

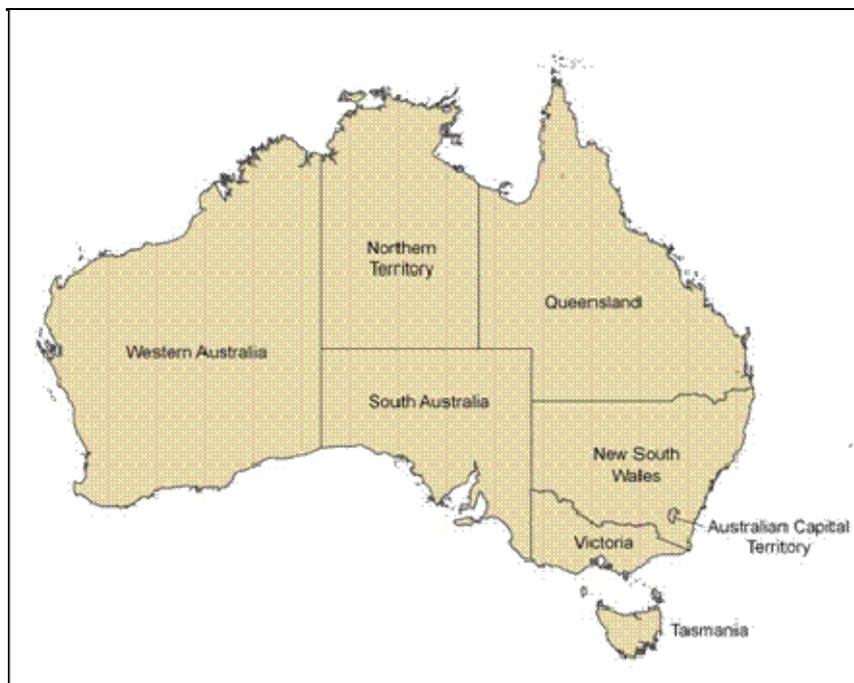


Climate and Agricultural Update

National Report

for the month of

August 2006



The NAMS is a collaborative project between Australian, State and Territory governments.

Copyright

Copyright Commonwealth of Australia (Bureau of Rural Sciences) 2006

Copyright in the material contained within the NAMS report vests in the Commonwealth of Australia. You may download, display, print and reproduce material from this report for your personal, non-commercial use, or use within your organisation. Apart from any use as permitted under the Copyright Act 1968, all other rights are reserved. Requests and inquiries concerning reproduction and rights in the NAMS report should be addressed to; The Secretary, Department of Agriculture Fisheries & Forestry, GPO Box 858, CANBERRA ACT 2601, AUSTRALIA.

Disclaimer

The National Agricultural Monitoring System (NAMS) is a decision making tool for Government and Industry bodies in evaluating the impact of climate on primary production, and is only one of a series of tools used in assessing such impacts. By accessing the information presented in this document the reader waives and releases the Commonwealth of Australia and other data contributors (see link to partners in the NAMS website) to the full extent permitted by law from all liability for loss or damage arising from the use of, or reliance on, such material, whether or not caused by any negligence on the part of the Commonwealth of Australia, other data contributors or their agents.

In particular and without limit to the generality of the above:

The quality of the data presented in this system cannot be guaranteed. This information should not be used by itself to support decision making; rather it is intended as context only for broader decision making processes

The Australian Government does not guarantee that this file is free from viruses.

Contacts

For further information visit www.nams.gov.au, or for enquiries/feedback relating to this report contact the NAMS helpdesk at NAMS@nams.gov.au.

Contributors

The information in this report was sourced from the following organisations:

ORGANISATION

<p>Bureau of Meteorology</p>  <p>Australian Government Bureau of Meteorology</p>	<p>www.bom.gov.au</p>
<p>Bureau of Rural Sciences</p>  <p>Australian Government Bureau of Rural Sciences</p>	<p>www.brs.gov.au</p>
<p>Australian Bureau of Statistics</p> 	<p>www.abs.gov.au</p>
<p>Department of Agriculture and Food, Western Australia</p>  <p>Department of Land Information Government of Western Australia</p>	<p>www.agric.wa.gov.au</p>
<p>Goulburn Murray Water</p> 	<p>www.g-mwater.com.au</p>
<p>Queensland Department of Primary Industries and Fisheries</p>  <p>Queensland Government Department of Primary Industries and Fisheries</p>	<p>www.dpi.qld.gov.au</p>
<p>New South Wales Department of Natural Resources New South Wales Department of Natural Resources</p>  <p>NSW Government DEPARTMENT OF NATURAL RESOURCES</p>	<p>www.dipnr.nsw.gov.au</p>
<p>Meat and Livestock Australia</p> 	<p>www.mla.com.au</p>

