NAMS
NATIONAL AGRICULTURAL MONITORING SYSTEM

Climate and Agricultural Update

National Report

Issued August 2007

Copyright

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	www.bom.gov.au
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	www.agric.wa.gov.au
Goulburn Murray Water	www.g-mwater.com.au
Queensland Department of Primary Industries and Fisheries	www.dpi.qld.gov.au
New South Wales Department of Natural Resources	www.dnr.nsw.gov.au
Meat and Livestock Australia	www.mla.com.au

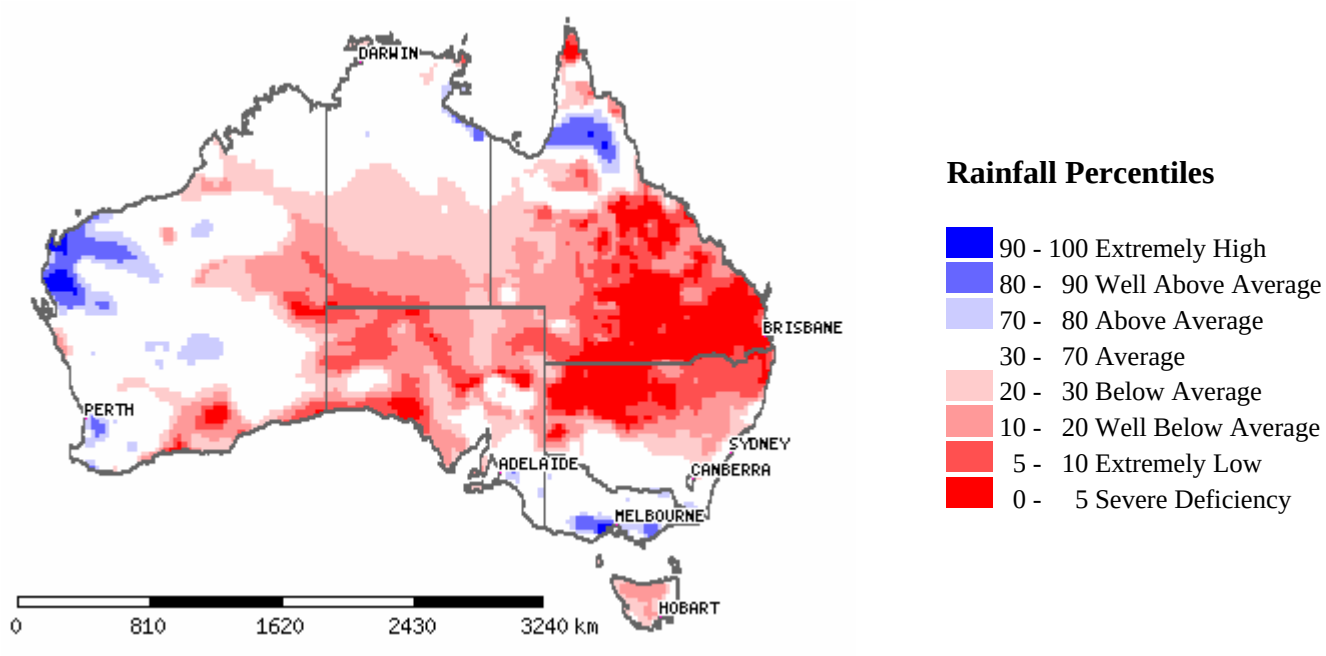
TABLE OF CONTENTS

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/

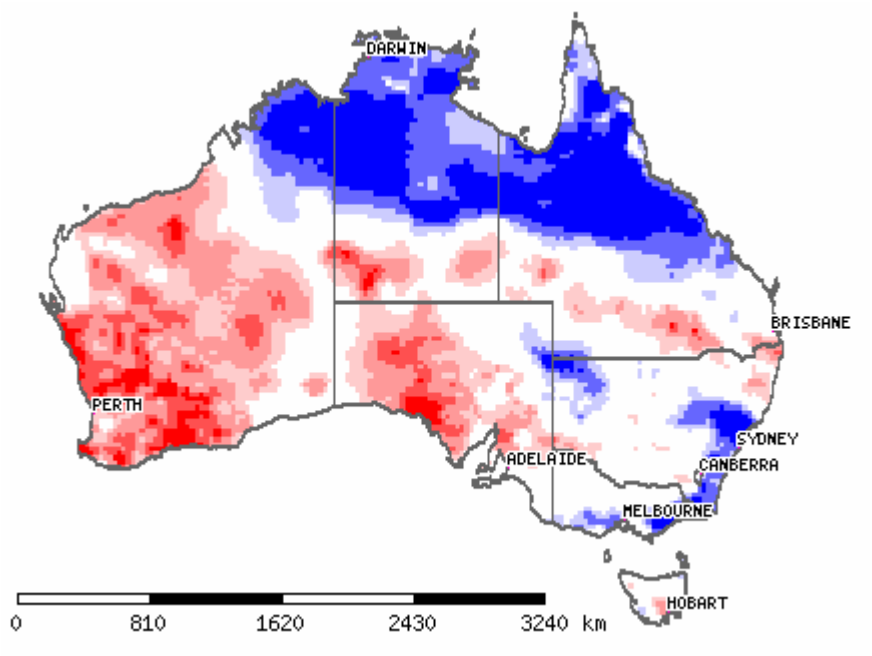
Rainfall over the last month (July 2007)



Rainfall percentiles for July 2007

July rainfall for most of Australia was below average, with northern NSW, central and southern Queensland and parts of South Australia being well below average. Localised areas in southern Victoria, parts of the western half of Western Australia and parts of the north of western Queensland received above average rainfall.

