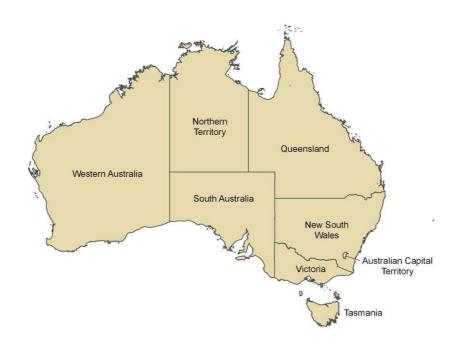
Climate and Agricultural Update

AMS

National Report

for the month of

April 2006



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New South Wales Department of Natural Resources	www.dipnr.nsw.gov.au



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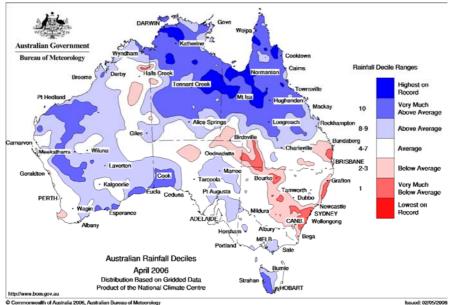
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1.0 Rainfall and temperature

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 decile analyses, go to http://www.bom.gov.au/climate/austmaps/

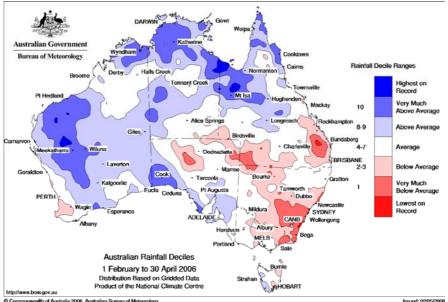


Rainfall over the last month (April 2006)

Rainfall deciles for April 2006.

April rainfall was variable across the continent, with large areas of above average to very much above average rainfall in Western Australia, Northern Territory, Queensland, South Australia and Tasmania. Highest on record rainfall occurred in patches across the Northern Territory and Queensland. Areas of below to very much below average rainfall occurred across large parts of New South Wales and southern Queensland.

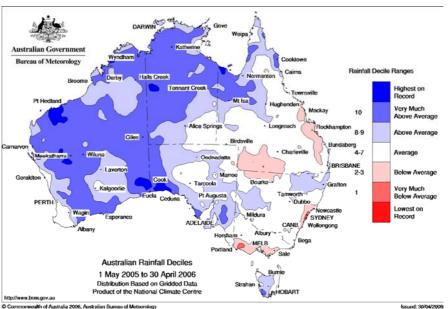




Ongoing or emerging rainfall situations

Rainfall deciles for the three months ending April 2006.

Rainfall for the last three months (February 2006 to April 2006) was above to very much above average over Western Australia, most of the Northern Territory and parts of South Australia and Queensland. However, there were significant areas of below to very much below average rainfall in the eastern states over this period.



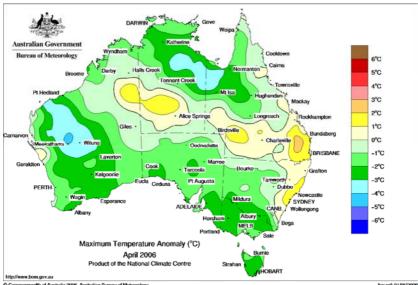
Rainfall deciles for the 12 months ending April 2006.

At the 12-month scale areas of below average rainfall occurred across southwest and coastal Queensland, north western and coastal New South Wales and southern Victoria. In contrast, the western and central parts of the continent generally received above average to very much above average rainfall over this period.



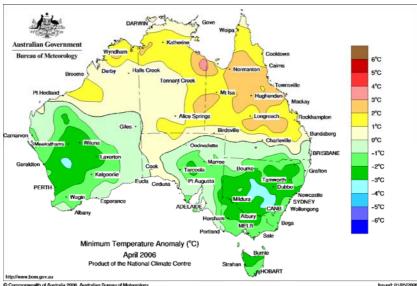
1.3 Maximum and minimum temperature anomalies

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 minimum 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/



Maximum temperature anomalies for April 2006.

Maximum temperatures in April were below to well below the long-term average in most parts of the continent and average to slightly above the long-term average in the some central areas and the east coast of Australia.

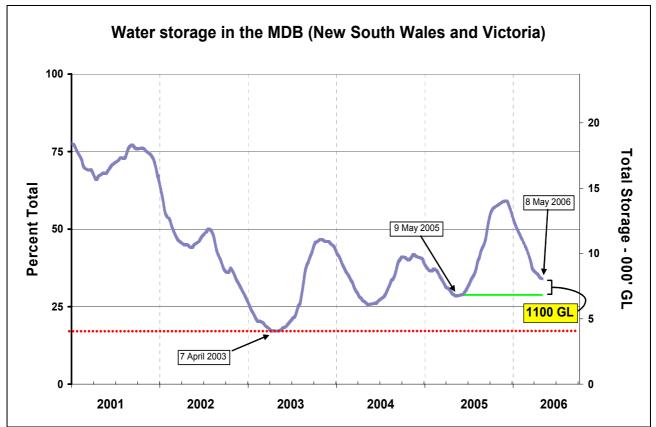


Minimum temperature anomalies for April 2006.

