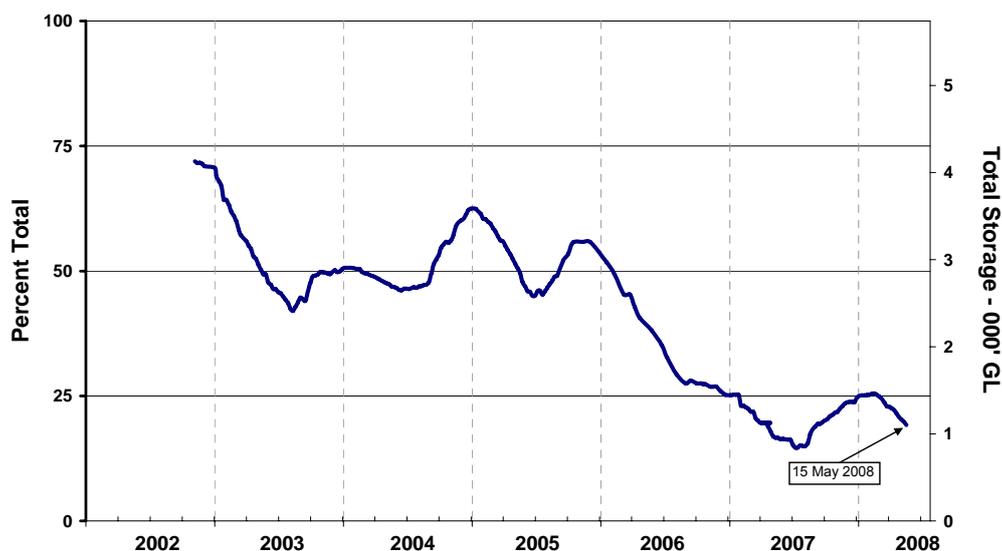
### Water storage in the MDB (New South Wales, Victoria and Queensland)



Water storage levels in the Murray-Darling Basin from 1 January 2001 to 15 May 2008. The green line indicates the storage level at the same time last year. Source: Bureau of Rural Sciences.

Over the past month storage levels within the Murray-Darling Basin (MDB) have decreased, with releases surpassing inflows. At 15 May 2008 storage levels for irrigated agriculture were at 4798 GL (20.8 per cent of a total capacity of 23 020 GL), a decrease of 73 GL (0.3 per cent of total capacity) over the month. Current storage levels are approximately 2365 GL greater than at the same time last year.

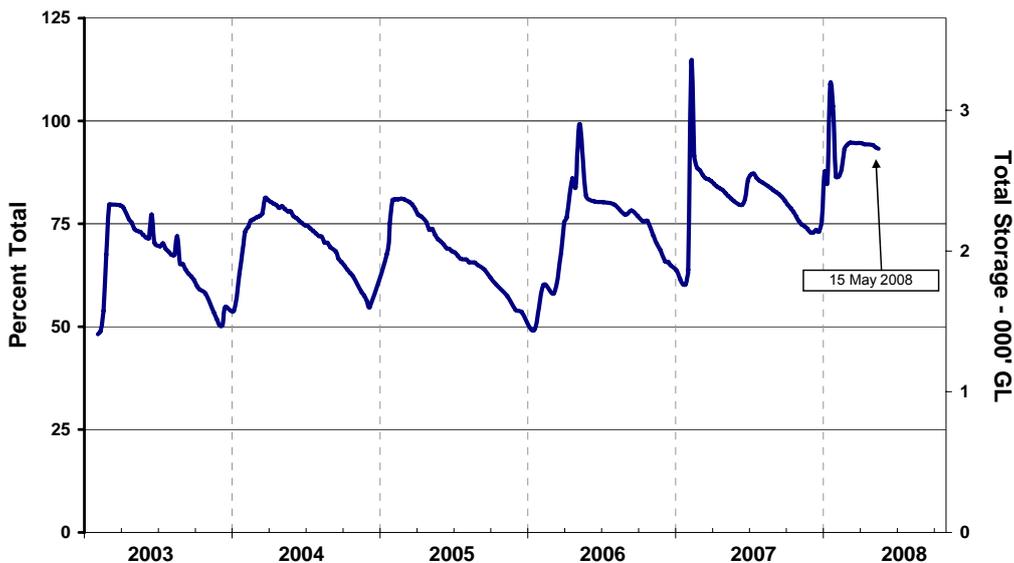
### Water storage in the Snowy Scheme



Water storage levels in the Snowy Scheme from 6 November 2002 to 15 May 2008. 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 which are reserved for hydro-electricity generation and irrigation purposes, collectively The Snowy Scheme. Current levels in The Snowy Scheme storages (see figure above) are 1103 GL (19.2 per cent of a total capacity of 5744 GL).

## Water storage in Queensland



**Water storage levels in northern Queensland from 3 February 2003 to 15 May 2008.**  
**Source: Bureau of Rural Sciences**

