



NAMS
NATIONAL AGRICULTURAL
MONITORING SYSTEM

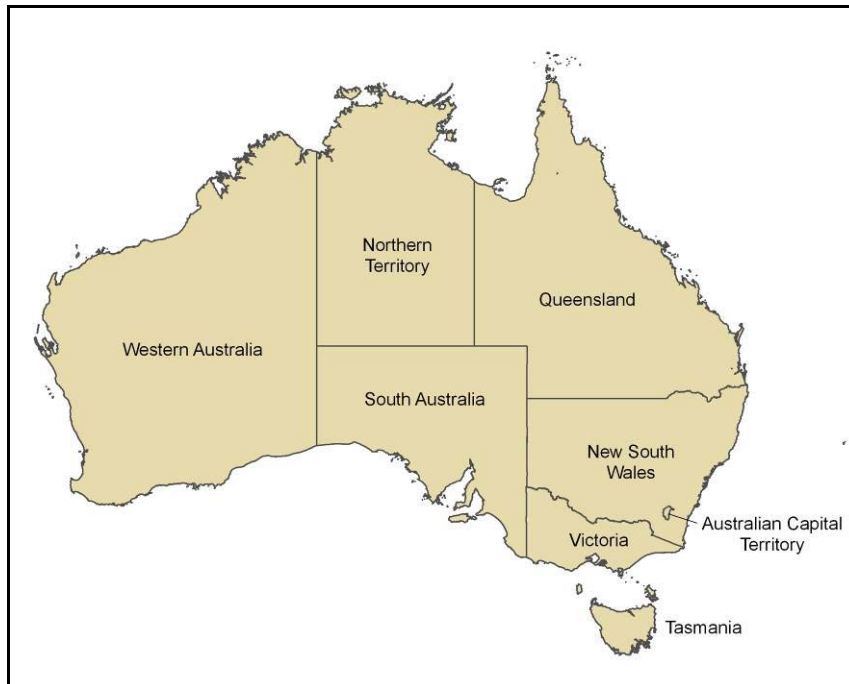
National Agricultural Monitoring System

Climate and Agricultural Update

National Report

for the month of

May 2006



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

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@brs.gov.au.

Contributors

The following organisations provide input to the National Report.

ORGANISATION






<p>Bureau of Meteorology</p> 	<p>www.bom.gov.au</p>
<p>Bureau of Rural Sciences</p> 	<p>www.brs.gov.au</p>
<p>Department of Agriculture and Food, 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>www.dpi.qld.gov.au</p>
<p>New South Wales Department of Natural Resources</p> 	<p>www.dipnr.nsw.gov.au</p>

TABLE OF CONTENTS

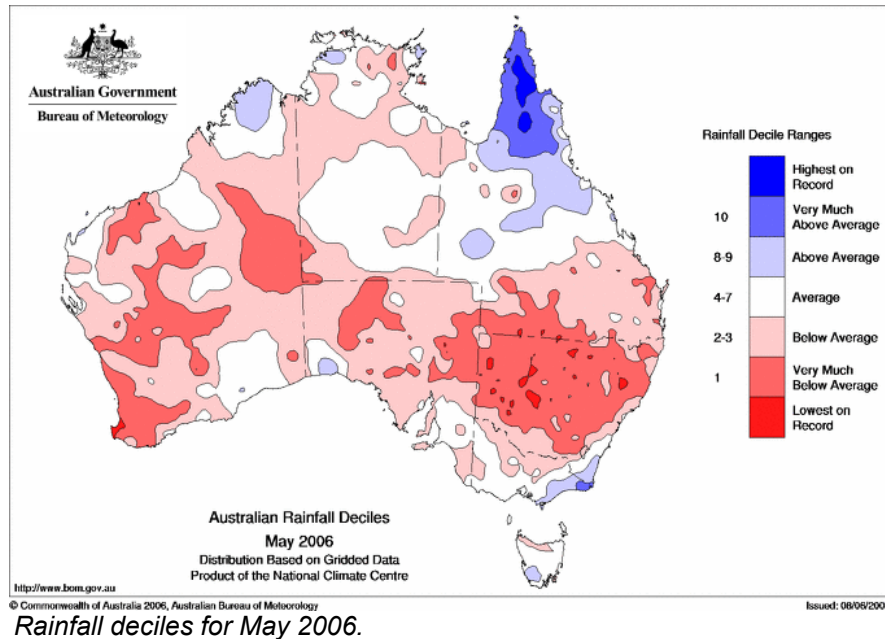
1.0 RAINFALL AND TEMPERATURE	5
1.1 Rainfall	5
<i>Rainfall over the last month (April 2006)</i>	<i>5</i>
<i>Ongoing or emerging rainfall situations</i>	<i>6</i>
1.3 Maximum and minimum temperature anomalies	7
2.0 WATER STORAGES AND IRRIGATION ALLOCATIONS	8
2.1 Water storages (current to 31 March 2006)	8
2.2 Irrigation allocations for the 2005/06 season (current to 15 March 2006)	9
3.0 CROP AND LIVESTOCK PRODUCTION	11
3.1 Crops	11
3.2 Livestock	11
4.0 CLIMATE OUTLOOK	12
4.1 Rainfall Outlook	12
4.2 El Niño & Southern Oscillation Index	12
4.3 Temperature Outlook	13

