



Climate and Agricultural Update

National Report

Issued June 2007



Copyright

Copyright Commonwealth of Australia (Bureau of Rural Sciences) 2007

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

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
Department of Primary Industries, New South Wales	www.dpi.nsw.gov.au
Snowy Hydro Limited	www.snowyhydro.com.au
Australian Bureau of Agricultural and Resource Economics (ABARE)	www.abare.gov.au
Department of Agriculture and Food, Western Australia Pepartment of Agriculture and Food Government of Western Australia	www.agric.wa.gov.au
Goulburn Murray Water GOULBURN-MURRAY 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	www.dipnr.nsw.gov.au
Meat and Livestock Australia	www.mla.com.au



TABLE OF CONTENTS

1.0 RAINFALL AND TEMPERATURE	5
1.1 RAINFALL	5
1.2 MAXIMUM AND MINIMUM TEMPERATURE ANOMALIES	7
2.0 WATER STORAGES AND IRRIGATION ALLOCATIONS	8
2.1 WATER STORAGES (CURRENT TO 21 JUNE 2007)	8
2.2 IRRIGATION ALLOCATIONS	9
3.0 CROP AND LIVESTOCK PRODUCTION	11
3.1 CROPS	11
3.2 Livestock	12
4.0 CLIMATE OUTLOOK	14
4.1 RAINFALL OUTLOOK	14
4.2 EL NINO & SOUTHERN OSCILLATION INDEX	15
4.3 TEMPERATURE OUTLOOK	15



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/





May rainfall was below average in much of Queensland and Western Australia but close to or above average through most of the rest of the country. This marks another dry start to the growing season in south-western Australia after the extremely dry conditions of 2006, with some areas in the lowest decile, whilst the most severely drought-affected areas in south-east Queensland remained very dry. In contrast, Tasmania had its wettest month since August 2005, and good fall were also recorded through northern and western Victoria and much of western New South Wales. The north-west of New South Wales was particularly wet with record highs locally in the far north-west around Tibooburra. It was also wetter than normal through large parts of the northern tropics, although in general this reflected light falls in seasonally dry areas, with only a few areas exceeding 50 mm.





Rainfall in the past three months has been above average to well above average over a belt extending across northern half of and in most of the NT, through most of SA and extending into north-western Victoria and the far west of New South Wales. In contrast most of south-eastern Queensland, the south-west Western Australia, the southern coast of Victoria and well below average to extremely low rainfall. The remainder of the continent received mostly average rainfall.



Average to above average rainfall during May in NSW, Victoria and Tasmania eased the intensity and extent of 12-month rainfall deficits in comparison with the situation at the end of April, but severe deficiencies still remain. In contrast, below average rainfall in WA saw little or no improvement in that State.For the 12-month period from June 2006 to May 2007, there were serious to severe rainfall deficiencies over southern and eastern Australia in an arc extending across south-eastern South Australia, much of southern and eastern Victoria, and south-eastern NSW. A large part of southeast Queensland was also affected, as were northern and eastern Tasmania and west of Western Australia. In contrast, much of northern and central Australia and inland Western Australia have recorded above average to extremely high rainfall conditions at a 12 month time scale.



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/



Maxima over Australia were 1.81°C above normal (equal 3rd highest on record), with records set over all four eastern states. Conditions were particularly extreme in Queensland, where records were set in most areas except the far north, and in Tasmania, where they were set almost statewide. Records were also set in southern Victoria and north-eastern New South Wales. Anomalies exceeded +2°C over most of this area, and were +3 to +4°C over most of inland Queensland, and around Alice Springs. A heatwave in the tropics early in the month saw new state records for May set in Queensland (39.3°C at Julia Creek) and the Northern Territory (38.6°C at Timber Creek and Daly Waters). The only areas with below-average maxima for May were the south-west of Western Australia and around Cooktown in Queensland.