TABLE OF CONTENTS

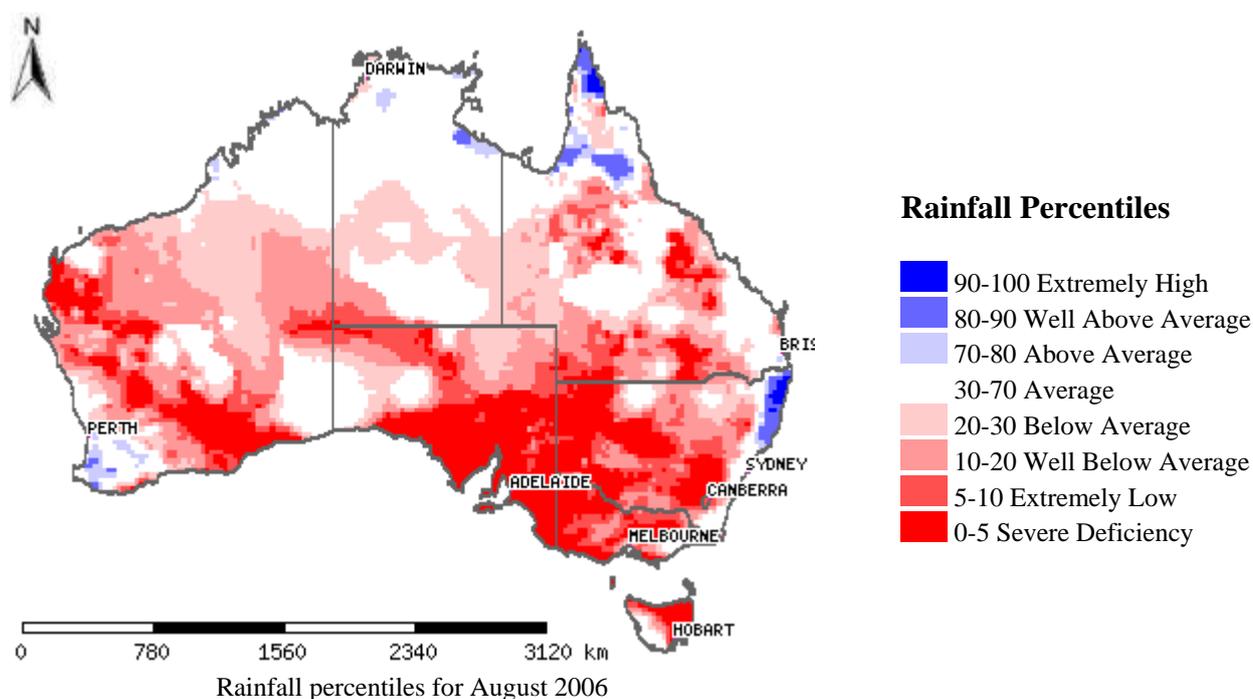
1. RAINFALL AND TEMPERATURE	5
1.1 Rainfall	5
<i>Rainfall over the last month (August 2006)</i>	5
<i>Ongoing or emerging rainfall situations</i>	6
1.2 Maximum and minimum temperature anomalies	7
2.0 WATER STORAGES AND IRRIGATION ALLOCATIONS	8
2.1 Water storages (current to 31 August 2006)	8
2.2 Irrigation allocations for the season	9
3.0 CROP AND LIVESTOCK PRODUCTION	11
3.1 Crops	11
3.2 Livestock	12
4.0 CLIMATE OUTLOOK	13
4.1 Rainfall Outlook	13
4.2 El Nino & Southern Oscillation Index	13
4.3 Temperature Outlook	14

1.0 Rainfall and temperature

1.1 Rainfall

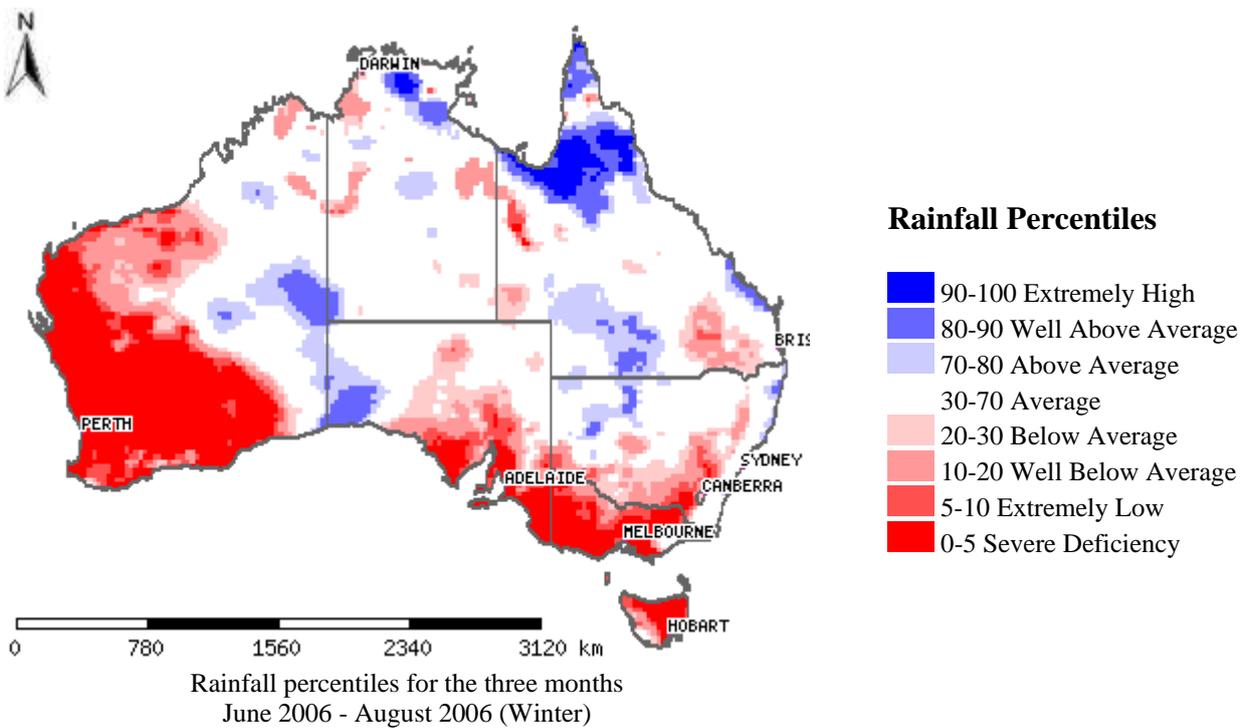
Spatial rainfall analyses are based on historical monthly rainfall data provided by the Bureau of Meteorology. For further information on rainfall data and the interpretation of percentile analyses, go to <http://www.bom.gov.au/climate/austmaps/>

