





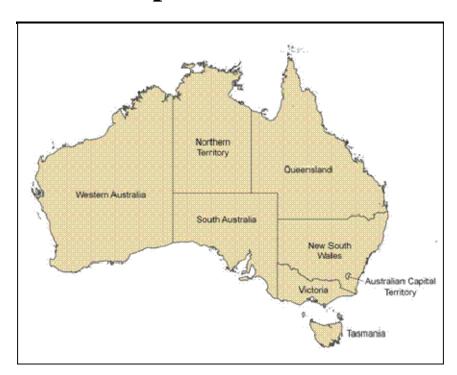


# **Climate and Agricultural Update**

# **National Report**

for the month of

# September 2006



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### **ORGANISATION**

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

## **TABLE OF CONTENTS**

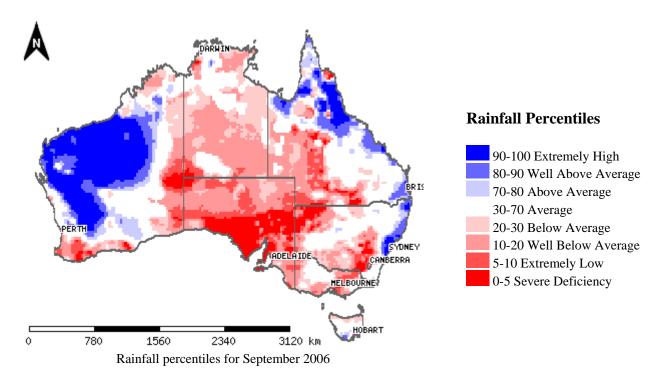
1. RAINFALL AND TEMPERATURE	5
1.1 Rainfall	5
Rainfall over the last month (September 2006)	5
Ongoing or emerging rainfall situations	6
1.2 Maximum and minimum temperature anomalies	7
2.0 WATER STORAGES AND IRRIGATION ALLOCATIONS	8
2.1 Water storages (current to 30 September 2006)	8
2.2 Irrigation allocations for the season	9
3.0 CROP AND LIVESTOCK PRODUCTION	10
3.1 Crops	10
3.2 Livestock	11
4.0 CLIMATE OUTLOOK	12
4.1 Rainfall Outlook	12
4.2 El Nino & Southern Oscillation Index	12
4.3 Temperature Outlook	13

# 1.0 Rainfall and temperature

### 1.1 Rainfall

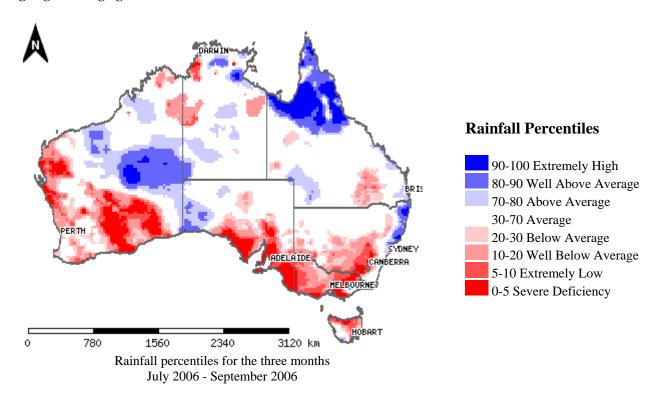
Spatial rainfall analyses are based on historical monthly rainfall data provided by the Bureau of Meteorology. For further information on rainfall data and the interpretation of percentile analyses, go to http://www.bom.gov.au/climate/austmaps/

#### Rainfall over the last month (September 2006)

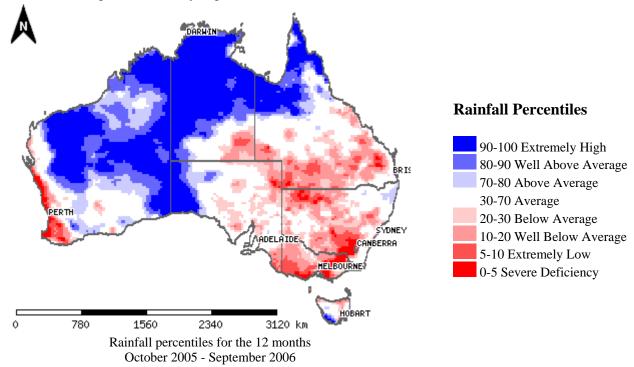


September saw continued below average rainfall across southern and central parts of the mainland, with extremely low to severe deficiencies occurring in all States and Territories except Tasmania. In contrast, well above average to extremely high rainfall occurred in northwest Western Australia and along the east coast from Sydney up to Cape York. Tasmania experienced mostly average conditions, with slightly above average falls in the south and below average falls in the north.