Minimum temperatures over Australia were 1.59°C above normal (3rd highest on record), with state records set in Victoria and Tasmania. They were below average only in the southern half of Western Australia (locally –2°C around Warburton) and on the mid-north coast of New South Wales. Anomalies exceeded +2°C over most of Victoria and Tasmania, much of inland New South Wales and Queensland, the Northern Territory outside Arnhem Land, and the Kimberley, and reached +3°C over parts of western Queensland and the eastern Northern Territory, as well as around Albury. Record values occurred in most of Tasmania, parts of western Queensland, south-western and north-eastern Victoria, and south-eastern South Australia. The lack of autumn frosts was particularly notable, with Canberra failing to record a night below 0°C by 1 June for the first time ever.



2.0 Water storages and irrigation allocations

2.1 Water storages (current to 21 June 2007)



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

Irrigation water available in the Murray-Darling Basin from 1 January 2001 to 21 June 2007. The green line indicates the storage level at the same time last year. Source: Bureau of Rural Sciences.

Over the past month the storage levels within the Murray-Darling Basin have been increasing.

At 21st June 2007 storage levels for irrigated agriculture were at 3,268 GL (13.67% of total capacity - 23,908 GL), an increase of 437 GL (1.8% of total capacity) over the month. Allocations and storage levels are at record low positions for this time of the season due to poor rainfall and inflows last year.

Current storage levels are approximately 4,932 GL less than at the same time last year (a decrease of 20.6% of total capacity).

The Murray-Darling Basin storage levels above do not include the capacities of Lake Eucumbene, Tantangara Reservoir and Lake Jindabyne which are reserved for hydro-electricity generation and irrigation purposes. Current storage levels are 933 GL (16% of total capacity - 5,744 GL).



Water storage in Queensland



Current water storage level in Queensland as of 21 June 2007. Source: Bureau of Rural Sciences

May 2007 storage levels in Queensland decreased by 3.5 GL to 3,320 GL (47.7% of total capacity - 6,965 GL); this storage level is approximately 278 GL lower than at the same time last year (a decrease of 4% of total capacity).

2.2 Irrigation allocations

Murray-Darling Basin

- During the past week, heavy rain once again fell along the Central and South Coasts of NSW and West Gippsland of Victoria, rain also extended into the Murray-Darling Basin but at lower intensities. These rains have had negligible effect on inflows to the River Murray System. Flow at Hinnomunjie Bridge in the upper Mitta Mitta catchment has now dropped to about 700 ML/day after reaching a peak of 3 600 ML/day due to rain in late May. Likewise, flow in the Ovens River at Wangaratta has now fallen to about 850 ML/day after reaching a peak of 6 000 ML/day in early June. Flow in the Kiewa River has been fluctuating between 1 000 and 2 200 ML/day, partly due to increased release for hydroelectric power generation.
- Current releases from Dartmouth Reservoir are being maintained at the normal minimum rate of 200 ML/day and storage has increased from 492 GL to 498 GL (12.8% capacity). Release from Hume Reservoir has been reduced from 600 to 400 ML/day as part of the drought contingency planning. Hume storage volume has increased from 290 GL to 333 GL (10.9% capacity), the bulk of which came from the Snowy Mountains Scheme.
- Although rainfall across the upper River Murray has continued at about average rates, a number of catchments remained extremely dry in April inflow for the month set a new April low of 40 GL. River Murray inflow was 103 GL during May, which is 34 GL less than inflows recorded for May last year (137 GL). The record low for May was 75 GL in 1902. The start of June has seen catchments 'wetting up', with flow rates in upper Mitta Mitta and Ovens Rivers the highest seen since December 2005.
- The end of May 2007 Murray system active storage volume was 740 GL compared to the 'worst case' projection of 490 GL in the last Drought Update in April, this level is some 380 GL below the previous lowest level of 1120 GL post-Dartmouth construction in 1983. The increase in storage was due to the use of special arrangements by Snowy Hydro Ltd under which some water due to be released to the Murray in 2007/08 has been delivered early, lower evaporation and transmission losses due to the rain of recent months and reduced usage of allocated water by irrigators.
- Partner Governments are finalising arrangements which will allow small amounts of water to be made available to the States at the opening of the 2007/08 irrigation season. It is expected that the initial volumes will be very small and further information will be provided by the relevant State authorities over coming weeks.
- The Bureau of Meteorology is reporting an elevated chance of a La Niña event occurring in 2007.
- Despite these welcome signs, significant persistent rainfall will be needed over coming months to improve the outlook for water availability and for the environment of the River Murray. It is estimated that streamflows would need to be in