Rainfall over the last month (August 2006)

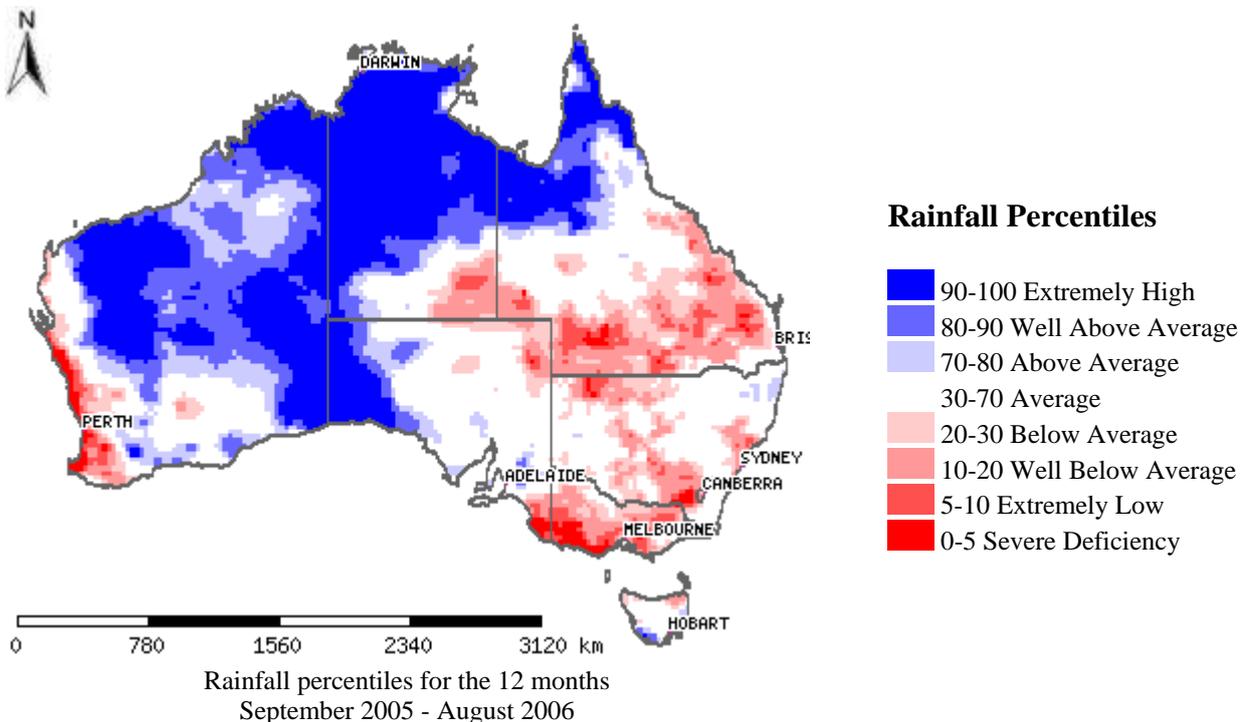


According to the Bureau of Meteorology, August rainfall was the lowest on record across Australia as a whole. Rainfall during August was extremely low to severely deficient across significant parts of South Australia, Victoria, Western Australia, New South Wales, Queensland and Tasmania. Small areas of above average to well above average rainfall occurred across Cape York Peninsula and northern New South Wales.