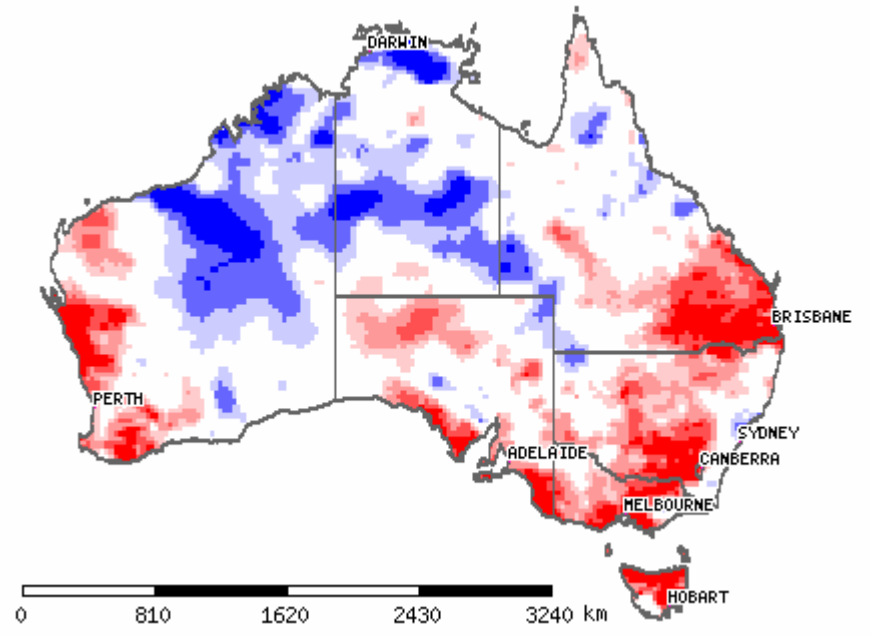
Ongoing or emerging rainfall situations



Rainfall percentiles for the three months May 2007 - July 2007

Unseasonal conditions in the past three months produced above average to extremely high rainfall in a band extending across northern Australia. There was also well above average rainfall in north-west New South Wales, and along the coastal south-east, covering the coast and adjacent tablelands from the Hunter Valley in the north to Gippsland in the south-much resulting in floods.

In contrast south-west and north-west Western Australia, southern Northern Territory and northern South Australia received below average rainfall.

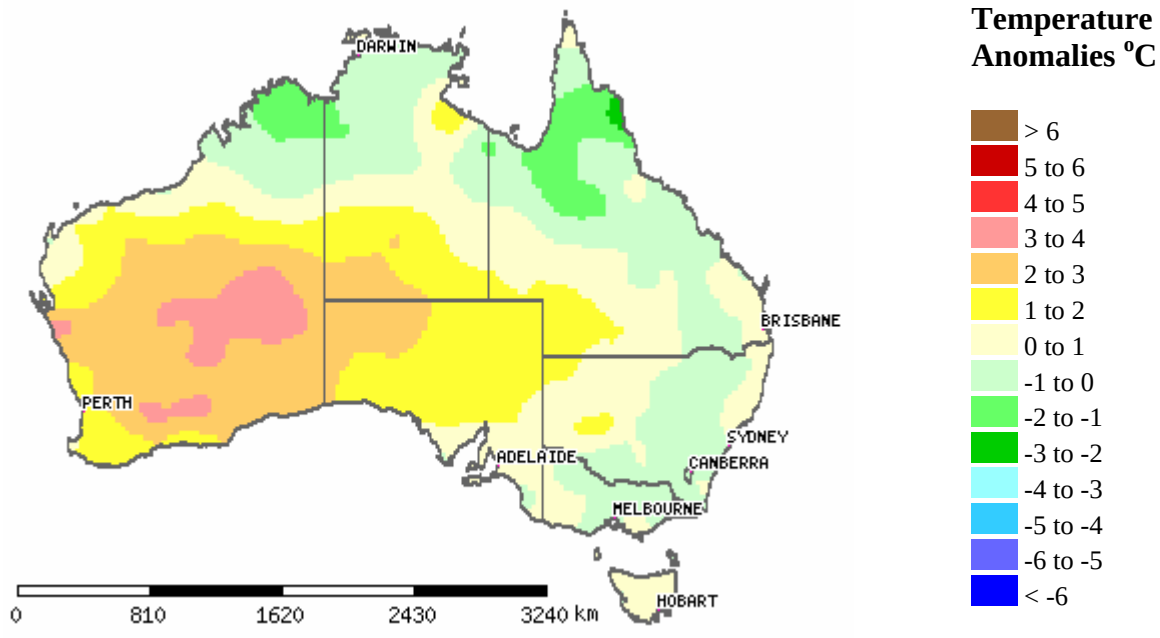


Rainfall percentiles for the 12 months August 2006 - July 2007

For the 12 month period from August 2006 - July 2007, there were serious to severe rainfall deficiencies over southern and eastern Australia in an arc extending across south and eastern SA, most of Victoria, and central inland NSW. A large part of southeast Queensland was also affected, as was northern and eastern Tasmania, and coastal western WA. These patterns were considered to be a result of the 2006 El Nino event, with a strong negative moving 30 day SOI in the second half of 2006 weakening and sometimes positive into 2007. 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, including a long and extensive wet season over the 2006 spring to autumn 2007 autumn.