the wettest 15% of records for Hume Reservoir to spill this winter/spring. It is likely that, even with good falls of rain this year, it could take several years for storage levels to return to long-term average levels.

Outlook for Victorian irrigators in the 2007/08 season

- The prolonged drought has severely depleted water resources across northern Victoria. Most reservoirs have fallen to record low levels following the failure of winter and spring inflows in 2006.
- Inflows this winter and spring remain critical to the availability of irrigation water for northern Victoria's farmers. Recent rainfall has improved soil moisture levels, but has failed to significantly boost storage levels. Sustained heavy rainfall is needed to provide an irrigation allocation by 2 July 2007.
- Goulburn-Murray Water and the Victorian Government are making detailed plans for a range of emergency measures to manage water supplies in these unprecedented dry conditions. The highest priority is to manage available water supplies to meet essential human needs.
- Goulburn-Murray Water has retained water in channels following the end of the 2006/07 gravity irrigation season to help customers with their immediate essential needs. If extremely dry conditions continue, not enough water will be available to refill the whole channel network for the 2007/08 season. Access to water will vary across the network, and G-MW will look at local conditions to determine the fairest options for sharing the limited resource between users.
- Over the next few months Goulburn-Murray Water and the Government will also consult with irrigation industry representatives to work out the most appropriate balance between the start date and length of the 2007/08 season and the allocation for customers. Rainfall and inflows will be critical to this decision.
- The Victorian Government introduced carryover as a once-off drought response in March so irrigators would have an option to meet any early season watering requirements. If delivery is not possible, the carried over water will remain in an allocation account. It can be traded to other areas or kept until delivery can be made during the 2007/08 season.
- A repeat of the record dry conditions experienced in 2006/07 will not provide any water for irrigation in any Goulburn-Murray Water system at the start of the season on 2 July 2007. Under dry conditions (inflows exceeded 9 times in 10) the 15 August allocation would remain at zero in all systems (See table below).
- The August to October period usually provides the majority of annual inflows, and helps water allocations improve rapidly. The increased availability of water is important for the continued growth of established crops and pasture. The Murray system is not expected to have an allocation by 15 October if dry conditions persist (See table below). The allocation may reach 32% of high-reliability water shares under average inflows (ie inflows experienced 5 times in 10), and could be 100% with wet conditions (inflows occurring 1 time in 10).
- Dry conditions would not give enough water for an allocation in the Goulburn system by 15 October (see table below). Average inflows could provide a 73% allocation, and an allocation of 100% may be possible under wet conditions.
- Campaspe system customers will also not have an allocation by 15 October if conditions remain dry, but could receive a 100% allocation under average inflows and an allocation of low-reliability water shares if high inflows are received with very wet weather.

Summary of Seasonal Allocation Outlook

Murray System

Conditions	1 Jul 2007	15 Aug 2007	15 Oct 2007	15 Dec 2007	15 Feb 2008
Wet (1 chance in 10)	50%	100%	100%	100%	100%
Average (5 chances in 10)	0%	0%	32%	82%	100%
Dry (9 chances in 10)	0%	0%	0%	18%	29%

Goulburn System (includes pumping of Waranga Basin)

Conditions	1 Jul 2007	15 Aug 2007	15 Oct 2007	15 Dec 2007	15 Feb 2008
Wet (1 chance in 10)	0%	80%	100%	100%	100%
Average (5 chances in 10)	0%	14%	73%	100%	100%
Dry (9 chances in 10)	0%	0%	0%	22%	25%

Campaspe System

Conditions	1 Jul 2007	15 Aug 2007	15 Oct 2007	15 Dec 2007	15 Feb 2008
Wet (1 chance in 10)	58%	135%	100%	100%	100%
Average (5 chances in 10)	0%	46%	100%	100%	100%
Dry (9 chances in 10)	0%	0%	0%	0%	4%

NOTE: Low-reliability water shares will be available in the Campaspe system under very wet conditions.