1.0 Rainfall and temperature

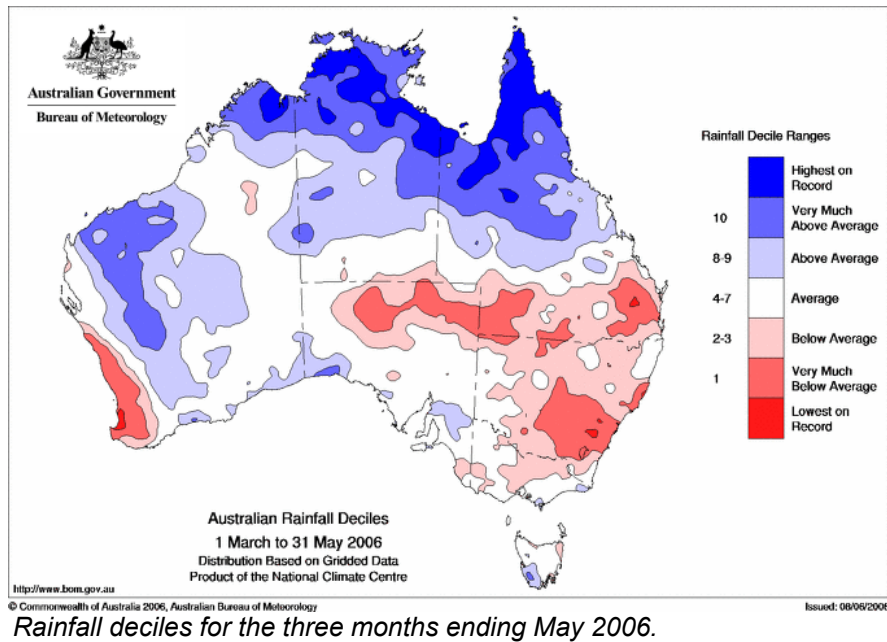
1.1 Rainfall

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/>

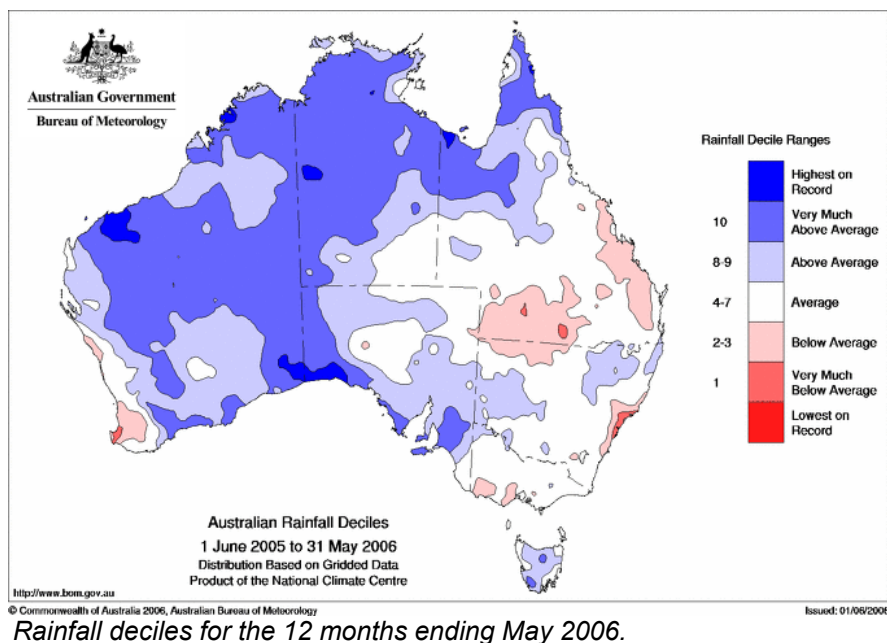
Rainfall over the last month (May 2006)



Rainfall during May was generally below average across the continent, with large areas of below average to very much below average rainfall in Western Australia, southern Queensland, South Australia and New South Wales. The vast majority of New South Wales received very much below average rainfall with isolated areas of lowest on record rainfall. Highest on record rainfall occurred in patches across the Cape York region of Queensland.

Ongoing or emerging rainfall situations

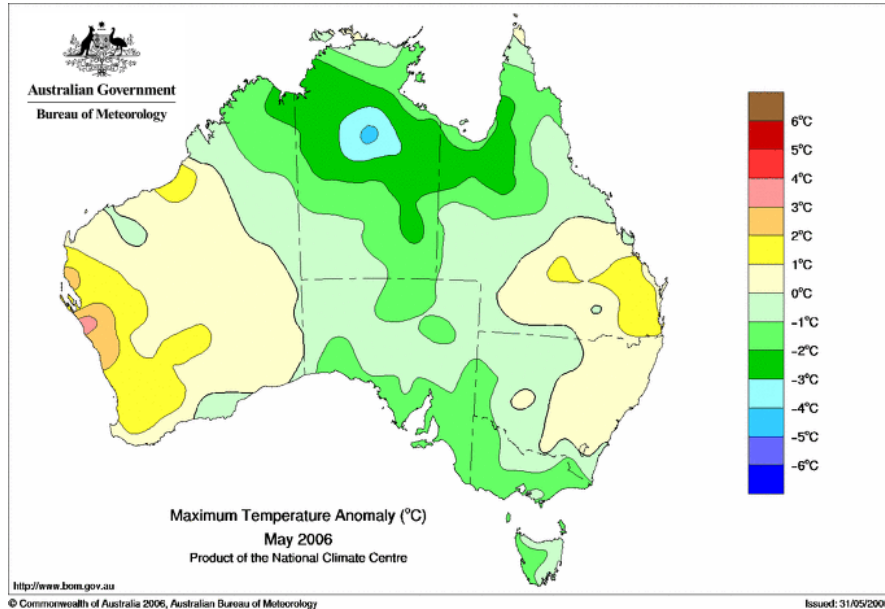
Rainfall for the last three months (March 2006 to May 2006) was above to very much above average over parts of Western Australia, most of the Northern Territory and northern Queensland. However, there were significant areas of below to very much below average rainfall in the far west of Western Australia, northern South Australia, southern Queensland and most of New South Wales.



Over the last 12 months areas of below average rainfall occurred across southwest Western Australia, 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.