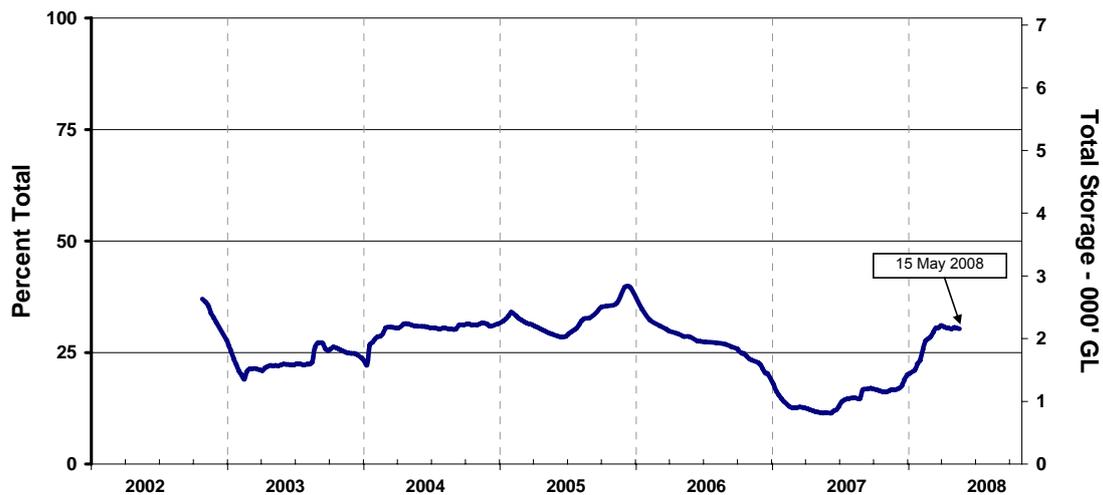
Storage levels in northern Queensland decreased by 34 GL to 2983 GL (93.2 per cent of a total capacity of 3199 GL) over the last month (see figure above). This storage level is approximately 388 GL higher than at the same time last year.



**Water storage levels in southern Queensland from 3 February 2003 to 15 May 2008.**  
**Source: Bureau of Rural Sciences**

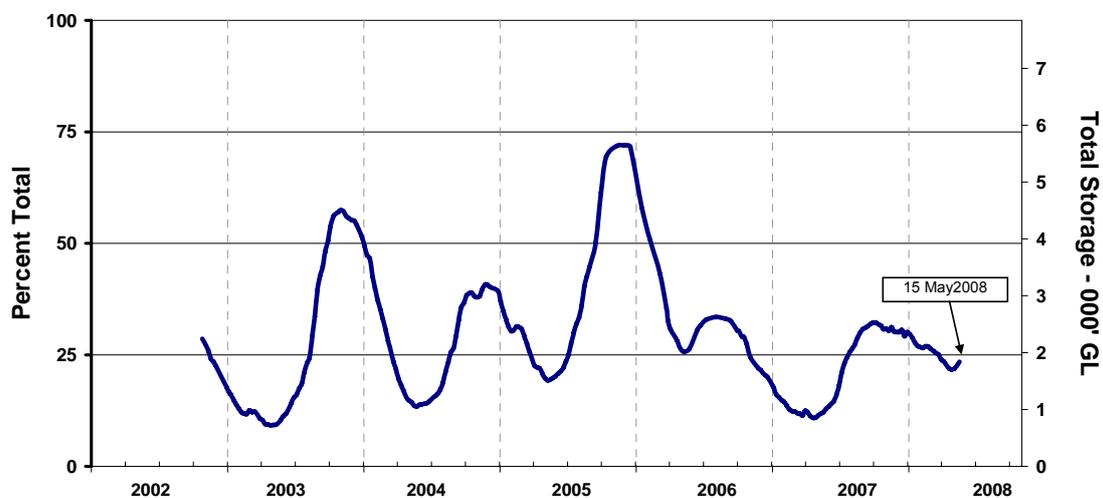
In southern Queensland storage levels decreased by 87 GL to 2698 GL (64.2 per cent of a total capacity of 4203 GL) over the last month (see figure above). This storage level is approximately 1539 GL higher than at the same time last year.

## Water storage in New South Wales



**Water storage levels in northern New South Wales from 28 October 2002 to 15 May 2008.**  
**Source: Bureau of Rural Sciences**

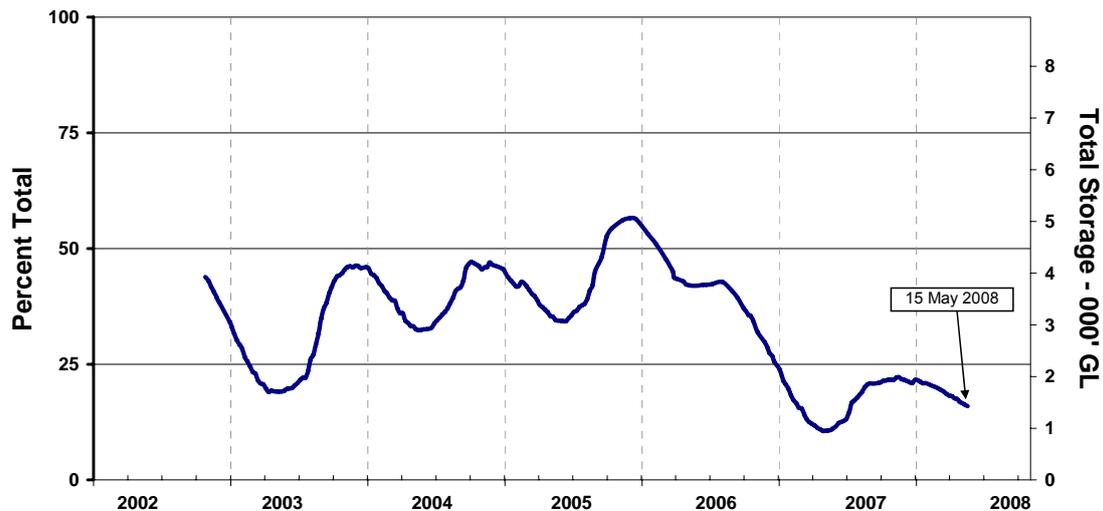
Storage levels in northern NSW decreased by 9 GL to 2156 GL (30.3 per cent of a total capacity of 7114 GL) over the last month (see figure above). This storage level is approximately 1345 GL higher than at the same time last year.