#### Ongoing or emerging rainfall situations



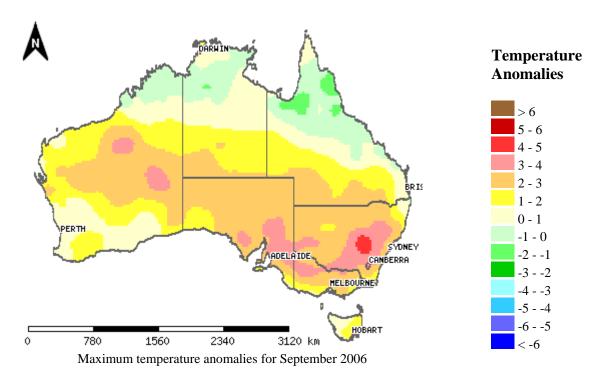
Extremely low to severe rainfall deficiencies occurred across the western parts of Western Australia, the southeast of South Australia, most of Victoria and Tasmania and parts of southern New South Wales over the last three months. The Cape York region in Queensland, central Western Australia and a small 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.



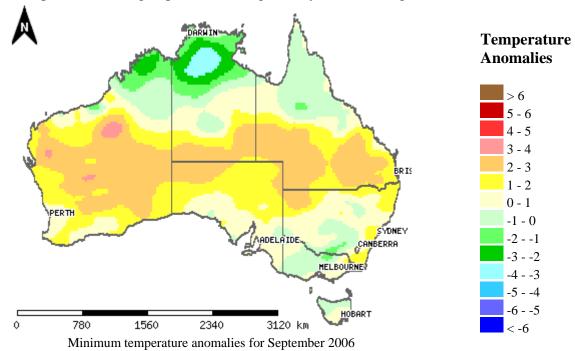
Over the last 12 months, there were significant areas of well below average rainfall across eastern Australia and southwest Western Australia. Rainfall was generally above average to extremely high across the western and northern parts of the continent.

## 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 September were above the long-term average in the southern and central parts of the continent, with well above average temperatures in central tablelands of New South Wales. Temperatures during September were generally below average across the north of Australia.

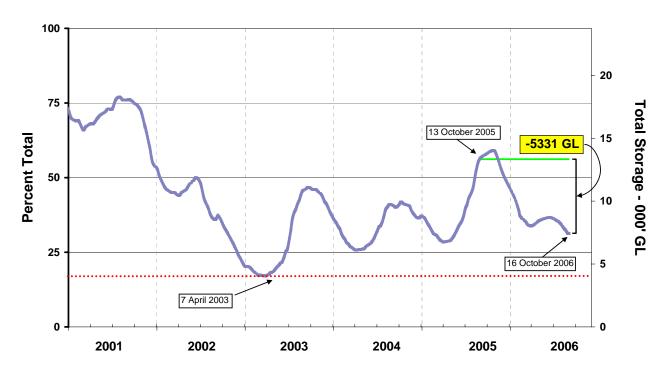


Minimum temperatures during September were generally below the long-term average across the north and south eastern parts of the continent, and generally above average across the west and central parts of the continent. Coastal parts of New South Wales also had above average temperatures for September.

# 2.0 Water storages and irrigation allocations

## 2.1 Water storages (current to 16 October 2006)

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

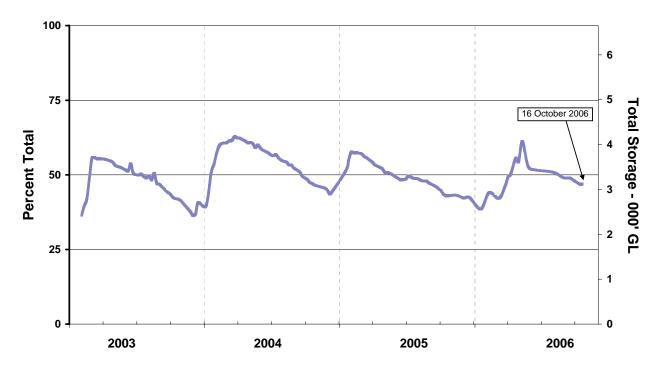


Irrigation water available in the Murray-Darling Basin from 1 January 2001 to 16 October 2006. The green line indicates the storage level at the same time last year. Source: Bureau of Rural Sciences.

There was very little recharge across the Murray Darling system over the winter and early spring periods and, as a result, storage levels are very low coming into the 2006-2007 irrigation season. Storage levels for irrigated agriculture in the Murray-Darling Basin are at 6,739 GL (total capacity of 21,492 GL), which is approximately 31.4% of total capacity and represents a decrease of approximately 3.3 % of total capacity (719 GL) in the last month. Current storage levels are approximately 5331 GL less than at the same time last year, which is equivalent to a decrease of approximately 24.8% 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 1571 GL (27% of capacity) of water, which represents a slight decrease over the last month.