Ongoing or emerging rainfall situations



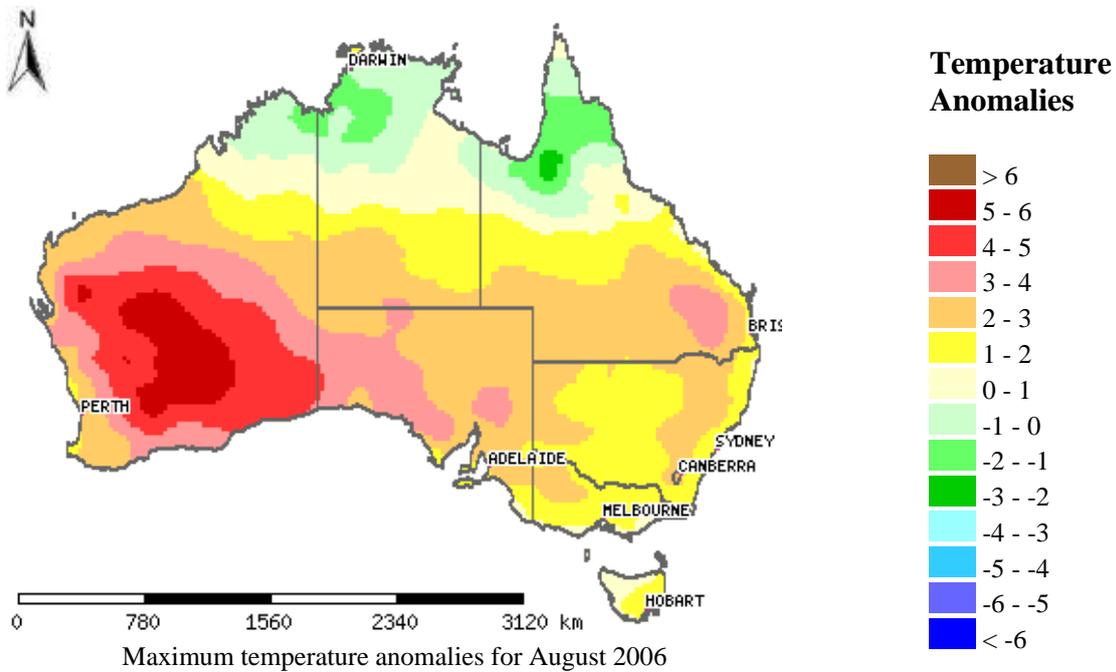
Extremely low to severe rainfall deficiencies occurred across the western parts of Western Australia, the southeast of South Australia, most of Victoria and Tasmania and parts of southern New South Wales. The Cape York region in Queensland and a small area in north of the Northern Territory were the only significant parts of Australia to receive well above average to extremely high rainfall over the last three months.



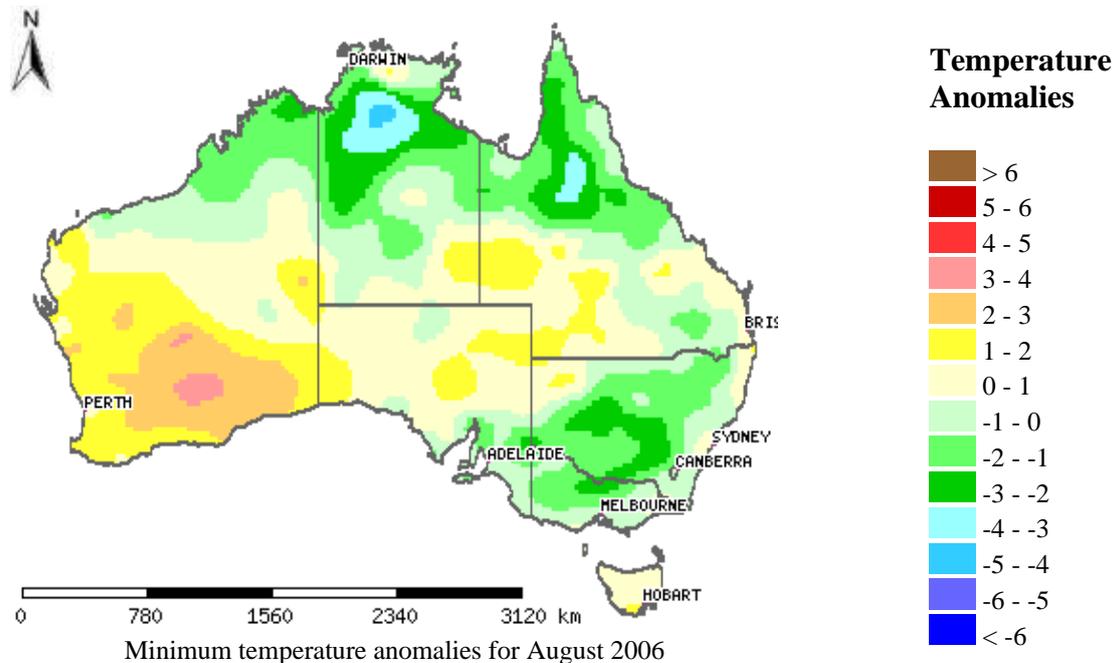
Over the last 12 months, there were significant areas of well below average rainfall across eastern Australia and southwest Western Australia. Rainfall was generally above average to extremely high across the western and northern parts of the continent.

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 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 temperatures during August were above the long-term average in the southern and central parts of the continent, with well above average temperatures in southern Western Australia. Temperatures during August were generally below average across the north of Australia.