**Water storage levels in southern New South Wales from 28 October 2002 to 15 May 2008.**  
**Source: Bureau of Rural Sciences**

In southern NSW storage levels increased by 115 GL to 1836 GL (23.4 per cent of a total capacity of 7844 GL) over the last month (see figure above). This storage level is approximately 887 GL higher than at the same time last year.

## Water storage in Victoria



Water storage levels in northern Victoria from 28 October 2002 to 15 May 2008.

Source: Bureau of Rural Sciences

Storage levels in northern Victoria decreased by 141 GL to 1427 GL (16.0 per cent of a total capacity of 8950 GL) over the last month (see figure above). This storage level is approximately 461 GL higher than at the same time last year.

### Murray-Darling Basin update

- Unseasonably warm weather affected much of southern Australia in the first half of March 2008, whilst autumn rainfall to date has been below average, and Murray System inflows during March and April have remained extremely low - approaching the record lows seen in 2007. The extreme dry state of the upper Murray catchments indicates that winter rainfall would need to be well above average to produce average inflows to upper Murray storages.
- Headwater storage levels are slightly higher than the record low levels of this time last year (due to higher levels of carryover) but still well below average. A significant difference to this time last year is the severe and deteriorating outlook for the Lower Lakes in South Australia.
- MDBC active storage is currently 1020 GL, or 12 per cent of capacity, which is slightly higher than this time last year (630 GL), but well below the long term average. There are additional 570 GL in Menindee Lakes, but this water remains under NSW control. Without additional Darling inflows it is not expected that there will be any further significant transfers of water from Menindee Lakes to the Murray. However, in extreme dry circumstances some of the water stored in Menindee Lakes could be available to assist delivery of water to meet critical needs in the Murray in 2008–09.
- The protracted nature of the current drought and the consistent above average temperatures have dried out catchments and reduced base flows from groundwater systems to rivers. It can be expected, therefore, that even with average rainfall in 2008–09, inflows could remain well below average. Full recovery of the system would take several years of above average rainfall.
- While critical, urban, stock and domestic requirements for 2008–09 are reasonably assured, although they are not yet guaranteed. Opening water allocations for Murray irrigators in 2008–09 are again expected to be very low or zero, although some carryover water is likely to be available. Critical human needs for 2008–09 can be met for urban water users taking water supplies from the main stream of the Murray provided inflows are no worse than the record lows in 2006–07. Allocation improvements during the season will be dependent on rainfall and inflows over coming winter and spring, which is the critical period for runoff in the high yielding catchments of the upper Murray, Mitta Mitta, Kiewa and Ovens Rivers. The very low system storage also presents very serious challenges for the environment in 2008–09.

## 2.2 Water announcements

### Announcements for New South Wales (current at 15 May 2008)

- As a result of low rainfall across New South Wales during the last two months, catchments are extremely dry with virtually no runoff. Flows in rivers and streams throughout the Murray-Darling Basin are now extremely low or have stopped. Inflows into the Snowy River system storages also remain extremely low and are similar to the record low levels observed at this time last year.
- Final allocation announcements for the major water systems in NSW for the 2007–08 season are summarised in the table below.

Water system	High Security Licences (%)	General Security Licences (%)
NSW Murray Valley	75*	0
Murrumbidgee Valley	95*	13
Lower Darling	100	50
Macquarie Valley	100	5
Hunter Valley	100	100
Lachlan Valley	30	0

- including re-crediting of water that was suspended in 2006–07

#### Murrumbidgee Valley

- There has been virtually no rainfall in parts of the Murrumbidgee Valley in the last month. From 15 April to 12 May, Wagga Wagga received 28.2 millimetres (mm) of rain, Gundagai 24.6 mm, Cooma 1.6 mm, Hay 25.8 mm and Griffith 1.4 mm.
- Murray Valley storage levels as at 13 May 2008 are summarised in the table below.

Storage @ 13 May 2008	Volume GL	Percent of capacity	Change in Volume 14 April 2008 to 13 May 2008 GL
Burrinjuck Dam	422	41	3
Blowering Dam	443	36	+36*

\* Nearly all of the inflow into Blowering Dam is a result of a Snowy release of 2008–09 water.

- Recent inflows into Blowering Dam have been as a result of Snowy Hydro release of 2008–09 water.
- While there is more water in storage now than at this time last year, much of this is held in individual accounts as carryover, undelivered inter-valley transfers or is a pre release of Snowy Hydro 2008–09 commitments. In the Murrumbidgee Valley provided that conditions do not deteriorate further in the next few months, there will be sufficient water for restricted basic human needs, domestic and stock supply, though supply in some tributaries may be intermittent and carryover of unused water from 2007–08.
- A water availability outlook for the 2008–09 irrigation season for the Murrumbidgee Valley was provided by the NSW Department of Water and Energy on the 15 May 2008. Estimates of probabilities of improvements can be seen in the table below.

Probability	August 1 2008	October 1 2008
9 chances in 10	Small High Security allocation and improved flow in Yanco Creek	50 % High Security
3 chances in 4	20 % High Security	95 % High Security Small General Security allocation
1 chance in 2	70 % High Security	30% General Security

## Murray Valley

- There has been little to no rainfall in the last month across the Murray Valley. From 15 April to 12 May, Corryong had 28.6 millimetres (mm) of rain, Albury 30 mm, Deniliquin 10.6 mm and Mildura 6.8 mm.
- Murray Valley storage levels as at 13 May 2008 are summarised in the table below.