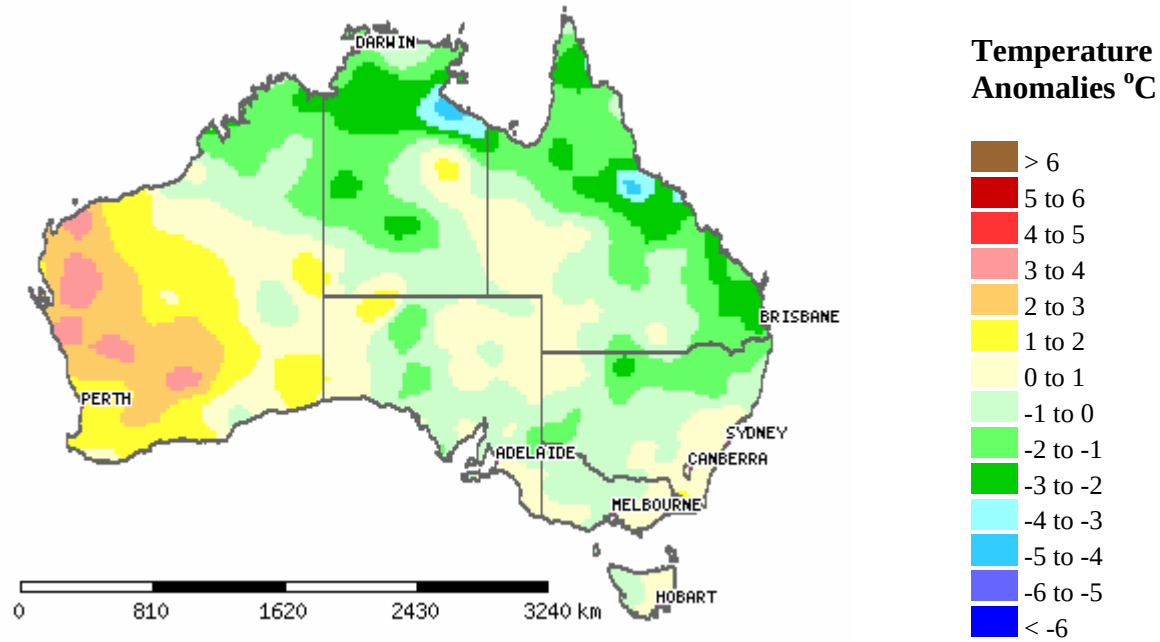
1.2 Maximum and minimum temperature anomalies

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 maxima and minima 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/



Monthly mean maximum temperature anomalies for July 2007

Monthly mean maximum temperatures were below normal across most of the continent except for the southern and western part of WA and most of SA. Eastern and northern Australia monthly mean maximum temperatures were neutral with anomalously cooler areas in north Queensland and northern WA.



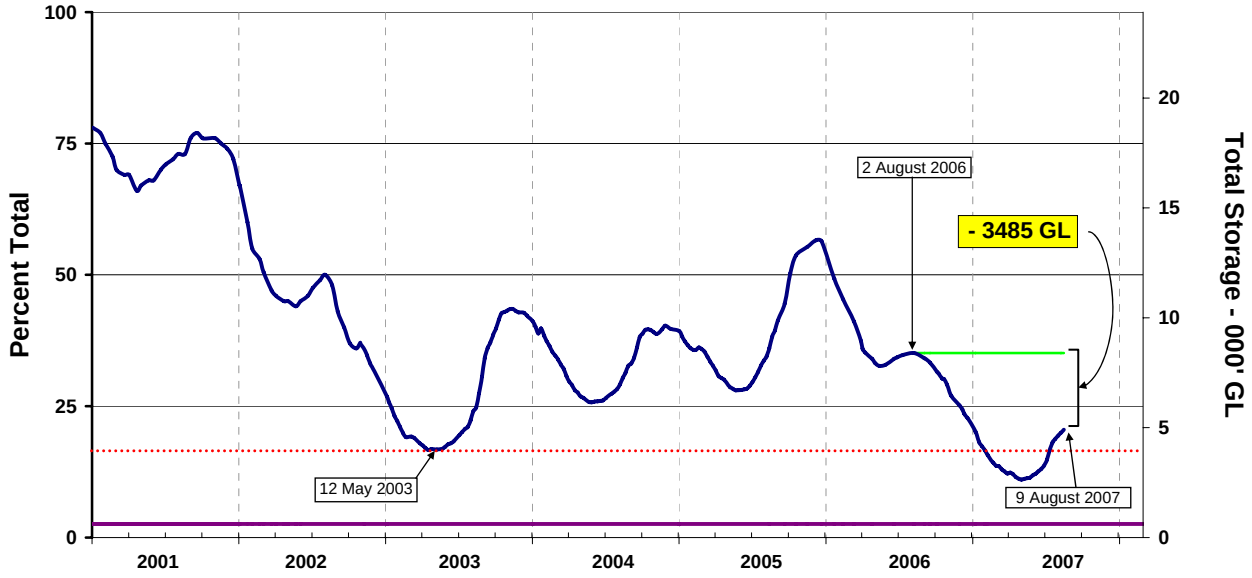
Monthly mean minimum temperature anomalies for July 2007

Monthly mean minimum temperatures were below normal in most areas except for western WA. Elsewhere minimum temperatures were below normal particularly in north coastal Queensland and in the Northern Territory on the Gulf of Carpentaria.

2.0 Water storages and irrigation allocations

2.1 Water storages (current to 9 August 2007)

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



Irrigation water available in the Murray-Darling Basin from 1 January 2001 to 9 August 2007.
The green line indicates the storage level at the same time last year. Source: Bureau of Rural Sciences.

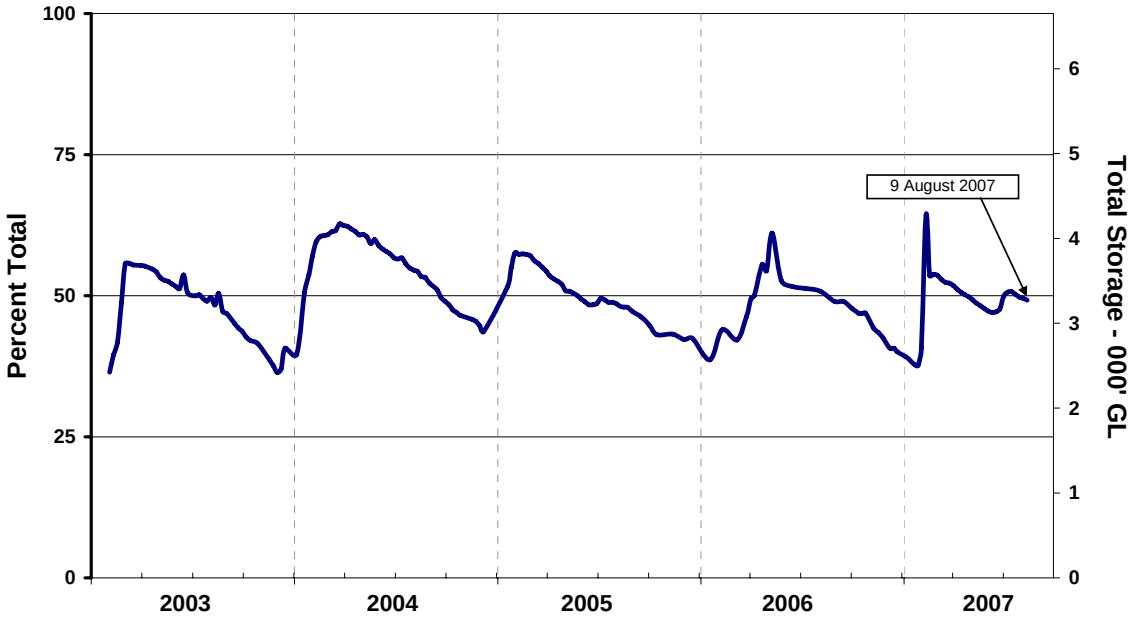
Over the past 2 months the storage levels within the Murray-Darling Basin have been increasing.