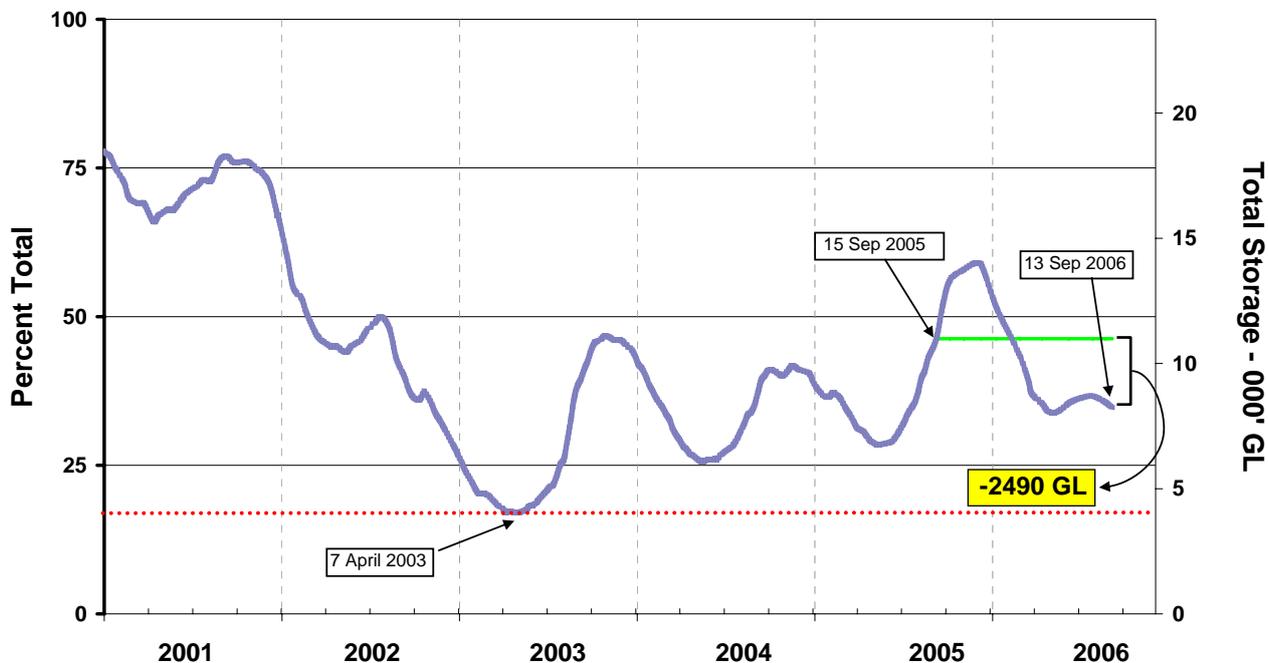


Minimum temperatures during July were generally below the long-term average across the north, southeast and eastern parts of the continent, and generally above average across the west and central parts of the continent. The southeast coast of Queensland, parts of coastal New South Wales and Victoria, and Tasmania had above average temperatures for August.

2.0 Water storages and irrigation allocations

2.1 Water storages (current to 12 September 2006)

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

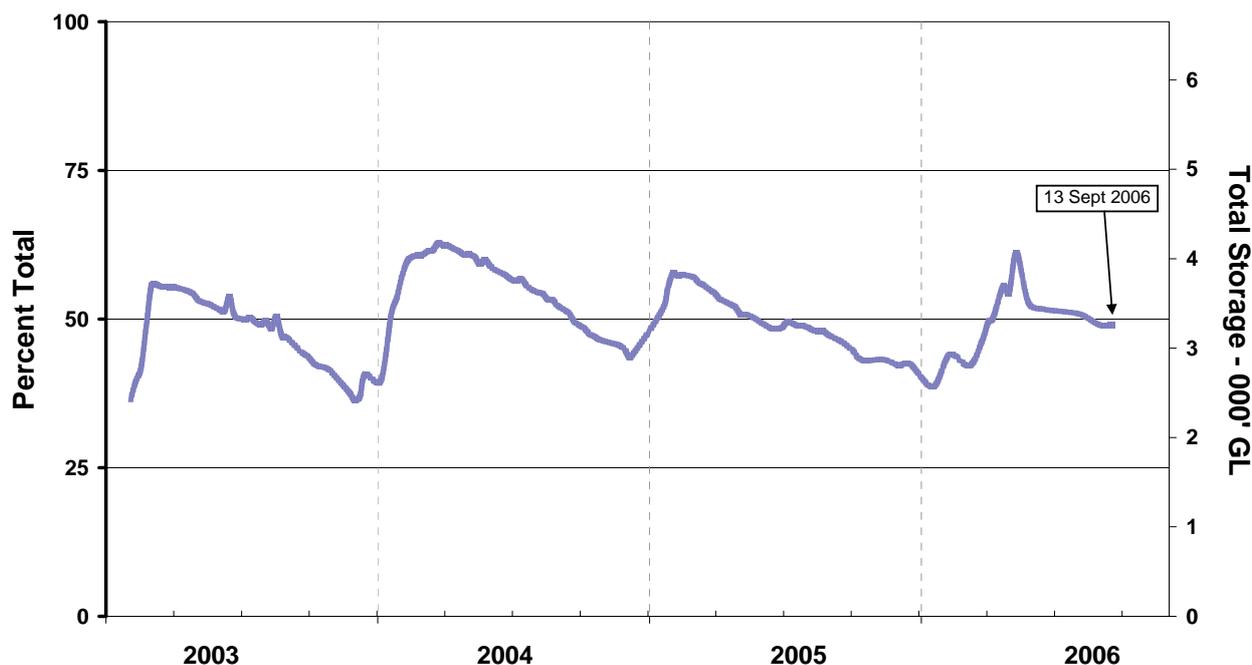


Irrigation water available in the Murray-Darling Basin from 1 January 2001 to 12 September 2006. The green line indicates the storage level at the same time last year. Source: Bureau of Rural Sciences.