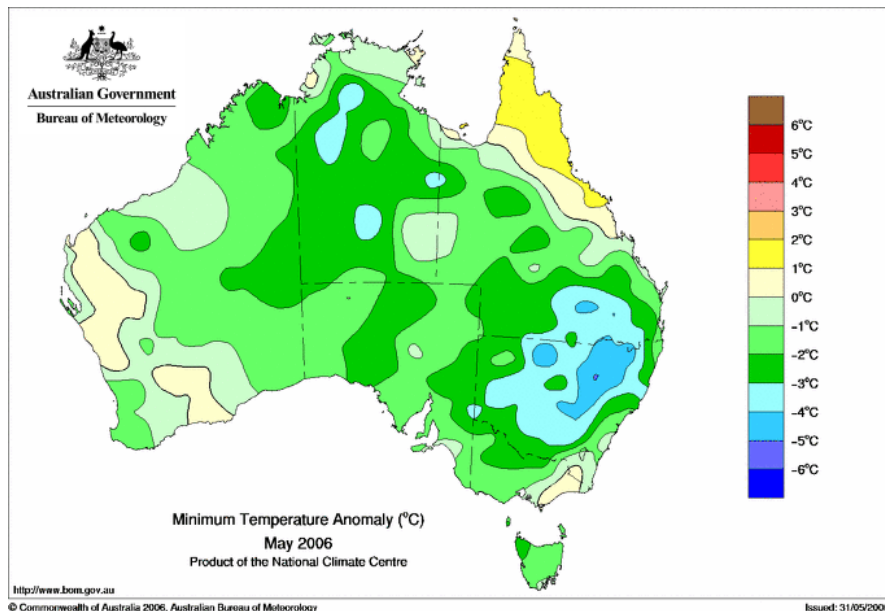
1.3 Maximum and minimum temperature anomalies

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 May 2006.

Maximum temperatures during May were below to well below the long-term average in the central parts of the continent and average to above the long-term average in most of Western Australia and the east coast of Australia.