At 9 August 2007 storage levels for irrigated agriculture were at 4,905 GL (20.5% of a total capacity of 23,908 GL), an increase of 910 GL (3.8% of total capacity) over the month.

Current storage levels are approximately 3485 GL less than at the same time last year.

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 levels in these storages are 893GL (16% of a total capacity of 5,744 GL).

Water storage in Queensland



Current water storage level in Queensland as of 9 August 2007. Source: Bureau of Rural Sciences

Storage levels in Queensland decreased by 108 GL to 3,426 GL (49.2% of a total capacity of 6,965 GL) in July. This storage level is approximately 111 GL lower than at the same time last year.

2.2 Irrigation allocations

Murray-Darling Basin

- Inflow to the River Murray System slowed during the month from 421 GL to 130 GL, compared to a decrease of 25 GL per week at the same stage last year.
- Significant inflows occurred over the central and southern parts of the MDB however total inflows are low and larger reservoirs remain below 20% capacity.
- The MDBC announced in their August e-letter at the start of the month, that "Despite recent rainfall and slightly higher inflows, water saving measures still need to be implemented along the River Murray System to save water for urban and irrigation water users."
- The MDBC reported during the month that river salinities, particularly in South Australia are expected to increase as a consequence of continued reduced flows and lower river levels. However they are at below or close to, the 20 year averages over most of the river system.
- The flow to South Australia for July was 37 GL.

Allocation announcement for New South Wales irrigators in the 2007/08 season (current at 1 August 2007)

- The NSW Department of Water and Energy, has announced commencing allocations for NSW water users in the Murray and Lower Darling valleys for the 2007-2008 season. There is currently not enough water to make an available water determination for general or high security users in the Murray Valley or general security users in the Lower Darling Valley. Suspended and water carried over from 2006/07 is currently not available for Murray users. It will be made available when resources improve sufficiently.
- With little inflow to water storages during the past months water availability remains critically low. In the NSW Murray Valley there is sufficient water available to meet the town water supply for the whole of 2007/08 under level four water restrictions. There is also enough water to meet the critical water needs of domestic, stock and industry (high security) users for the month of July and August. In the Lower Darling River there is sufficient water to secure Broken Hill's town water supply for 18 months. All licensed irrigators will be able to carry over unused water from 2006/07, up to 50 per cent of their licensed entitlement. Availability of carry over water will be announced shortly, however at this stage it is not available.

- The NSW Department of Water and Energy has announced zero commencing allocations for NSW water users in the Murrumbidgee Valley for the 2007/08 season. With little inflow to water storages, water availability remains critically low. There is currently not enough water available to make an available water determination for general or high security users. In the Murrumbidgee Valley there is sufficient water available to provide town water supply for the whole of 2007/08 under level four water restrictions. There is also enough water to meet critical water needs of stock, domestic and industry.
- The NSW Department of Water and Energy has announced for the commencement of the 2007/08 water year that high security licence holders on the Belubula River will receive 50% of their entitlement for three months from 2 July. For the Namoi, Gwydir and Border Rivers there is 100 per cent allocation of town water supply, stock and domestic, and high security needs and a 0% allocation to general security licences. Supplemental water access is being denied until future supplies for Broken Hill town water supply can be assured.
- The Department of Water and Energy reminded landholders in most areas of NSW during July, to check on their entitlements before accessing water for stock and domestic purposes, stressing that access is for only those purposes and not for irrigation or industrial applications. These allocations are being viewed in the light of urban water restrictions and calls upon landholders to be sensible and fair in conserving their water usage.
- The NSW Department of Water and Energy announced water allocations for groundwater users in Zone 1A of the Great Artesian Basin for the water year 1 July 2007 to 30 June 2008. Town water utility allocations for Warialda, North Star and Toomalah are set at 100% of allocation and allocation for other purposes are set at 80% of licenced entitlements, although a provision for forward borrowing will apply for the year.
- On 27 July the Department of Water and Energy announced that the Macquarie and Cudegegong regulated rivers water sharing plan has been suspended and the water allocation for general security water licence holders upstream and downstream of Burrendong Dam has been restricted since there was insufficient water for the plan to operate. The Hunter Regulated River Water Sharing Plan has similarly been suspended, although they can access up to 10% of their carryover entitlement.
- From 1 July Water sharing plans were to commence in 2007/2008 for Paterson Regulated River Water Sharing Plan.
- Statutory Orders were released during July announcing embargos on further applications for water licences for Great Lakes Basin, Hunter River, Macquarie/Tuggerah Lakes water sources.
- During July Critical Water Planning analyses were issued for the Hunter Valley, Murray Valley and Lower Darling; applications from licence holders with permanent plantings were sought to ensure their eligibility for survival water should the need arise later in the year.
- From 26 July Temporary Water Restriction Orders were released for the NSW Murray River, Lower Darling and Murrumbidgee Regulated Rivers and applying to high security and general security access licences.