#### Water storage in Queensland



Current water storage level in Queensland as of 16 October 2006. Source: Bureau of Rural Sciences

Storage levels in Queensland are at 3,000 GL (total capacity of 6,965 GL), which is approximately 47% of total capacity and represents a decrease of approximately 2.1 % of total capacity (148 GL) in the last month. Current storage levels are approximately 263 GL greater than at the same time last year, which is equivalent to an increase of 3.8% of total capacity.

## 2.2 Irrigation allocations for the 2005/06 season

#### Allocation Outlook for Victorian irrigators in the 2006/07 season (current to 2 October 2006)

- The allocation for the Goulburn System has increased by 2% to 23% of Water Right and Licensed Volume. Pumping of Waranga Basin to support the allocation will occur with the financial support of the Victorian State Government. The 1 April 2007 closure of the irrigation season remains, but will be reviewed prior to the next Goulburn system allocation. Insufficient resources are available to provide an allocation for irrigation entitlements in the Campaspe and Loddon systems. Very wet conditions and high rates of inflow will be needed to provide any allocation in these systems this season. In the Murray system allocations have increased by 2% to 93% of Water Rights and in the Broken system the allocations have increased by 15% to 60%.
- According to Goulburn-Murray Water the chances of announcing a 100% allocation in February 2007 are: less than a 1 in 10 for Goulburn, 2 in 10 for Broken and 8 in 10 for the Murray.
- The next allocation announcement is scheduled for Wednesday 1 November 2006.

#### Allocation Outlook for New South Wales irrigators in the 2006/07 season (current to 5 October 2006)

- The allocation for NSW general security water users in the Murray and Lower Darling valleys for the 2006-2007 season remains at 0%. There is currently speculation regarding the ability to deliver announced high security allocations. Recent inflows have been significantly below the previous minimum inflow sequence and there is currently a shortfall in the volume available to NSW to meet the High Security allocation of 97% and the General Security water carried over from last year. These current shortfalls would normally be covered by inflows above minimum in any month, however, inflows have also been below the worst previously recorded for each of the past four months. If these conditions continue there may be the need to impose restrictions on the use of this water.
- General water allocations for the Murrumbidgee Valley for the 2006-2007 season would remain at 18 % for the full season with 15% being available by the end of February.

For further information on irrigation allocations, go to:

Goulburn-Murray Water

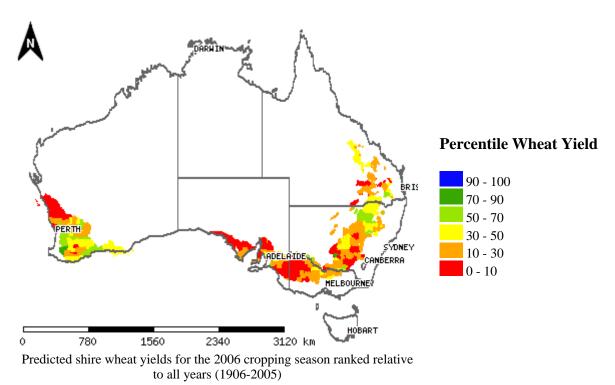
http://www.g-mwater.com.au/news.asp?ContainerID=media\_releases

New South Wales Department of Natural Resources http://www.naturalresources.nsw.gov.au/mediarelnr/mr\_toc\_currnr.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/.



 Current predictions for shire level wheat yields for the 2006 growing season are in the lower third of historical yields reflecting the continuation of dry conditions during the current winter cropping season. Wheat yields in the central west and southern New South Wales, the central wheat belt of Queensland, the central west of Victoria and the eastern wheat belt of Western Australia are predicted to be below average. The northern wheat belt of Western Australia, much of South Australia, the mallee regions of Victoria, and isolated areas in central and southern New South Wales and Queensland are predicted to be in the lowest 10% of historic yields. Average yields are predicted for the southern wheat belt of Western Australia 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

- Continuing below average rainfall across large parts of eastern and southern Australia over the autumn and winter period has resulted in low potential for pasture growth throughout spring.
- In the first week of October, New South Wales saleyards saw a halt in the slide of prices and a reduction in numbers of cattle (largely influenced by the public holiday on Monday), although this varied with individual selling centres. The particular exception was Dubbo saleyards which saw an increase in numbers due to the dire state of the area. South Australia has seen large numbers yarded despite the Monday holiday, due to the severe deficiencies in rainfall in the region. In fact, the second week of October has seen national numbers at Meat and Livestock Australia's (MLA) National Livestock Reporting Service (NLRS) reported stockyards double compared to the previous week. NSW and South Australia were four times larger, Victoria saw 33% more, while Oueensland, Western Australia and Tasmania saw similar numbers to the previous week. In the first week of October, Queensland has seen a steady supply in the saleyards, however the condition of animals coming in continues to deteriorate with each week. During the first week of October in Victoria, MLA's NLRS markets saw an increase of 35% in the saleyard throughput from the previous week (partially influenced by the New South Wales saleyards being closed on the Monday holiday), the major influence was lack of water in some areas and the failing season. Western Australia seasonal conditions remain mixed, saleyards saw reduced numbers in the first week of October and many cattle were sent in unfinished. The value of beef and veal exports for the September period this year were 22% above September 2005 values.
- Nationally, MLA's NLRS reported saleyards saw a jump of 18% in lamb in the first week of October, even though there were no sales in New South Wales and South Australia on Monday. Previously, 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. However, from August to September, there was a 46% slaughter jump in Eastern states. Lamb winter slaughter levels for 2006 have generally been high due to the poor season. September saw the highest numbers for the year to date, levels not seen since November 2004. Lamb export values for September this year have increased by 7% from September last year. Australian mutton export value for the eight months to August this year saw an increase of 8% from the same period last year.