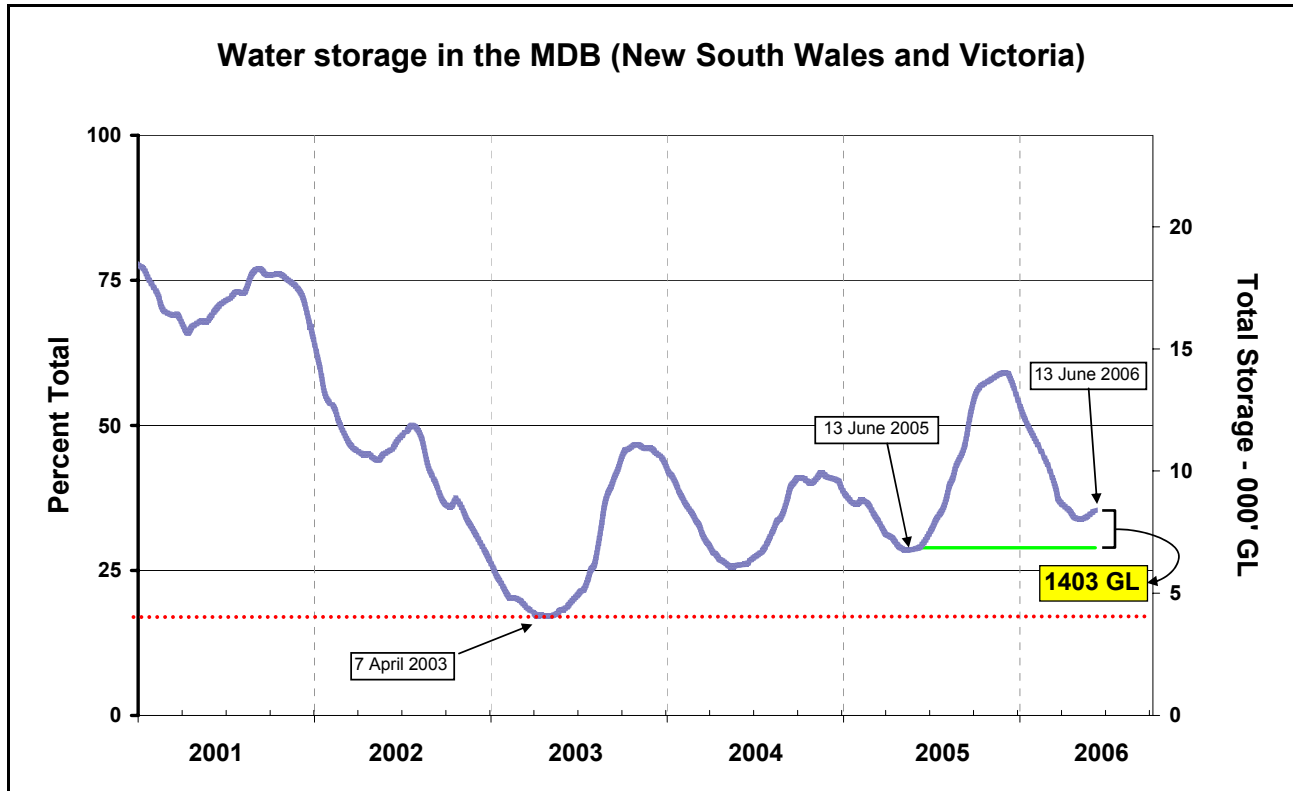


Minimum temperature anomalies for May 2006.

May minimum temperatures were below to well below the long-term average across most of Australia, with a large area of well