Allocation announcement for Victorian irrigators in the 2007/08 season (current at 1 August 2007)

- Allocations remained unchanged at zero across all systems in the latest update announced by Goulburn-Murray Water on 1st August 2007
- Sustained moderate inflows to the Goulburn system have been enough to almost secure channel system losses for the entire 2007/08 season. At current inflows there should be sufficient water to allow the announcement of an opening allocation on 15 August.
- Resources in the Murray system have also improved, but remain well below loss commitments. The latest resource improvements provide additional water for operation of the delivery systems and access to water for qualified purposes. Goulburn-Murray Water is assessing supply options for customers as the traditional start of the irrigation season approaches. The options will be discussed at an industry bodies forum to be hosted by Goulburn-Murray Water on 2 August.
- The Broken, Campaspe, and Loddon water systems have insufficient resources for any allocation, but the supply of qualified domestic and stock entitlements throughout 2007/08 is possible.
- In the Goulburn system, dry conditions would give enough water for a 41% allocation by 15 October (see table below). Average inflows could allow a 82% allocation, and an allocation of 100% may be possible under wet conditions.
- The Murray system is expected to have a 8% allocation by 15 October if dry conditions persist (See table following). The allocation may reach 43% of high-reliability water shares under average inflows (ie inflows experienced 5 times in 10), and could be 72% with wet conditions (inflows occurring 1 time in 10).
- Campaspe system customers will not have an allocation by 15 October if conditions remain dry, but could receive a 39% allocation under average inflows and an allocation of 100% if high inflows are received with very wet weather.

Goulburn System

Probability	15 Aug 2007	15 Sep 2007	15 Oct 2007	15 Dec 2007	15 Feb 2008
9 chances in 10 of	11%	29%	41%	55%	60%
5 chances in 10 of	21%	56%	82%	100%	100%
1 chance in 10 of :	-	98%	100%	100%	100%

Murray System

Probability	15 Aug 2007	15 Sep 2007	15 Oct 2007	15 Dec 2007	15 Feb 2008
9 chances in 10 of	0%	0%	8%	16%	20%
5 chances in 10 of	0%	21%	43%	54%	67%
1 chance in 10 of :	-	43%	72%	100%	100%

Broken System

Probability	15 Aug 2007	15 Sep 2007	15 Oct 2007	15 Dec 2007	15 Feb 2008
9 chances in 10 of	0%	0%	0%	0%	2%
5 chances in 10 of	0%	57%	100%	100%	100%
1 chance in 10 of :	-	100%	100%	100%	100%

Campaspe System

Probability	15 Aug 2007	15 Sep 2007	15 Oct 2007	15 Dec 2007	15 Feb 2008
9 chances in 10 of	0%	0%	0%	0%	4%
5 chances in 10 of	0%	11%	39%	54%	62%
1 chance in 10 of :	-	95%	100%	100%	100%

Loddon System

Probability	15 Aug 2007	15 Sep 2007	15 Oct 2007	15 Dec 2007	15 Feb 2008
9 chances in 10 (dry)	0%	0%	0%	0%	0%
5 chances in 10 (ave)	0%	35%	87%	100%	100%
1 chance in 10 (wet)	-	100%	100%	100%	100%

Interpretation of this table: In a dry scenario, there is a 9 in 10 chance of no allocation in the Loddon System. In an average rainfall scenario, there is a 5 in 10 chance of being a 35% allocation by 15 September, and an 87% allocation by 15 October, and so on. In the wet scenario, there is a 1 chance in 10 of there being a 100% allocation by 15 September in the Loddon System.

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

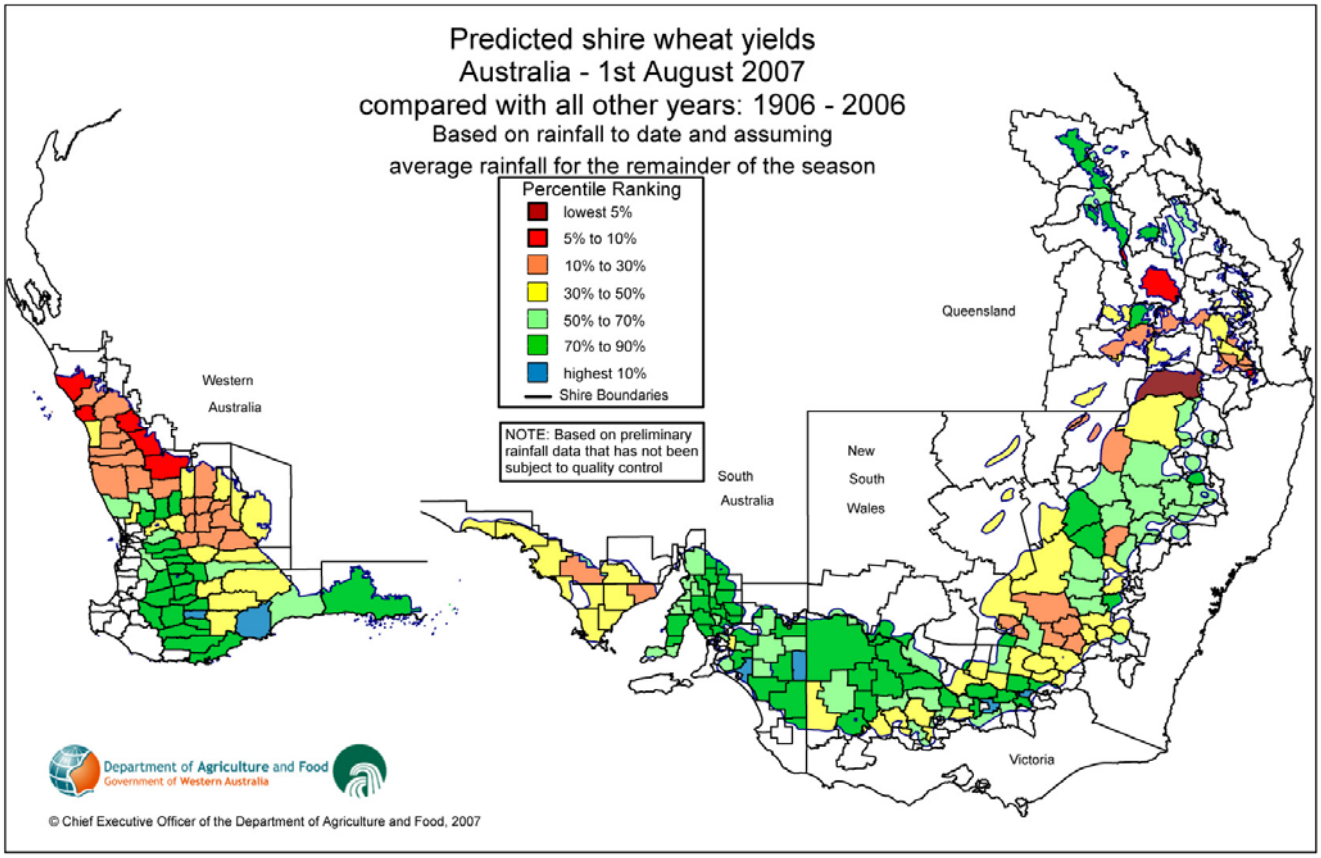
New South Wales Department of Natural Resources
http://www.naturalresources.nsw.gov.au/mediarelnr/mm20060418_3331.html