For further information go to:

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/

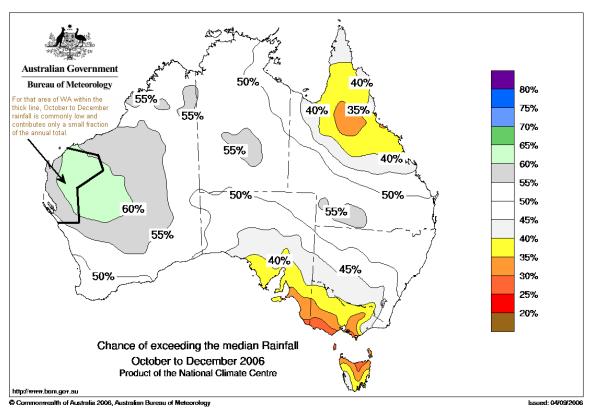
New South Wales Department of Primary Industries http://www.agric.nsw.gov.au/reader/nsw-grains-report-sept-2005

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 <a href="http://www.bom.gov.au/climate/ahead/rain">http://www.bom.gov.au/climate/ahead/rain</a> ahead.shtml



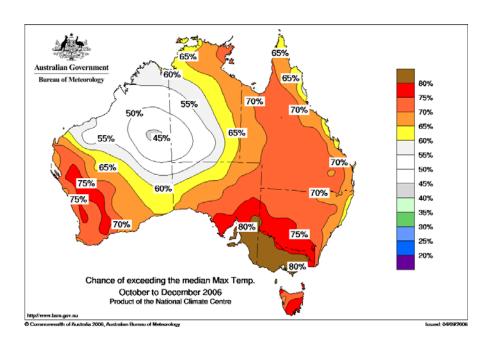
The chance of exceeding median rainfall between 01 October 2006 and 31 December 2006

Seasonal rainfall probabilities released by the Bureau of Meteorology indicate there is a moderate shift in the odds towards drier than normal conditions for the December quarter (October-December) in parts of southeast and northeast Australia. In contrast, parts of Australia's northwest face the prospect of increased seasonal falls. There is no strong trend towards wetter or dryer conditions across the rest of the country over the next three months.

## 4.2 El Nino & Southern Oscillation Index

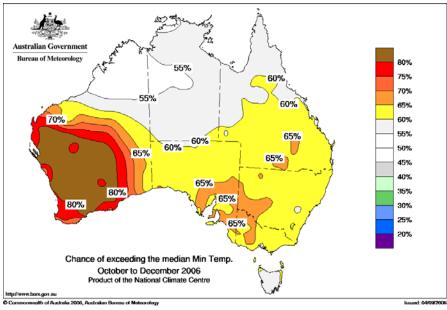
- Key ENSO indicators for beginning of October show the continuation of El Niño conditions. These indicators include sustained negative values of the Southern Oscillation Index (SOI), Pacific seasurface temperatures (SSTs) above El Niño thresholds, weaker than average Trade Winds since July and increased cloudiness in the central to west Pacific. This pattern will qualify as an El Niño event if these key indicators consistently remain at their present levels until the end of December.
- The observed below average rainfall starting in late autumn in the southern half of Australia, particularly in the southeast and southwest are consistent with early stages of an El Niño event.

## 4.3 Temperature Outlook



The chance of exceeding median maximum daytime temperatures between 01 October 2006 and 31 December 2006

For the October to December 2006 period there is a strong chance that maximum temperatures will be above average over large parts of northern, southwest and southeastern Australia. There is a greater than 80% chance of maximum temperatures exceeding the median across most of Victoria, southeast South Australia and parts of southern New South Wales.



The chance of exceeding median minimum daytime temperatures between 01 October 2006 and 31 December 2006

For the October to December 2006 period the chance of seasonal minimum temperatures being higher than the median are generally above 55% over nearly the whole country, reaching around 80% across much of southwest WA.

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