For further information on water storage levels and irrigation allocations, go to:

Murray-Darling Basin Commission http://www.mdbc.gov.au/

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



3.1 Crops

Winter cropping

- ABARE has reported in the June edition of the Australian crop report that the majority of cropping areas in southern Western Australia, South Australia, New South Wales and Victoria received average to above average rainfall in late April early May, providing an excellent start to the 2007-08 winter cropping season. Rainfall in Queensland in early June has improved prospects for central and south east Queensland. However, the lack of subsoil moisture in most areas means that follow-up rainfall will be critical. Continued dry conditions throughout parts of the central and northern cropping zone of Western Australia mean that winter crop prospects for that state are below average at this stage.
- The total area sown to winter crops in Australia is forecast to increase by 10 per cent to just over 20 million hectares in 2007-08. Assuming average yields, winter crop production is forecast to reach around 37 million tonnes in 2007-08, a 21 million tonne increase from the drought affected 2006-07 crop. Of the major winter crops, the area planted to wheat is forecast to rise by 11 percent to 12.4 million hectares. Assuming a return to average yields, total wheat production in 2007-08 is forecast to be around 22.5 million tonnes, more than double production in 2006-07. Barley and canola area are also forecast to increase, by around 10 percent and 7 per cent respectively. Barley production is forecast to increase to over 9 million tonnes, and canola production to around 1.4 million tonnes, almost triple the amount of canola produced in the previous season.
- The NSW Department of Primary Industries is predicting a surge towards winter cereal crops this season, rather than the alternatives such as canola, faba beans and lupins. Winter cereals are considered low risk, low cost crops that provide more options, such as grazing and cutting for hay, when only low, or below average, rainfall is realised.
- Winter crop estimates in NSW are for 4.72 M ha, which is similar to recent years. Recent widespread rainfall is consolidating this planting estimate. About 53% of the estimated 210,000 ha of canola has been sown, with the remaining area now assured with recent rain. An estimated 14% of the 2.82 M ha wheat crop has been sown, mostly to dual-purpose wheats for much needed feed. Early sown grazing cereals, sown in February/March are providing useful feed in favoured eastern districts, whilst the early May sown crops have responded to the unseasonably warm temperatures.
- Soaking rain in April and early May has given Victorian Wimmera-Mallee farmers ideal conditions to start sowing winter crops. The Victorian Department of Primary Industries (DPI) says the rain has given the Wimmera its best autumn break in years and put Mallee farms on track for average yields. Follow-up rains will, however, be critical.
- The SA Department of Primary Industries (PIRSA) reports total crop area is estimated to be 3.95 million hectares, making it the largest area of crop on record for South Australia. The increased crop area is mainly due to an increase in the area of barley and to a lesser extent wheat and oats, with the areas of other crops being generally similar to last year. Crop production is currently estimated to be 6.68 million tonnes, which is well above the five year average and reflects both the increased area of crop and the above average yield potential from the excellent start to the season.
- The Department of Agriculture and Food WA reports that below average rainfall over most of the Agricultural area has not consolidated a season break despite April rains. The Northern agricultural region still awaits effective rain with a reduced crop area likely as the break of the season gets later. Preliminary estimates suggest a total crop area of 6 million hectares with a harvest of around 11 million tonnes. These estimates reflect the late season break and the soil moisture availability at June 2007.