There was very little recharge across the Murray Darling system over the winter period and, as such, storage levels are very low coming into spring. Storage levels for irrigated agriculture in the Murray-Darling Basin are at 7,458 GL (total capacity of 21,492 GL), which is approximately 34.7% of total capacity and represents a decrease of approximately 1.9 % of total capacity (417 GL) in the last month. Current storage levels are approximately 2490 GL less than at the same time last year, which is equivalent to a decrease of approximately 11.6% 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. These storages currently hold 1612 GL (29% of capacity) of water, which represents a decrease of 74 GL from June 2006.

Water storage in Queensland



Current water storage level in Queensland as of 13 September 2006. Source: Bureau of Rural Sciences

Storage levels in Queensland are at 3,412 GL (total capacity of 6,965 GL), which is approximately 49% of total capacity and represents a decrease of approximately 1.8 % of total capacity (125 GL) in the last month. Current storage levels are approximately 195 GL greater than at the same time last year, which is equivalent to an increase of 2.8% of total capacity.

2.2 Irrigation allocations for the 2005/06 season

Allocation Outlook for Victorian irrigators in the 2006/07 season (current to 1 September 2006)

- The allocation for the Goulburn System is 17% of Water Right and Licensed Volume, which represents an increase of 7% from the last announcement. This increase has been made possible by including a volume of 86,000 ML of water at Waranga Basin that can be pumped. There is no allocation for irrigation entitlements in the Campaspe and Loddon systems. Water reserves from last season in these systems are still insufficient to meet all losses and fixed commitments. In the Murray system the allocation is 85% of Water Right and in the Broken system, the allocation is 45%.
- Very low rainfall totals during August meant that streamflows have remained extremely low. Record low inflows at storages for August have occurred across the Goulburn-Murray systems. This has further weakened water resource availability and hence the prospects of reaching 100% allocations have generally fallen.
- According to Goulburn-Murray Water the chances of announcing a 100% allocation in February 2007 are: 4 in 10 for the Goulburn, 1 in 10 for Campaspe, 6 in 10 for Broken, and 2 in 10 for Loddon.
- The seasonal climate outlook released by the Bureau of Meteorology for September to November 2006 indicates a slight trend towards drier than average rainfall across parts of south-central Victoria. This period coincides with the timing of traditionally high inflows to Goulburn-Murray Water storages.

Allocation Outlook for New South Wales irrigators in the 2006/07 season (current to 1 September 2006)

- There is currently no general water allocation for the Murray system. Record low inflows have continued through August. The total inflow to the Murray River during August was 112 GL, 10% less than the previous record low of 125 GL. Currently, another 300GL inflow is required into the Murray Valley storages before there is sufficient to announce an allocation. The catchment is extremely dry and requires significant rain to produce worthwhile runoff.
- General water allocations for the Murrumbidgee Valley are currently at 18% of water right and will remain at 18 % for the full season, with 14% being available by the end of February.

For further information on irrigation allocations, go to:

Goulburn-Murray Water

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

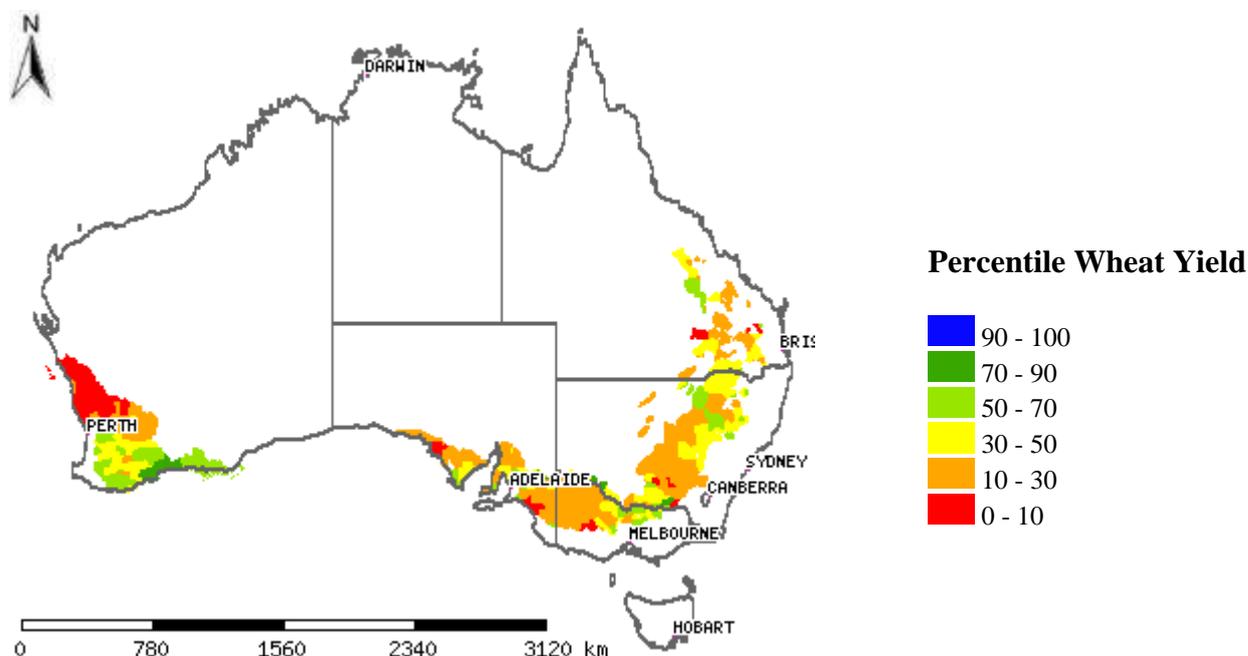
New South Wales Department of Natural Resources