Storage @ 13 May 2008	Volume GL	Percent of capacity	Change in Volume 14 April 2008 to 13 May 2008 GL
Hume Dam	298	10	+57*
Dartmouth Dam	682	17	+5
Lake Victoria	270	40	-16
Menindee Lakes Storage	566	33	-18

\* Nearly all of the inflow into Hume Dam is a result of a Snowy release of 2008–09 water.

- While there is now a significant volume of water in storage compared to last year, much of this is held as carryover in individual accounts or is pre-release of Snowy Hydro's 2008–09 release commitments. There is also a large volume held in Murrumbidgee and Goulburn storages as undelivered inter-valley transfers.
- New South Wales is in a better position than it was at this time last year. At this stage it is not intended to implement the Department of Water and Energy's Critical Water Program as there is a significant volume of carryover in the Murray Valley. Similarly, there are substantial carryover volumes in the Murrumbidgee Valley and in Victoria and South Australia to underpin trade.
- New South Wales has reserved water both within its Murray Valley resources and in the Menindee Lakes to support the delivery of water for critical human needs and carryover in 2008/09. Any improvements in resource availability will be used to secure domestic and stock requirements and to provide sufficient high security water to ensure permanent planting survival.

## Announcements for Victoria (current at 15 May 2008)

- Goulburn-Murray Water announced final season allocations on 1 April 2008 (see below).

Water system	High-reliability share (%)
Murray	43
Broken	71
Goulburn	57
Campaspe	18
Loddon	5
Bullarook Creek	0

- This was the final allocation announcement for the 2007–08 season. The water resources improvements that are received from now until the end of June 2008 will be used for system operations and allocations during the 2008–09 season.
- On 15 May 2008 Goulburn-Murray Water released an outlook for seasonal allocations in the 2008–09 season. The availability of irrigation allocations across northern Victoria in 2008–09 will rely entirely on inflows from winter and spring rainfalls. Continuing drought conditions have again seen reservoirs fall to low levels. Although a number of reservoirs hold more water than at the same time last year, the remaining reserves are largely assigned to meeting customers' carryover allocations, and will not be used to supply system operating water or allocations. Without substantial winter inflow, there will be little water to allocate for irrigation at the start of the 2008–09 season.
- Carryover of unused entitlements from the 2007–08 season is now available for all customers in northern Victoria. Access to carryover commitments in the channel network will become available when enough water is available to operate the delivery system. Goulburn-Murray Water is currently planning to open the irrigation season on 15 August if reserves are available and there is demand from customers. If demand is

minimal, the season opening will be delayed to save water. The length of the 2008–09 season will depend on the water available to assign to system operating needs. Full system operation to the target close date of 15 May 2009 will rely on the inflows received during upcoming winter and spring.

- Average inflow conditions will not provide enough water to allocate water for irrigation on 1 July 2008. All systems will begin the 2008–09 season with zero seasonal allocations. By 15 August 2008, average inflows are expected to allow non-zero allocations in all systems. Goulburn-Murray Water will announce the opening seasonal allocations for all water systems on Tuesday 1 July 2008.
- A summary of 2008–09 season allocations can be seen in the tables below. The terms in these tables are defined as: *wet* (inflow volumes that are higher in 1 year out of every 10 years), *average* (inflow volumes that are higher in 5 years out of every 10 years) and *dry* (inflow volumes that are higher in 9 years out of every 10 years)

#### Outlook for 1 July 2008 Seasonal Allocations (% of high-reliability water share)

Inflow Conditions	Murray	Broken	Goulburn	Campaspe	Loddon
<i>wet</i>	0	0	0	0	11
<i>average</i>	0	0	0	0	0
<i>dry</i>	0	0	0	0	0

#### Outlook for 15 August 2008 Seasonal Allocations (% of high-reliability water share)

Inflow Conditions	Murray	Broken	Goulburn	Campaspe	Loddon
<i>wet</i>	89	100*	58	100	100*
<i>average</i>	4	7	2	2	7
<i>dry</i>	0	0	0	0	0

#### Outlook for 15 October 2008 Seasonal Allocations (% of high-reliability water share)

Inflow Conditions	Murray	Broken	Goulburn	Campaspe	Loddon
<i>wet</i>	100	100*	100	100	100
<i>average</i>	61	65	67	65	100
<i>dry</i>	11	0	0	0	0

#### Outlook for 15 December 2008 Seasonal Allocations (% of high-reliability water share)

Inflow Conditions	Murray	Broken	Goulburn	Campaspe	Loddon
<i>wet</i>	100	100*	100	100	100
<i>average</i>	82	100*	92	78	100
<i>dry</i>	17	0	7	0	0

#### Outlook for 15 February 2009 Seasonal Allocations (% of high-reliability water share)

Inflow Conditions	Murray	Broken	Goulburn	Campaspe	Loddon
<i>wet</i>	100	100*	100	100	100
<i>average</i>	93	86	100	86	100
<i>dry</i>	24	0	13	0	0