April minimum temperatures were below to well below the long-term average across southern Australia and were above the long-term average across the northern half of Australia.



2.0 Water storages and irrigation allocations



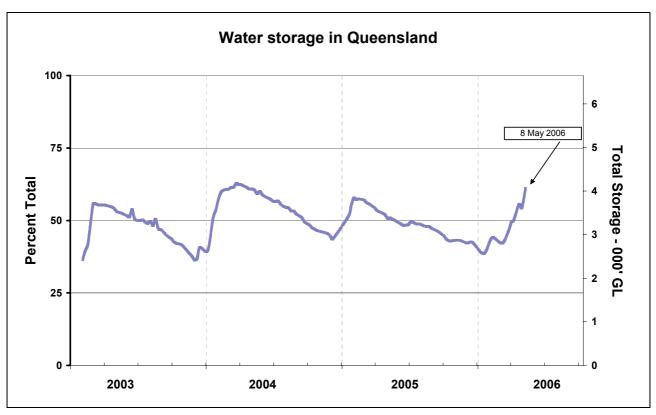
2.1 Water storages (current to 31 March 2006)

Irrigation water available in the Murray-Darling Basin from 1 January 2001 to 8 May 2006. The green line indicates last year's storage value. Source: Bureau of Rural Sciences.

Storage levels for irrigated agriculture in the Murray-Darling Basin are at 7,282 GL (total capacity of 21,492 GL), which is approximately 33.9% of total capacity and represents a decrease of approximately 2.5% of total capacity (586 GL) in the last month. Current storage levels are approximately 18% (1,099 GL) greater than at the same time last year, which represents an increase of 5.1% of total capacity.

The storage levels of the Murray-Darling Basin discussed above do not include the water contained in Lake Eucumbene, Tantangara Reservoir and Lake Jindabyne, which represent 5700 GL of total capacity and are used for hydro-electricity generation and irrigation purposes. The currently available data (20th April 2006) show that the storages currently hold 2457 GL (43% of capacity) of water, which represents a decrease of 147 GL from February 2006.





Current water storage level in Queensland as of 8 May 2006. Source: Bureau of Rural Sciences.

There has been substantial re-charge of Queensland water storages due to above average rainfall in central and northern Queensland during April. Water storage in Queensland (6965 GL total capacity) are currently at 61% capacity (4,256 GL), which represents an increase of 11% of total capacity in the last month.

2.2 Irrigation allocations for the 2005/06 season (current to 18 April 2006)

- Goulburn Murray Water has recently updated allocations for Victorian users and there have been no significant changes in seasonal allocations since last month.
 - Allocations on the Campaspe system remain at 31%, with little prospect of significant increases for the remainder of the season.
 - Allocations for irrigators on the Loddon system remain at 100%.
 - In the Goulburn system allocations remain at 100%.
 - There is little chance of the Goulburn or Loddon systems receiving any Sales allocation during the remainder of the season.
 - There has been a slight change in the Murray System allocation, which is currently at 100% water right and has increased slightly to 44% sales.



- In the Bullarook and Broken systems allocations remain at maximum levels of 190% and 170% water right and sales respectively.
- There are no further allocation reviews scheduled this season. The first allocation announcement for 2006/07 will be released 3 July 2006.
- Goulburn Murray Water has also released a water allocation outlook for the 2006/07 irrigation season. The outlook states that:
 - The Murray System will have considerably more water in reserve at the end of this season than at the end of last season.
 - The Goulburn System is expected to have a similar amount in reserve.
 - The Campaspe and Loddon Systems are expected to have less water in reserve than at the end of last season.
 - No outlook was provided for the Broken System, as the duration of the current Blue-Green Algae bloom will influence the carryover in Lake Nillahcootie for next season.
 - An updated outlook for 2006/07 allocations will be released on 15 May 2006.
- Allocations for New South Wales water users in the Murray and Murrumbidgee valleys for the 2005/06 season are as follows:
 - There has been no change in irrigation allocations for general security users in the Murray Valley and they remain at 63% of entitlement. Indications are that there is a 75% chance of allocations increasing to 65% and a 50% chance of allocations increasing to 100 % by end of May 2006..
 - There has also been no change in water availability for general security users on the Murrumbidgee, with allocations remaining at 54% for the full season. There is a 75% chance of the allocation reaching 57% by the end of May 2006 and a 50% chance of allocations reaching 60%.