[http:// http://www.naturalresources.nsw.gov.au/mediarelnr/mm20060901_3418.html](http://http://www.naturalresources.nsw.gov.au/mediarelnr/mm20060901_3418.html)

3.0 Crop and livestock production

3.1 Crops

Predicted wheat yields are provided by the Western Australian Department of Agriculture and Food. The following figure shows wheat yield forecasts as percentiles of a 100-year historic data set. For further information on predicted wheat yields, go to www.agric.wa.gov.au/.



Predicted shire wheat yields for the 2006 cropping season ranked relative to all years (1906-2005)

Current predictions for shire level wheat yields for the 2006 growing season are in the lower half of historical yields reflecting the dry start to the winter cropping season. Wheat yields in the central west of New South Wales, the central wheat belt of Queensland, the western wheat belt of Victoria, large sections of the wheat belt of South Australia and the eastern wheat belt of Western Australia are predicted to be below average. The northern wheat belt of Western Australia, small areas in South Australia, southern Victoria, southern New South Wales and western Queensland are predicted to be in the lowest 10% of historic yields. Average to above average yields are predicted for the southern wheat belt of Western Australia, parts of coastal South Australia, northeast Victoria into southern New South Wales and small parts of Queensland and northern New South Wales. Predictions of future yields are based on season to date plus average rainfall for the remainder of the season.

3.2 Livestock

- Below average rainfall across large parts of eastern Australia over the autumn and winter period has resulted in low potential for pasture growth this year.
- Cattle numbers at MLA's NLRS reported saleyards were unchanged overall during the first week of September 2006, however these numbers varied on a state to state basis. In Queensland there was 11% less, New South Wales 6% less, while South Australia and Western Australia penned 12% lower numbers respectively. Rainfall in the north east of New South Wales and the northern coastal fringes of Queensland has had a short term effect on supply. In contrast to the national trend, Victorian yardings increased by 40%. The northern border markets of Wodonga and Shepparton had significantly higher numbers. With water allocations continuing to be a concern and seasonal conditions showing no signs of improving, producers are being forced to offload stock as supplementary feed reserves run out and become costly to source.
- Drought conditions continue to impact heavily on the quality and composition of consignments to MLA's NLRS reported physical markets across New South Wales. Larger yardings of predominantly light conditioned young cattle was the pattern at most centres with prime trade cattle in limited supply. Prices, however, responded to useful but isolated falls of rain last weekend and again mid-week with restockers lifting their sights on suitable weaners and yearlings with price gains over the past week.
- Lamb slaughter levels for August 2006 in the eastern states were 3% below July, however 10% above the 5-year average for August. Winter slaughter levels for 2006 have generally been high due to the poor season. However, slaughter levels are now slowly on the decline due to high quantities already processed. As this autumn-winter has been one of the worst growing seasons, with cold, dry conditions and minimal rainfall, producers have opted to reduce stock levels as feed reserves diminish and its quality deteriorates.
- Sheep slaughter levels for August 2006 in the eastern states was 7% above July, however 15% below the five-year average for August. Sheep slaughter levels have been below average as the ongoing difficult seasonal conditions have cut flock numbers over recent years, particularly in New South Wales.

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/>

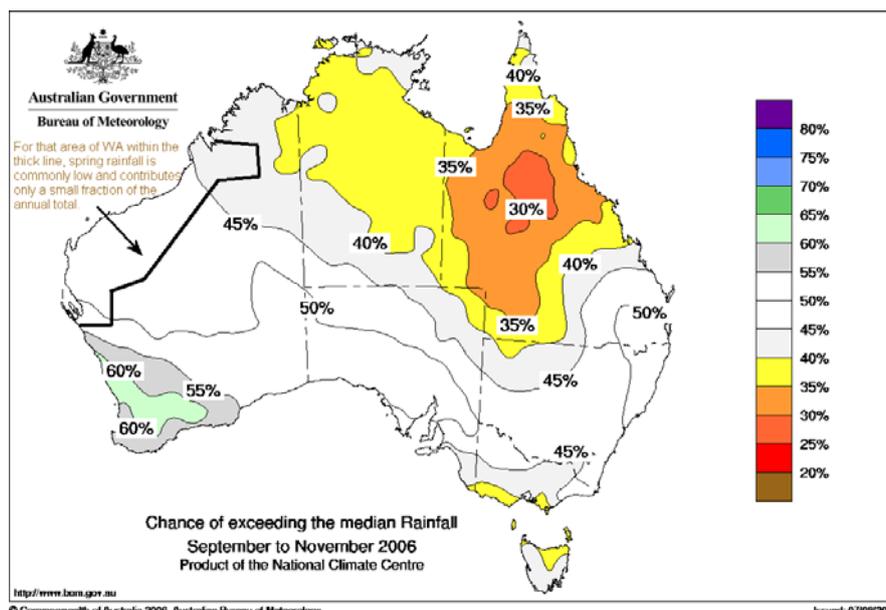
New South Wales Department of Primary Industries
<http://www.agric.nsw.gov.au/reader/nsw-grains-report-sept-2005>