3.0 Crop and livestock production

3.1 Crops

Winter cropping

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 2007 cropping season ranked relative to all years (1906-2006) as of 1 August 2007.

- Current predictions for shire level wheat yields for the 2007 growing season are generally average to below average reflecting the variable start to the 2007 winter cropping season. The northern part of the Western Australian wheatbelt, the west of South Australia, parts of Victoria, southern NSW and northern NSW and southern Queensland are all indicating forecasts of well below average yields.
- Lack of July rainfall across the whole of the national wheatbelt has reduced prospects for a record wheat crop.
- The NSW Department of Primary Industries has reported in early July that winter crop estimates have reached 5.08 million ha, as growers take advantage of the early seasonal break and favourable sowing conditions. Due to the late April break most of the winter crop, about 96% compared to 81% at this time last year, has been planted on time for the first time since 2001.
- NSW winter broadleaf plantings of 600,596 ha, which comprise about 12% of total cropping area, are dominated by canola and chickpea. Canola plantings of 229,600 ha have exceeded early season forecasts. About 96% of the potential wheat crop of 2.93 million ha, has been sown. Pulse plantings are at an all time high with chickpeas comprising 67% of the total area. Cereals that were planted for grazing have provided valuable early-winter feed. Weed control will be a major priority in all crops over the next 4-6 weeks. This information will be update in mid-September.
- The Victorian Department of Primary Industries (DPI) reports that the area sown in Victoria has increased by 8% from last year to just under 3 million tonnes and production is forecasted to reach 6.3 million tonnes, 5 million more than last year. Wheat, barley and canola areas are up by 14%, 8% and 12% respectively and with the early season providing ideal conditions for canola, production is expected to be 380,000 tonnes, up from only 42,000 tonnes last year.
- The Department of Primary Industries of South Australia (PIRSA) reports the total crop area is estimated to be 4.01 million ha, 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. Although crop production is currently estimated to be 6.98 million tonnes, 20% above the five year average, reflecting both the increased area of crop and the above average yield potential from the excellent start to the season, plantings on a large part of the Eyre Peninsula have run out of soil moisture. .

- The Department of Agriculture and Food Western Australia reports that dry conditions across the state during the first half of July has reduced the crop potential for the northern and eastern parts of the wheatbelt, prompting a revised growing season crop forecast of 8.9 million tonnes down from 11 million tonnes at the start of the season. The latest forecast indicates a wheat crop of close to 5.6 million tonnes and 1.9 million tonnes of barley. Canola production is forecast at around 0.5 million tonnes with the vast majority being grown in the Great Southern and at Esperance. Lupin production from northern agricultural areas will again be well down.
- National stock of grain held by major bulk handlers continues to decline, falling by nearly 20% to 5 million tonnes by the end of July according to the Australian Bureau of Statistics. This combined with a softening cattle market, has resulted in the number of cattle in feedlots falling by 10% in the last few months.
- US agriculture officials have raised their 2007-08 wheat price forecast to more than $221 a tonne or in American terms, $5 a bushel according to the ABC in mid July.

3.2 Livestock

Beef cattle

- The June 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.
- According to MLA, National average saleyard cattle prices during 2006-07 averaged between 4-12% lower than the previous year, due principally to the effects of the drought and a strengthening A$. Further falls are forecast for 2007-08. The extent and severity of drought conditions across much of southern Australia during the past year saw many producers forced to turn off additional stock. Cattle slaughter jumped substantially from spring to autumn, with adult slaughter up an estimated 8% for the year and calves 12%.
- On the demand side, the A$ averaged 5% higher against the US$ and 9% against the yen, reducing the competitiveness of Australian meat and lowering export returns. Despite the effect of the high A$, export demand for Australian beef remained strong until the June quarter, with record fiscal year shipments. The largest fall in cattle prices for the year was in the US cow category, which averaged 12% lower, at 257¢/kg cwt. This was due to the rising A$, 12% jump in cow and heifer slaughter during the drought and flat US demand. Strong demand from Japan and Korea (until the June quarter) helped to contain the fall in prices across the medium steer and Japan ox categories to 4% and 7%, respectively. Trade steer prices fell 10%, as large numbers of lighter cattle entered cattle markets throughout summer and autumn, with feeder cattle rates declining due to the high grain costs.
- A substantial late autumn break across eastern Australia has now enticed producers to begin holding onto stock, with good spring pastures and a bumper winter grain harvest in prospect. Together with some seasonal improvement in export demand in Japan, Korea and the US by spring, this should see cattle prices at least hold until September. However, cattle prices are now expected to fall from summer and average lower in 2007-08, due to the impact of a high A$ and increased competition from the US in Japan and Korea.
- According to figures released by the Department of Agriculture, Fisheries and Forestry (DAFF), beef shipments from Australia to Japan in June amounted to 30,604 tonnes swt, a decline of 12% compared to June 2006. The volume reduction was in all chilled/frozen and grass/grain categories, with chilled grainfed seeing the largest decrease, of 18% to 10,707 tonnes. June was a particularly challenging month for exporters, as the A$ appreciated further, to be up 14% against US$ and 22% against the Japanese yen compared to the same period last year. In addition, much awaited rain reduced cattle supplies, subsequently raising production costs and making it even harder for exporters to match the prices with buyers' expectation. Despite such obstacles, Australia managed to send 192,935 tonnes of beef to Japan in the first half of 2007 – only 1% below the same period last year.
- The MLA/SFE Cattle Futures market fell in late July, with the September 07 contract down 6.5¢ to 340¢/kg cwt, and the November 07 and January 08 contracts both down 5.5¢, to finish at 331¢/kg cwt.
- Bulk feed suppliers say drought breaking rain is needed to peg back lucerne hay prices from record levels. Various outlets in Queensland say small square bales are fetching up to $30 each while prices have hit $38 a bale in Sydney reports the ABC.