below average minimum temperatures over New South Wales and southern Queensland.

2.0 Water storages and irrigation allocations

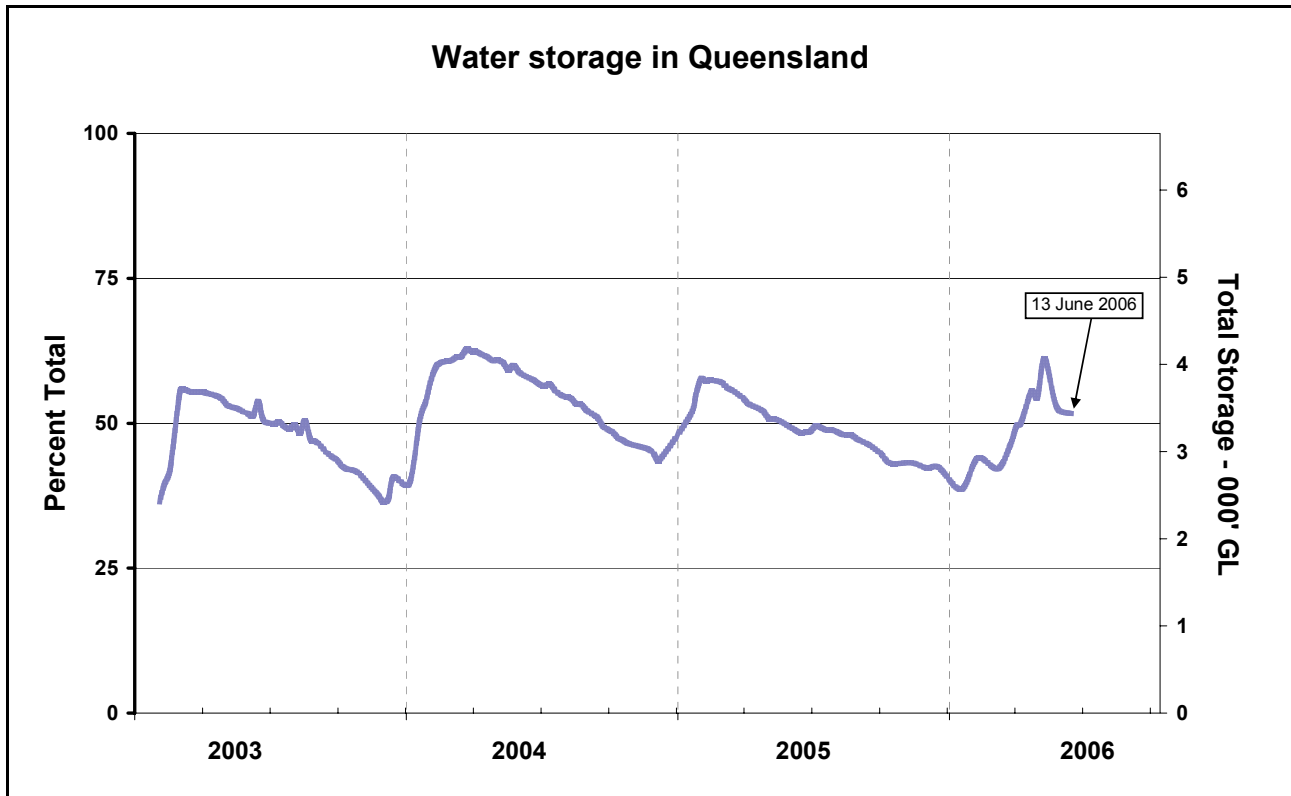
2.1 Water storages (current to 13 June 2006)