For further information on irrigation allocations, go to Goulburn-Murray Water

http://www.g-mwater.com.au/news.asp?ContainerID=media_releases

New South Wales Department of Natural Resources

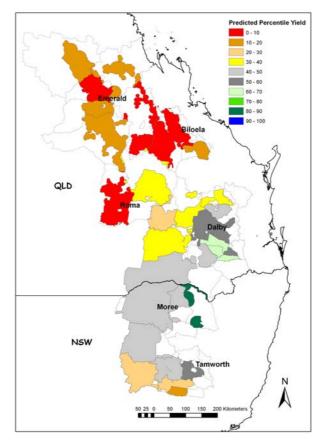
http://www.naturalresources.nsw.gov.au/mediareInr/mm20060418_3331.html



3.0 Crop and livestock production

3.1 Crops

Predicted sorghum yields are provided by the Queensland Department of Primary Industries and Fisheries. The following figure shows sorghum yields for different production areas as percentiles of a 100 year historic record for New South Wales. For further information on the Queensland Department of Primary Industries and Fisheries predicted sorghum yields, go to <u>http://www2.dpi.gld.gov.au/fieldcrops/14206.html</u>



Predicted shire sorghum yield for the 2005/2006 cropping season ranked relative to all years (1901-2005) as of 6 March 2006.

The summer cropping zones in eastern Australia received below average rainfall in the late summer and early autumn period which has reduced expected yields.

Predicted percentile shire sorghum yields are very low in northern cropping areas of Queensland, and below average in central Queensland and in southern parts of New South Wales. Predicted percentile shire yields for the region spanning from Dalby in Queensland to Tamworth in New South Wales range from average to above average.

3.2 Livestock

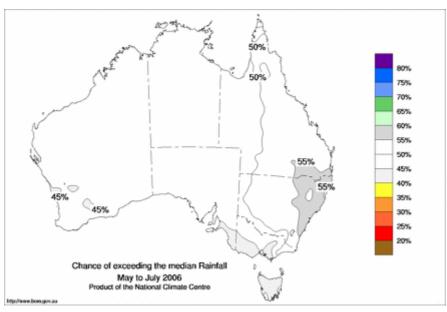
Below average rainfall over the recent summer and early autumn period across large parts of eastern Australia have caused deterioration in pasture conditions in those affected areas.



4.0 Climate Outlook

4.1 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, however, 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



Seasonal Outlook: the chance of exceeding median rainfall between May 2006 and July 2006.

Seasonal rainfall probabilities released by the Bureau of Meteorology indicate that there is no strong tendency towards either wetter or dryer conditions across most of Australia for the May 2006 to July 2006 period. There is a slightly higher then average chance of receiving above average rainfall in the north east of New South Wales and the south east of Queensland.

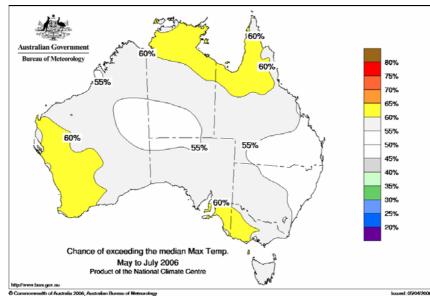
4.2 El Niño & Southern Oscillation Index

The Bureau of Meteorology is stating that the recent cool phase in the Pacific, which briefly approached La Niña-like conditions, is showing signs of decay. Sea-surface temperatures have continued to warm in the central to eastern Pacific and are now close to average. More importantly, the large body of cooler than average sub-surface water in the east has contracted considerably during the past month.

Computer modelling predictions of Pacific temperatures mostly indicate warming over the next few seasons, with neutral conditions in the southern winter and spring. It should be noted, however, that March to June is the period when predictability of future ENSO conditions is at its lowest.

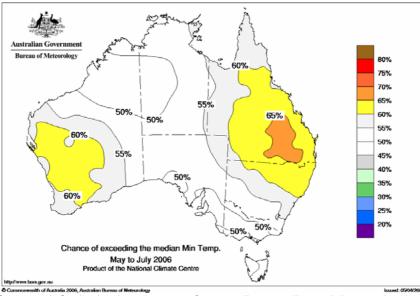


4.3 Temperature Outlook



Seasonal Outlook: the chance of exceeding median maximum daytime temperatures between May 2006 and July 2006.

There is no strong tendency towards above or below average maximum temperatures across most of Australia for the May 2006 to July 2006 period, except for areas in western West Australia, northern Northern Territory and Queensland and a small area in South Australia and Victoria that have an increased chance of above average maximum temperatures.



Seasonal Outlook: the chance of exceeding median minimum daytime temperatures between May 2006 and July 2006.

There is no strong tendency towards above or below average minimum temperatures across central Australia for the May 2006 to July 2006 period, while Queensland and central Western Australia have an increased chance of above average minimum temperatures.

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