Summer cropping

- The June edition of ABAREs' Australian crop report states that severe ongoing drought conditions experienced throughout the major cropping areas of Australia, particularly since August 2006, have resulted in significant depletions of soil moisture profiles and have led to some of the lowest water storage levels on record. As a result the total summer crop area is estimated to have declined by around 53 per cent in 2006-07, to 743 000 hectares.
- Total summer crop production in 2006-07 is estimated to have fallen by around 57 percent to around 1.9 million tonnes. Continued drought conditions over summer from last winter-spring in southern Queensland, northern New South Wales and the Riverina resulted in depleted soil moisture profiles and water storages, severely limiting summer crop plantings.
- ABARE has reported a significant reduction in summer crop production for the 2006-07 season, grain sorghum production is estimated to have fallen by 52 per cent to around 950 000 tonnes. Both cotton seed and cotton lint production are estimated to have fallen by 54 per cent, to 388 000 tonnes of cottonseed and 274 000 tonnes of lint. Rice production is estimated to have dropped by 83 per cent to 167 000 tonnes, reflecting the significant decline in water availability.



• Predicted sorghum yields are provided by the Queensland 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.agric.wa.gov.au/.



Predicted shire sorghum yields for the 2007 cropping season ranked relative to all years (1906-2006)

• End of season predictions for shire level sorghum yields for the 2006/2007 growing season are generally below average to extremely low in the sorghum growing region of New South Wales and Queensland, and vary from high average to above average over the northern sorghum growing region of Queensland. Grain sorghum production in NSW is forecast at 425,620 tonnes from an estimated 135,845 ha.

The next ABARE Crop Report is expected to be released on 18 September 2007

3.2 Livestock

- The March quarter edition of Australian Commodities, released by the Australian Bureau of Agricultural and Resource Economics (ABARE), reported that the weighted average saleyard indicator price of beef cattle is forecast to increase by 10% in 2007-08.
- ABARE has also reported that the Australian saleyard lamb and sheep prices are projected to increase in 2007-08, reflecting reduced supplies and the impact of the drought. ABARE forecasts Australian saleyard lamb prices to increase by around 14% in 2007-08, whilst sheep yard prices are forecast to increase by around 15%.
- According to MLA, Australian beef exports during May increased 3% on May 2006, to 89,112 tonnes swt (Department
 of Agriculture, Fisheries and Forestry). Shipments during the first five months of 2007 also increased, jumping 8% on
 last year, to 389,279 tonnes swt, despite the rapid appreciation of the A\$ since the beginning of the year. Higher beef
 exports in May were mainly a result of rising beef supplies during April, following increased cattle turn-off due to
 ongoing drought conditions.
- Eastern states' cattle slaughter during May 2007 was 3% down on the same period last year, and 6% lower than the five year average. Following on from the public holidays in April, both Queensland and NSW cattle slaughter increased significantly, up 12% and 20%, respectively. They were relatively unchanged compared with last year and the five year average for May. On the other hand, SA cattle slaughter was steady on last year, but 19% down on the five year average.
- Australian mutton production for the first quarter of the year totalled 77,931 tonnes cwt, an increase of 12% on the same time last year (Australian Bureau of Statistics). The rise for the quarter was primarily due to increased slaughter levels and turnoff rates across all states, as drought conditions persisted.
- Australian mutton exports during May dropped 13% on the same period last year, to 11,149 tonnes swt (DAFF). The decline in shipments for the month can largely be attributed to continued reductions in demand from the US, Japan and Russia. However, demand for Australian mutton remained strong in the Middle East.