Irrigation water available in the Murray-Darling Basin from 1 January 2001 to 13 June 2006. The green line indicates the storage level at the same time last year. Source: Bureau of Rural Sciences.

Storage levels for irrigated agriculture in the Murray-Darling Basin are at 7,614 GL (total capacity of 21,492 GL), which is approximately 35.5% of total capacity and represents an increase of approximately 1.5 % of total capacity (332 GL) in the last month. Current storage levels are approximately 1,403 GL greater than at the same time last year, which is equivalent to an increase of 6.5% 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 2188 GL (38% of capacity) of water, which represents a decrease of 146 GL from April 2006.



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

The Queensland water storages experienced a sharp drop as excess water that was stored in the Burdekin Falls dam (580 GL above total dam capacity) following above average rainfalls during March and April was released. Water storage in Queensland (6965 GL total capacity) are currently at 52% capacity (3,598 GL), which represents a 9% decrease of total capacity over the last month.

2.2 Irrigation allocations for the 2005/06 season (current to 15 May 2006)

Allocation Outlook for Victorian irrigators in the 2006/07 season

- The 2005/06 irrigation season has finished and Goulburn-Murray Water has updated the outlook for allocations for the 2006/2007 season. The outlook has been adjusted with the current seasonal condition. A February 2007 allocation of 100% or better of Water Right and Licensed Volume is the likely outcome on most systems. However, like last year, there is a risk of February allocations less than 100% of Water Right and Licensed Volume on the Goulburn, Campaspe and Loddon systems.
- Initial allocations at 1 July are likely to be less than 100% of Water Right or Licensed Volume in most systems, with allocations increasing with winter/spring inflows to storages.

Water Storage and Irrigation Allocations

- In the Goulburn, Campaspe and Loddon systems, it is likely that there will be little or no water to allocate for irrigation purposes on 1 July 2006. With average winter conditions, the allocation on 15 August would be 38% for the Goulburn. The allocation on 1 July is expected to be better than 49% in the Broken and Murray systems. The allocation will reach 100% of Water Right and Licensed Volume on 15 August in the Murray and Broken systems with average winter conditions. Goulburn-Murray Water will make the first seasonal allocation announcement on 3 July 2006.

Allocation Outlook for New South Wales irrigators in the 2006/07 season

- Using all years in the analysis, there is a 9 in 10 chance that allocations for Murray Valley irrigators will reach 7% by November, 23 % by March and 30 % by June. There is a 3 in 4 chance that 27 % will be available in November, 39 % by March and 44 % by June and a 1 in 2 chance that 42 % will be available in November, 100 % by March and 100 % by June. Users should be aware that these probabilities are indicative only.

For further information on irrigation allocations, go to

Goulburn-Murray Water

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

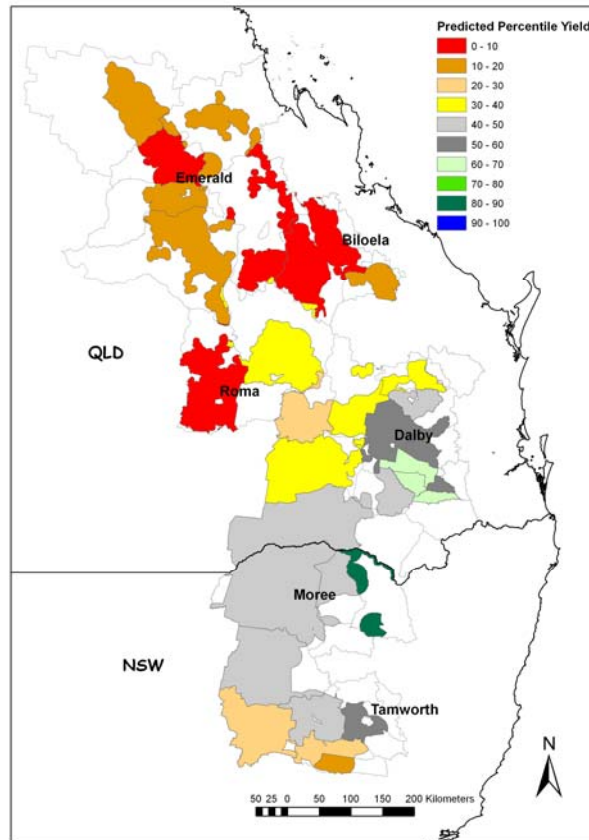
New South Wales Department of Natural Resources