Sheep and lambs

- ABARE reported in the June quarter edition of Australian Commodities 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 16% in 2007-08, whilst sheep yard prices are forecast to increase by around 48% due to the retention of ewes for stock rebuilding.
- According to MLA, national average saleyard lamb prices in 2006-07 were at their lowest levels since 2001-02, down 6-14% on the previous year, while mutton sheep prices fell 21%, to 142¢/kg cwt, the lowest price since 2000-01. The principal factors lowering lamb prices were a surge in lamb supplies, strong competition from competing meats and the high A$. Drought and the increased numbers of second cross lambs available in 2006-07 saw lamb slaughter rise an estimated 8% for the year, with Victorian numbers up 22% and NSW up 5%.
- Numbers of lighter lambs were particularly high, and quality down, due to the severity of the drought, causing prices to fall 13-14% for light, Merino and feeder lamb categories. Heavy export lambs averaged 327¢/kg cwt for 2006-07, down 6% on the previous year, as tighter supplies of this category and improved US demand offset the impact of a higher A$. Trade lamb prices averaged 7% lower, at 332¢/kg cwt, with domestic demand firm, despite stronger competition from beef. With the prospect of good spring pastures and crops across much of the eastern states, and a significant fall in lambs on the ground, both lamb and sheep prices are expected to rebound sharply in 2007-08. Supplies of both lamb and mutton are likely to fall significantly over the coming year, quality and weights should lift and restocker and feedlot demand is expected to be intense.

Wool

- A significant decline in the Australian sheep flock due to several years of drought is expected to see wool production decrease in 2007-08, to a forecast 410mkg greasy – down 4% on 2006-07 levels (Australian Wool Innovation Production Forecasting Committee). Much of the decline in production for 2007-08 is due to a 5% fall in the number of sheep forecast to be shorn, with the national opening sheep and lamb numbers for 2007-08 estimated at 87 million head – down from 92 million head in 2006-07.
- The largest fall in wool production for 2007-08 comes from lower flock numbers in NSW (127mkg) and Victoria (82mkg), down 9% and 6%, respectively, while WA production (103mkg) is forecast to be back 2%. Interestingly, SA (66mkg) wool production levels are expected to increase 7% on the previous year, with fleece weights forecast to be 5% higher on the back of improved seasonal conditions throughout Autumn and slightly higher shorn sheep numbers.
- Several years of drought across sheep and lamb producing areas of Australia has seen flock numbers decline, with the Australia flock currently at its lowest level since 1925. The Australian sheep flock is expected to enter a rebuilding phase from 2007-08, underpinned by strong returns from lamb production and some recovery in fine wool demand and prices.
- The ABC reports that the Chinese Government has suspended imports of Australian wool after refusing to lift import quotas . Currently, Chinese processing mills can import up to the quota level of 287 million kilograms a year but in the past, Chinese governments have lifted quotas to allow increased buying. The unexpected action has caught Australia's industry by surprise and is causing widespread concern as China imports 70 per cent of the clip.
- It has been a dramatic climb for the wool market over the past six months, with prices hitting the 1,000 cent mark in May. This week, while the benchmark eastern market indicator has ended down two cents at 929 cents a kilogram, it is still about 200 cents a kilogram higher than last financial 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.dpi.nsw.gov.au/aboutus/news/newsletters/grains-report-nsw