- May has seen further indications that the supply of sheep is tightening, with the eastern states sheep slaughter for the month falling 3% on April. During April, eastern states' slaughter started showing the first signs of tightening, with numbers back 14% on the five year average for the month. Slaughter during May was down 22% on the same period last year. NSW and Victoria incurred the biggest drop in slaughter, with sheep numbers falling 5% and 11% on April, and 31% and 7% respectively, on May 2006. While Queensland and SA slaughter numbers have fallen throughout the year, levels during May actually increased, 9% and 8%, respectively, on April. At physical markets, demand continues to be very strong for mutton. This resulted in the national indicator finishing Thursday at 213¢, 20¢ higher than last week, and 32¢ kg cwt above this time last year.
- According to MLA, typically, late autumn is the time of the year when lamb supply starts to tighten, with slaughter declining. Lamb slaughter during May finally started to show some signs of slowing, with the eastern states' slaughter for May only 4% above April 2007, and 4% below the five year average for May. On a state basis, lamb slaughter in NSW during May lifted 7% compared with April, with numbers in both SA and Victoria also up 4% and 3%, respectively. Producers have continued to offload lambs, with feed and water shortages continuing across many areas, while increased prices have created an incentive to sell. Compared with May 2006, both NSW and SA lamb slaughter are still down 16% and 8%, respectively. In contrast, Victoria lamb slaughter during May was up 3% on the same period last year.

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/

Department of Primary Industries and Resources http://www.pir.sa.gov.au/dhtml/ss/section.php?sectID=566&tempID=15



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 June 2007 and 31 August 2007

The national outlook for total winter rainfall (June to August), shows no strong swings in the odds towards either abovenormal or below-normal rainfall. Over Australia the chances of accumulating at least average rain for winter are relatively close to 50%. The chances of exceeding the median rainfall for the June to August period are between 40 and 45% in a band stretching from the NT across the centre and south of the continent to Tasmania (see map). In other parts, the chances are between 45 and 55%.



4.2 El Nino & Southern Oscillation Index

The Bureau of Meteorology reports that although computer models show a La Niña event is likely in 2007, there has been little further development during the past month. Current conditions in the equatorial Pacific remain neutral.

Although conditions in the equatorial Pacific have remained neutral the precursors for the development of a La Niña event are still evident. The most important of these precursors is the presence of cooler than normal conditions in the Pacific Ocean subsurface - a situation that has persisted since mid-January - which have led to cooler than average surface waters in the eastern Pacific, despite some warming during the past fortnight. In addition, subsurface waters are much warmer than in April or May, although they're still cooler than average. This recent warming trend in ocean temperatures appears to have, at least temporarily, stalled the development of a La Niña event.

There is no apparent trend as yet in the amount of convection (high cloud) near the date-line, but the 30-day average SOI has risen to small positive values. Furthermore, the Trade Winds have become close-to or stronger than average in the western to central Pacific. A switch to consistently reduced convection, stronger positive SOI values and stronger than average Trade Winds would be favourable indications for La Niña development.

The fact that all major international coupled models show further cooling of the equatorial Pacific Ocean over the coming months, suggests that there is an elevated chance of a La Niña event occurring in 2007. Conversely, this suggests that the El Niño risk is very low. Historically, La Niña events bring wetter than normal conditions across much of the eastern half of Australia during the second half of the year. Furthermore, the years following El Niño usually bring average to above average rainfall to eastern and southern Australia.

CURRENT STATUS as at 13th June 2007

Next update expected by 27th June 2007 (two weeks after this update).

4.3 Temperature Outlook



The chance of exceeding median maximum daytime temperatures between 01 June 2007 and 31 August 2007

Averaged over June to August, the chances are mainly between 60 and 70% for above-normal maximum temperatures in Queensland, the NT, WA and western SA (see map). In western WA, the chances reach a little over 75%. Over the south-eastern states and the rest of SA, the chances for a warmer than average winter are between 50 and 60%.





The chance of exceeding median minimum daytime temperatures between 01 June 2007 and 31 August 2007

Average winter minimum temperatures are favoured to be warmer than normal across largely the same areas as the maxima, with the addition of the northern half of New South Wales (see map). The chances of increased overnight warmth (averaged over winter) in these areas are generally between 60 and 70%, with 70-75% probabilities in southern Queensland and western WA. In remaining areas the probabilities are in the neutral 45 to 60% range.

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