\* Low-reliability water shares allocated

## ***Announcements for South Australia (current at 16 April 2008)***

- Minister for the River Murray Karlene Maywald announced on 16 April 2008 that there is now a 50 percent chance that the opening allocations for the 2008-09 irrigation season will be less than four percent.
- Inflows to the River Murray system during March were 62 gigalitres, compared with the average of about 200GL. Since the end of February there has been no improvement in the amount of water available to South Australia. This is due to the very hot and dry conditions experienced during March, which resulted in very low inflows and high water loss caused by increased drawdown and evaporation. As a result, irrigation allocations for the rest of 2007-08 will remain unchanged at 32 percent in South Australia.
- Information from the Murray-Darling Basin Commission shows that worsening conditions across the Basin have further impacted upon the predicted available resources and therefore reduced the opening allocation projection for 1 July 2008. The opening allocation will depend on rainfall in the catchment between now and the end of the water year. It will be clearer by the end of May how the 2008-09 water year will begin, including flows and likely opening allocations.
- In total, SA has now been allocated 1070 gigalitres of water from the River Murray System for the 2007-08 season, which is the lowest volume in more than 50 years, with 350 gigalitres allocated to critical urban needs and irrigation and 720 gigalitres allocated for dilution, reserves and losses.
- Current flows over the border to South Australia are 2300 megalitres per day (ML/day), compared with the normal April entitlement flow of 4500 ML/day. Flows were increased during February and March to meet demand during hot weather, yet they were still well below the average. While salinity levels above Lock 1 remain low, salinity below Lock 1 continues to increase because of low flows into SA. Salinity at Murray Bridge averaged 840 EC last week, compared to 400 EC for the same period last year. Salinity in Lake Alexandrina is 3700 EC, compared with 1550 EC last year, although there are sections where levels are much higher.

For further information on water announcements, go to:

Murray-Darling Basin Commission

<http://www.mdbc.gov.au/>

Goulburn-Murray Water

<http://www.g-mwater.com.au/news/media-releases>

New South Wales Department of Natural Resources

<http://www.naturalresources.nsw.gov.au/>

SA water

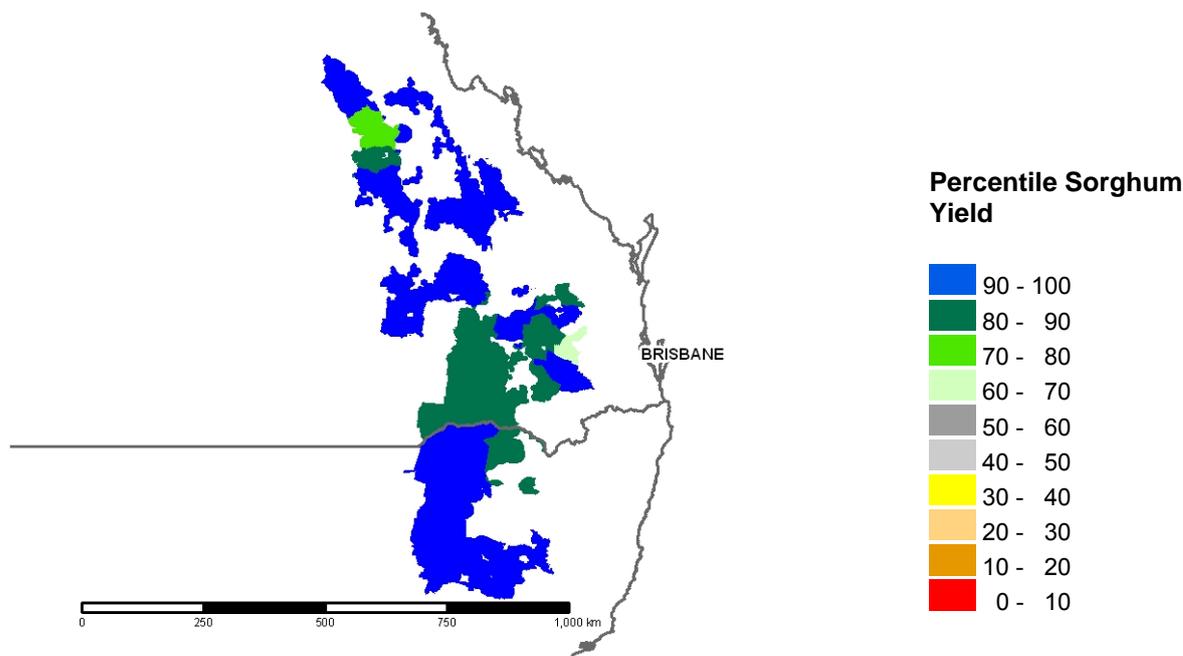
<http://www.sawater.com.au/SAWater/WhatsNew/NewsRoom/>

## 3.0 Crop and livestock production

### 3.1 Crops

#### Summer Crops

Predicted sorghum yields are provided by the Queensland Government Department of Primary Industries and Fisheries. The following figure shows sorghum yield forecasts as percentiles of a 100 year historic data set. For further information on predicted sorghum yields, go to [www.dpi.qld.gov.au/fieldcrops](http://www.dpi.qld.gov.au/fieldcrops).



#### Predicted shire sorghum yields for the 2007–08 cropping season ranked relative to all years (1908-2007) based on rainfall to date (March 2008)

- Australia's sorghum crop may top 3 million tonnes, the best ever national summer crop output for 50 years. Yields have broken records this summer, particularly in Queensland, where dryland crops are yielding as much as 13 tonnes per hectare. The dry March and April in the south of the state ensured an uninterrupted sorghum harvest with the bulk of the crop being harvested with little weather damage. In the Emerald district over half the sorghum crop has been harvested with yields ranging from 1.85 - 2.7 t/ha. Most sorghum crops in the south east of the state have now been harvested with good yields and excellent prices.