http://www.naturalresources.nsw.gov.au/mediarelnr/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 <http://www2.dpi.qld.gov.au/fieldcrops/14206.html>



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 reduced expected yields.

Final predicted percentile shire sorghum yields for the 2005/06 growing season are for very low yields 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.

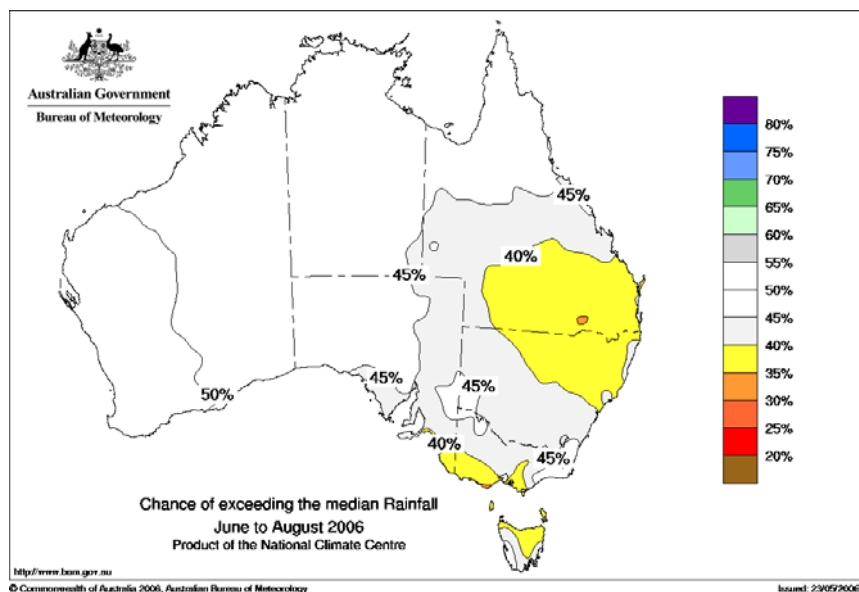
3.2 Livestock

Below average rainfall across large parts of eastern Australia over the summer and autumn period have caused deterioration in pasture conditions in the 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 June 2006 and August 2006.

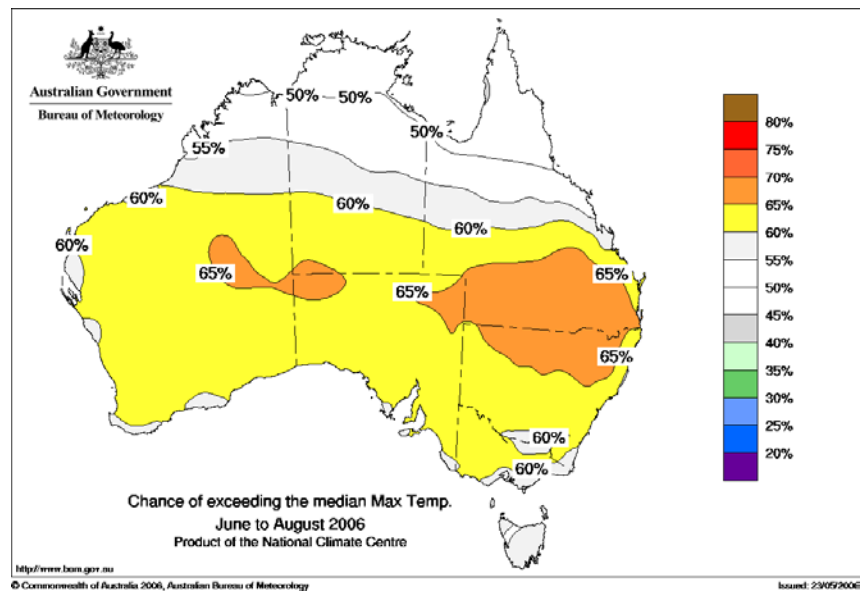
Seasonal rainfall probabilities released by the Bureau of Meteorology indicate that there is no strong tendency towards either wetter or dryer conditions across most of central and western Australia for the June 2006 to August 2006 period. However, there is a higher than average chance of receiving below average rainfall in the north east of New South Wales, the south east of Queensland and small areas in southern Victoria and northern Tasmania.