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

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>



The chance of exceeding median rainfall between
01 September 2006 and 30 November 2006

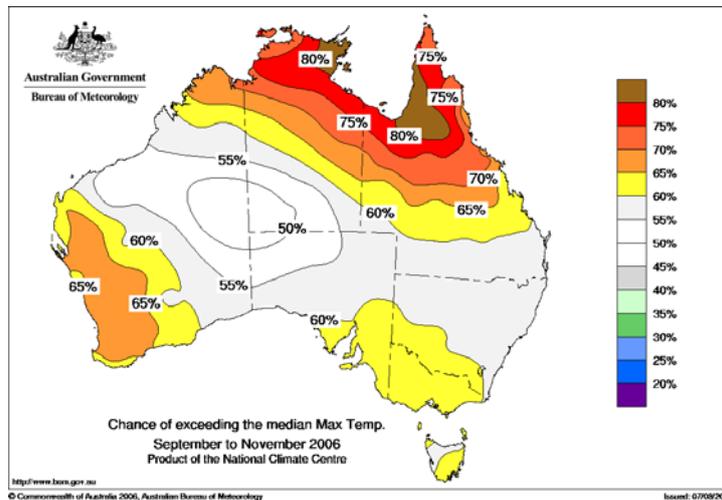
Seasonal rainfall probabilities released by the Bureau of Meteorology indicate that there is a mixed pattern of odds, with below average totals more likely in northern Australia and a few patches in the southeast, while the chances favour wetter than average conditions in southwest Western Australia.

4.2 El Nino & Southern Oscillation Index

- Since early August, key ENSO indicators have been consistent with the development phase of an El Niño event. These include sustained negative values of the Southern Oscillation Index (SOI), warmer than normal tropical Pacific Ocean temperatures and a marked decrease in the strength of the Trade Winds. During the past fortnight, weekly surface temperatures have risen above El Niño thresholds in the western and eastern Pacific, while reaching a level just marginally below in the central Pacific.
- To qualify as an El Niño event, tropical Pacific temperatures would need to persist at their present weekly levels for around another four months, accompanied by a continued weakening of the Trade Winds and above average central Pacific cloudiness. Most computer models indicate continued warming in the Pacific, which implies a probable strengthening of the developing El Niño pattern.
- The observed below average rainfall during late autumn and winter across Australia's southern half, especially in the southeast and southwest, is also consistent with the early stages of an El Niño

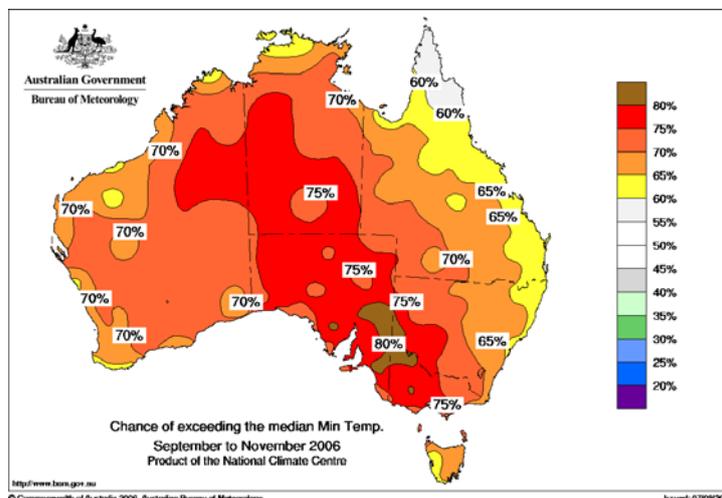
event. Furthermore, even if El Niño thresholds are not reached across the range of indicators, a warming Pacific and a low SOI bias the climate towards being drier and warmer than average across eastern and northern Australia for the remainder of 2006. This is reflected in the spring outlooks for rainfall and temperature.

4.3 Temperature Outlook



The chance of exceeding median maximum daytime temperatures between 01 September 2006 and 30 November 2006

For the September to November 2006 period there is a strong chance for maximum temperatures to be above average over large parts of northern, southwest and southeastern Australia. There is a greater than 60% chance of maximum temperatures exceeding the median across most of the tropics, southwest WA and a large part of southeast Australia. In northern Queensland and the north of the NT, the probabilities are between 70 and 85%.



The chance of exceeding median minimum daytime temperatures between 01 September 2006 and 30 November 2006

For the September to November 2006 period the chance of seasonal minimum temperatures being higher than the median are above 60% over nearly the whole country, reaching around 80% in parts of the southeast.

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