#### Winter Crops

- Winter crops are predicted to be high across NSW with about 5.4 million ha expected to be sown (up 6 per cent from last year). However, the cropping outlook is dependent on a good general autumn break. In addition, the relatively cold April temperatures across much of Australia may reduce the sowing time window.
- Grain producers in WA have already had a promising start of the 2008 cropping season but one more widespread rainfall is needed to get sowing programs well underway. The plant available soil moisture is very good for much of the WA wheatbelt with the recent rainfall enabling an early start to seeding operations. The main wheat planting is expected to occur during May. There is renewed confidence of an improved growing season ahead to capitalise on attractive grain prices. Grain producers are viewing the 2009 cropping season optimistically, hoping that the previous grain crop record will be surpassed if the favourable conditions continue through the season.
- Indications are that conditions have significantly improved in the drought affected northern wheatbelt of WA, with an excellent start of the season and farmers well into their seeding programs.

- In SA, following good rainfall at the end of the month, seeding of wheat, barley, oats and canola has started in some districts. However, in all districts a substantial follow-up rainfall is needed to get the season underway. Overall it is expected that the total crop area will slightly increase this season with more wheat and canola in particular likely to be sown. There are reports of an increased number of grazing paddocks being cropped this year due to high grain prices.
- Victorian grain growers are expecting to plant more than 3.7 million hectares over the coming two months, reported the State Department of Primary Industries. Many farmers, encouraged by the rising commodity prices have already started their cropping programs. If a decent season break occurs, wheat is likely to be the largest crop sown with an expected 1.6 hectares this season, followed by barley with 850 000 hectares sown.

## 3.2 Livestock

### ***Beef cattle***

- Australian beef exports during the first four months of 2008 were 9 per cent below exports for the same period in 2007. However, beef and veal exports increased by 21 per cent during April 2008 compared to the same month last year. April beef and veal exports surged in the minor markets for Australian beef, with increased shipments to North Asia, the European Union, Russia and South East Asia. Exports for the month reached 88,308 tonnes swt, an increase of 21 per cent year-on-year and the highest monthly total since May 2007. The proportion of Australian beef sent to the major three markets of Japan, the US and Korea during April fell to only 75 per cent – the lowest monthly proportion since September 2002. In 2007, exports to Japan, the US and Korea made up 87 per cent of total exports.
- Beef exports to Japan for April increased 8 per cent year-on-year, to 33,080 tonnes swt. The demand from Japanese buyers continues to fluctuate from month to month. This is primarily a combination of consumer resistance to higher prices and uncertainty surrounding access to US beef. Exports to Korea for the month increased 82 per cent on a very low April 2007 volume, to 13,626 tonnes swt.
- Beef exports to the US continue to remain subdued, with shipments for April decreasing 28 per cent year-on-year, to 19,604 tonnes swt – the lowest April volume since 1998. Exports for the first four months of 2008, at only 65,773 tonnes swt, were the lowest since 1996, and down 31 per cent on the previous year. The lower shipments to the US have been a result of the high Australian dollar constraining returns to exporters, with some product being diverted to more lucrative markets.
- Beef offerings at saleyards in April 2008 were 16 per cent below numbers offered for the same period last year. A larger supply of plain conditioned cattle was offered in April compared to March. Competition was strong in the lower proportion of better conditioned cattle and lot feeders increased their activity. Prices paid at saleyards were mixed due to the varying quality of livestock.
- April slaughter in the eastern states increased 10 per cent compared with March and was a 10 per cent increase on the same time last year. A big increase in slaughter occurred in the calf component, with a 40 per cent increase compared to March. Calf slaughter in Victoria more than doubled, while cattle numbers increased by 12 per cent compared with March – on par with the previous year. SA slaughtered similar numbers in April compared to the previous month but 7 per cent less than the same time last year. NSW was in line with the national trend, and Queensland abattoirs processed 9 per cent more cattle in April than in March and 16 per cent more than in April 2007. This was largely due to an extended wet season, which resulted in March slaughter reducing by over a quarter, due to the difficulty in moving stock from some parts of the state.
- The Eastern Young Cattle Indicator (EYCI) has further fallen this month with reduced quality being a major influence. The EYCI decreased 6.5 cents to 308.75 cent per kilogram of carcass weight (¢/kg cwt). This is the lowest point for 2008, and rain events in the coming months, fluctuations of the Australian dollar and rising grain prices could further impact on cattle prices.

### ***Sheep and lambs***

- Lamb exports during April 2008 increased 14 per cent to a record 13,713 tonnes swt compared to the same period in the 2007. Increased April exports contributed to an 8 per cent increase to a record 53,730 tonnes swt in lamb exports for the first four months of 2008 compared to the same period in the previous year. Although the number of animals slaughtered was lower, average carcase weights were higher and an increased proportion of lamb production was exported.

- Lamb exports to the US (the largest export market for Australia) were down 12 per cent to 12,960 tonnes swt for the first four months of 2008, which was largely due to lower shipments in February and March. For the month of April, exports to the US increased by 15 per cent year-on-year to 3,370 tonnes swt. For the first four months of 2008, mutton exports rose by 7 per cent compared to the same period in 2007.
- Lamb numbers at Meat and Livestock Australia's NLRS (National Livestock Reporting Service) reported saleyards increased by 17 per cent for the first four month period of 2008, compared to the same period last year. This increase is chiefly a result of the larger numbers offered in South Australia and Victoria. Numbers were 59 per cent and 45 per cent above the five year average in South Australia and Victoria respectively.
- This trend of increased lamb offerings is due to continued drought conditions over a wide area of northern South Australia and western Victoria. Other contributing factors include the historically high grain prices, cooler weather, and reduced outlook for rainfall into winter.
- NSW was the only state to record a fall in lamb yardings during the first four months of 2008, decreasing by 10 per cent on the five year average. NSW had a somewhat slower start to the year, with an improved seasonal outlook, particularly across central and northern regions of the state. However, a lack of rain and cooler weather throughout April has seen yardings increase. Lamb yardings started the year with traditionally smaller offerings and have increased to peak in April 2008.
- Quality again was very mixed which kept slaughter rates at generally unchanged price levels. Mainly heavy weights lambs are being penned as lambs are generally being supplementary fed on grain or crops heading into the cooler temperatures, enabling lambs to fill out to the heavier weights.
- Replacing breeders has been a focus in areas where conditions have improved in recent months. However, with low rainfall over the April period in Victoria and NSW particularly, producers are likely to reassess their herd and flock numbers in light of these changed conditions. Further de-stocking into winter in regions where heavy de-stocking has already occurred in the past year will further exacerbate the decline in livestock numbers, and will lengthen the time required to rebuild numbers.
- In the western-third of southern WA, above average rainfall during April has provided a favourable start to winter cropping. In response to high grain prices, many producers are reducing livestock numbers to increase cropping production.