4.2 El Niño & Southern Oscillation Index

The Bureau of Meteorology is stating that the Pacific Ocean, both at and below the surface, has continued to warm through May. This has resulted in near, to very slightly above, average temperatures in the central Pacific and there is no longer any sign of the cooler than normal waters which were apparent during the first quarter of 2006. The Southern Oscillation Index (SOI) has dropped considerably to be minus 10 at the end of May. Trade Winds are also currently near normal. Enhanced cloudiness in the western equatorial Pacific has now become suppressed. However, cloudiness on and east of the dateline has remained below normal.

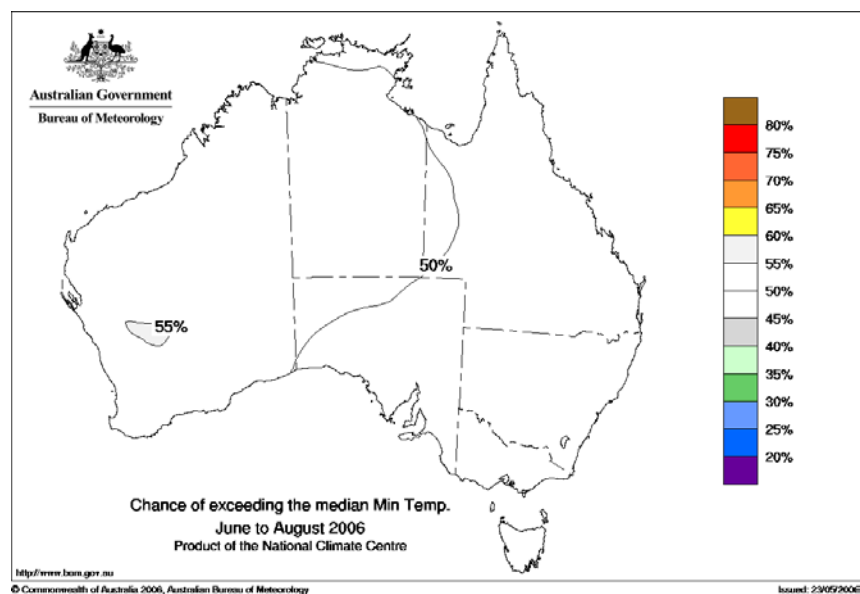
Predictions of Pacific Ocean temperatures from Australian and international computer models suggest neutral conditions will persist through the southern winter and into spring. It should be noted that March to June is the period when the ability to predict future ENSO conditions is at its lowest.

4.3 Temperature Outlook



Seasonal Outlook: the chance of exceeding median maximum daytime temperatures between June 2006 and August 2006.

For the June 2006 to August 2006 period most of central and southern Australia excluding Tasmania shows a tendency towards above average maximum temperatures. There is no strong tendency towards above or below average maximum temperatures across the northern parts of Australia, or for Tasmania.



Seasonal Outlook: the chance of exceeding median minimum daytime temperatures between June 2006 and August 2006.

There is no strong tendency towards above or below average minimum temperatures across Australia for the June 2006 to August 2006 period.

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