For further information go to:

Australian Bureau of Statistics

<http://www.abs.gov.au>

ABARE Australian Crop report and ABARE Australian Commodities forecast and issues

<http://abareonlineshop.com/>

Meat and Livestock Australia

<http://www.mla.com.au/>

Department of Agriculture Western Australia

<http://www.agric.wa.gov.au/>

New South Wales Department of Primary Industries

<http://www.dpi.nsw.gov.au/aboutus/news>

Queensland Department of Primary Industries and Fisheries

<http://www.dpi.qld.gov.au/fieldcrops/>

## 4.0 Climate Outlook

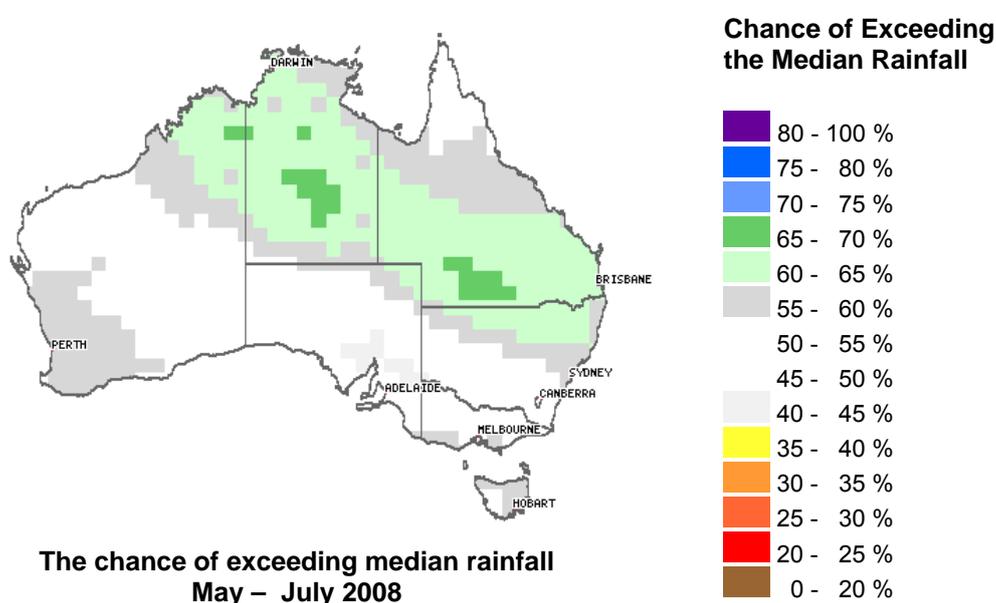
### 4.1 El Niño & Southern Oscillation Index

On 6 May 2008 the Bureau of Meteorology reported that El Niño - Southern Oscillation [ENSO] indicators show that the La Niña event of 2007–08 has weakened considerably, to the extent that most indices are now within the neutral range. The SOI has been positive since August and reached a record high February value of +21, but over the past several weeks has generally been falling, with the 30-day average SOI being +5 on 28th April. Only the western to central Pacific displays any features typical of a La Niña event, with cooler than normal ocean temperatures, enhanced Trade Winds and reduced cloud amounts.

Elsewhere, ocean surface and sub-surface temperatures continued to warm, and as a result, are no longer at levels typical of a La Niña event. Furthermore, the Trade Winds across the eastern half of the Pacific are close to or weaker than average, and the SOI has continued to retreat from the strong positive values seen earlier in the year and is now in the neutral range. The decline in La Niña has seen below average rainfall return to large parts of eastern and northern Australia during March and April. Computer model predictions show Pacific temperatures gradually increasing over the next two seasons, but remaining near-average. The models indicate a low chance of either a stronger warming to El Niño levels or a re-intensification of La Niña conditions during 2008.

### 4.2 Rainfall Outlook

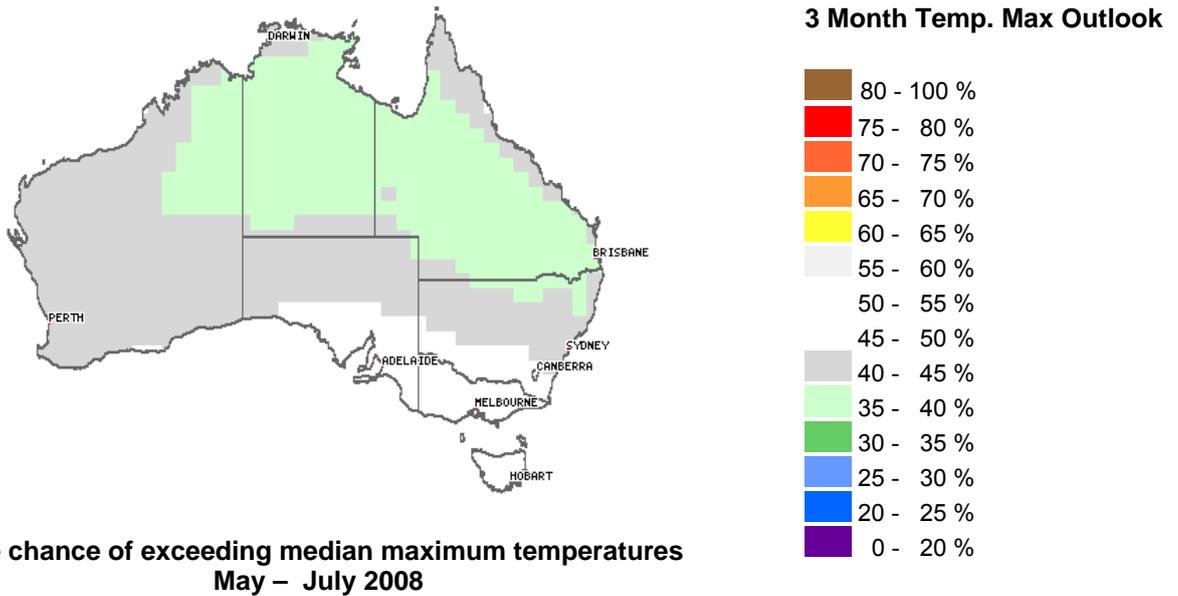
The Bureau of Meteorology provides seasonal outlooks that are statements about the probability of wetter or drier than average weather over a three-month period. The outlooks are based on the statistics of chance (the odds) taken from Australian rainfall/temperatures and sea surface temperature records 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. For further information on this rainfall outlook, go to [http://www.bom.gov.au/climate/ahead/rain\\_ahead.shtml](http://www.bom.gov.au/climate/ahead/rain_ahead.shtml).



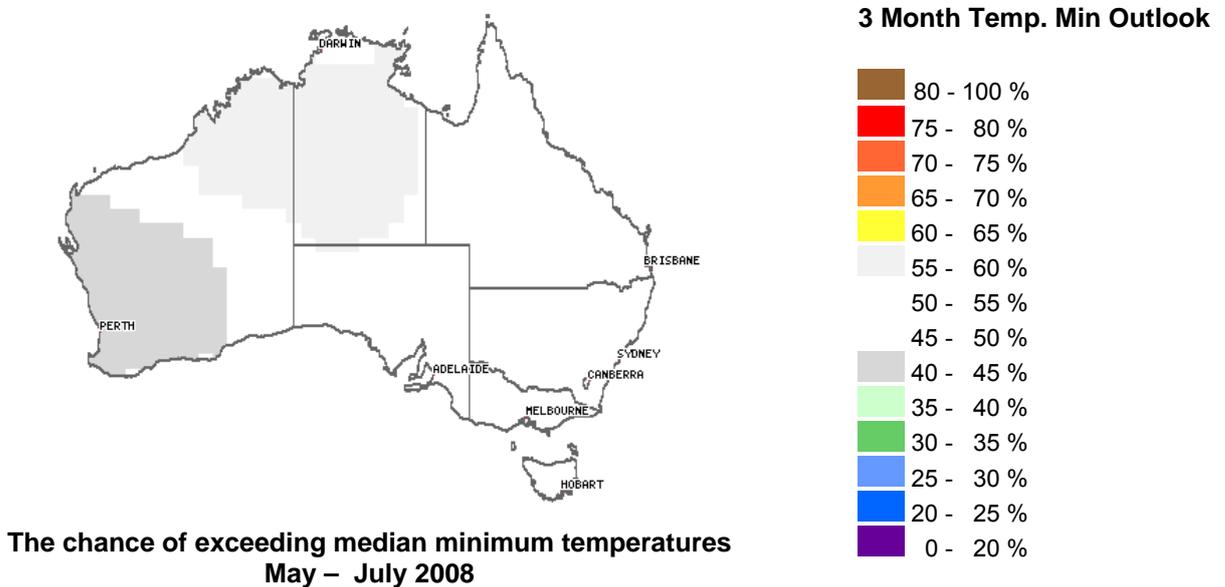
The national outlook for total rainfall over the late autumn to mid-winter period (May to July), shows a moderate shift in the odds (60–70%) favouring a wetter than average season in a broad band from northern WA and the NT through to southern Queensland and northern NSW. It should be noted, however, that this is a seasonally dry time of year over some northern parts of Australia.

The pattern of seasonal rainfall odds across Australia is a result of higher than average temperatures in the Indian Ocean, and cooler than average waters across the equatorial Pacific in association with La Niña.

### 4.3 Temperature Outlook



The national outlook for average maximum temperatures over the late autumn to mid-winter period (May to July) shows that cooler days are favoured for much of the northern half of Australia. The pattern of seasonal maximum temperature odds across Australia is a result of the combined effects from above average temperatures in the Indian Ocean and cooler than average temperatures in the equatorial Pacific (La Niña). Averaged over May to July, the chances are between 35 and 40% for above-average maximum temperatures in northeastern WA, much of the NT and Queensland, and far northern NSW.



The neutral pattern of seasonal minimum temperature odds for the May to July period in northern Australia is a result of effects from the Indian and Pacific Oceans cancelling each other out: below normal minimum temperatures are promoted by the La Niña pattern, while above-normal minimum temperatures are promoted by continuing higher than average temperatures in eastern parts of the Indian Ocean. History shows the oceans' effect on minimum temperatures in the May to July period to be moderately consistent over large parts of the country, with the exception of SA and Victoria.

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