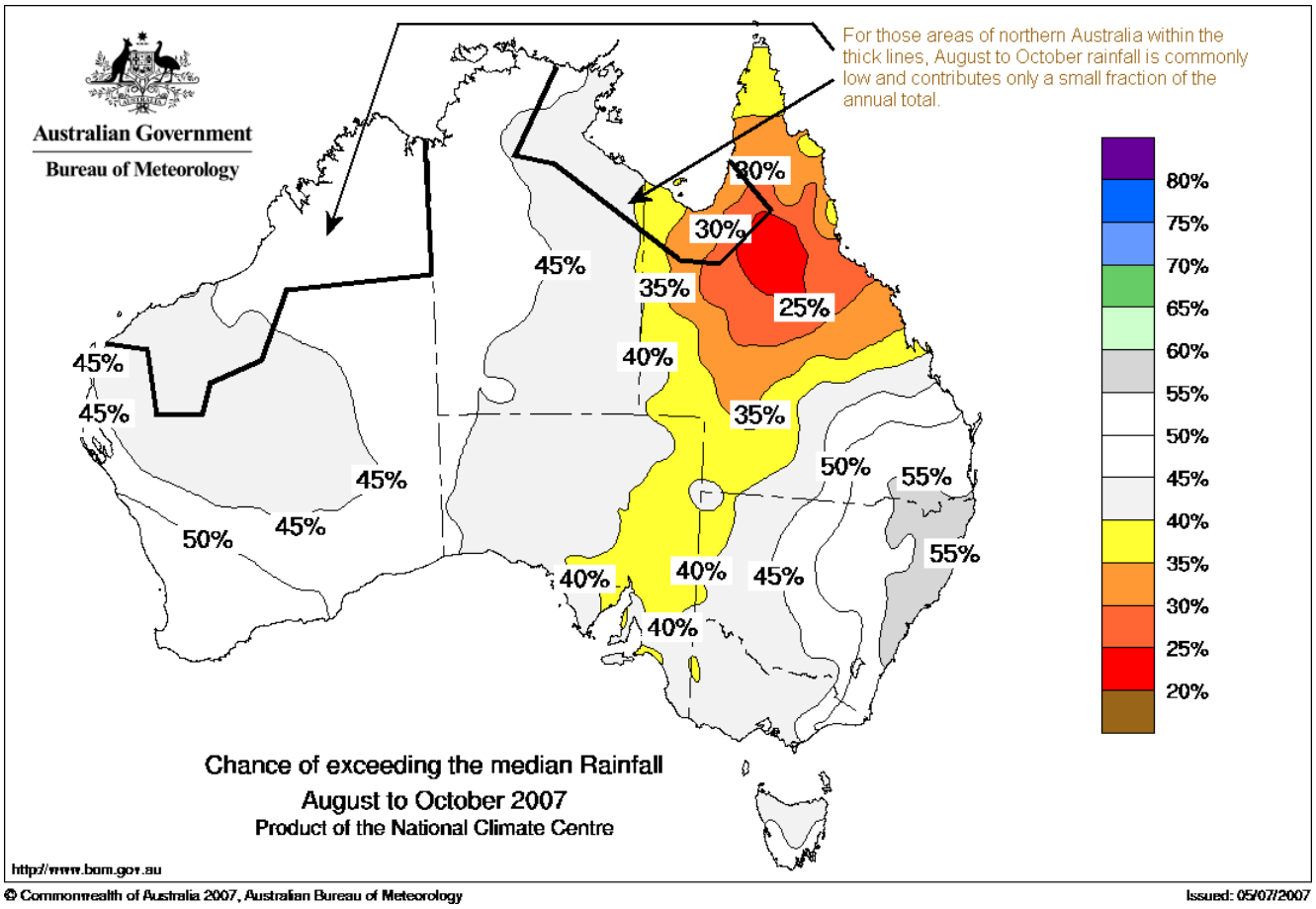
Queensland Department of Primary Industries and Fisheries
http://www.dpi.qld.gov.au/fieldcrops/

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 August 2007 and October 2007

The national outlook for total 3-monthly rainfall (August to October), shows distinct trends towards a low to well below average chance of receiving normal rainfall, in a trough running from Adelaide through to north west and central Queensland. Over the remainder of Australia the chances of accumulating at least average rain for August to October grades away from that trough in a range of 25-40%, with the highest chance to receive average rainfall being in south west WA and in eastern Australia, ranging up to near 60% in north eastern NSW and south eastern Qld

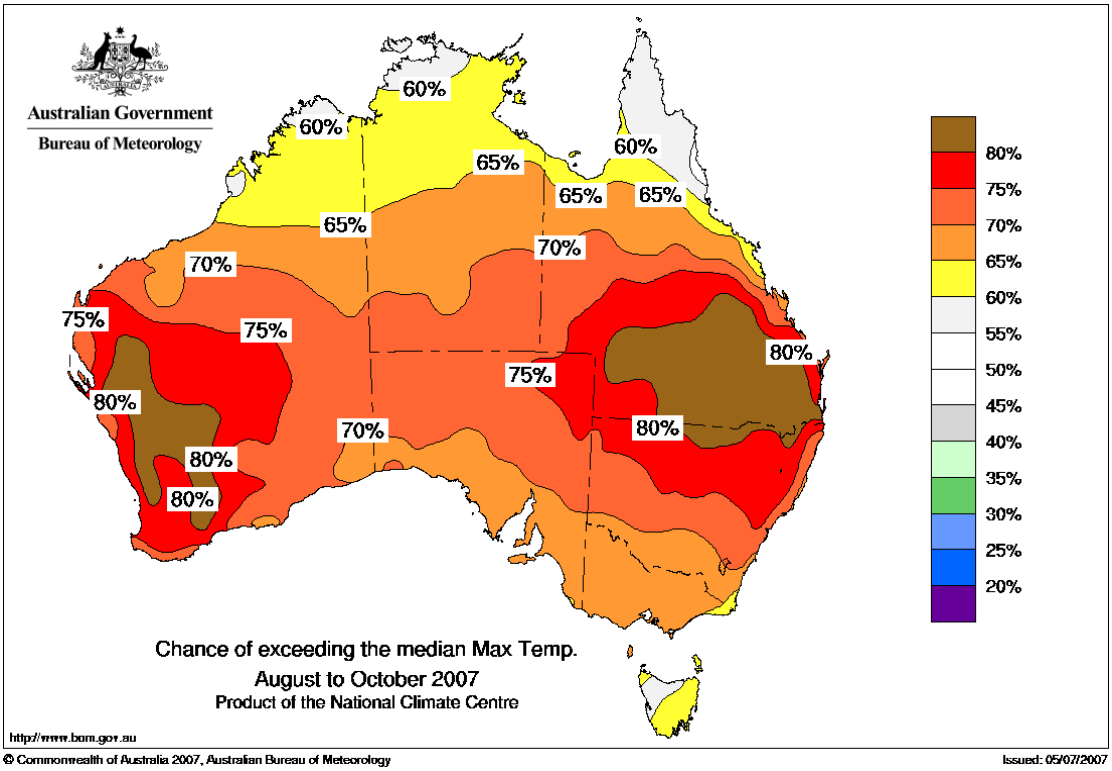
4.2 El Nino & Southern Oscillation Index

The Bureau of Meteorology (BoM) reported on 1st August that fluctuating ENSO indicators have continued over the last three months, producing no consistent overall trend. Trade Winds in the western Pacific and the Southern Oscillation Index (SOI) have alternated around weakening and strengthening phases, however there has been a slight overall ocean cooling from June to July. While the most recent weekly surface temperatures of the eastern equatorial Pacific are approaching the La Niña threshold, the SOI index is about -5.

The report considers that there is a 50:50 chance of La Nina occurring, based on the latest computer model runs, however the present fluctuations in conditions will have to become a consistent trend of consistently stronger Trade Winds, positive SOI values and further cooling of the ocean. Furthermore, the report notes that the cooling now occurring is much slower than was predicted in autumn and early winter in 2007.

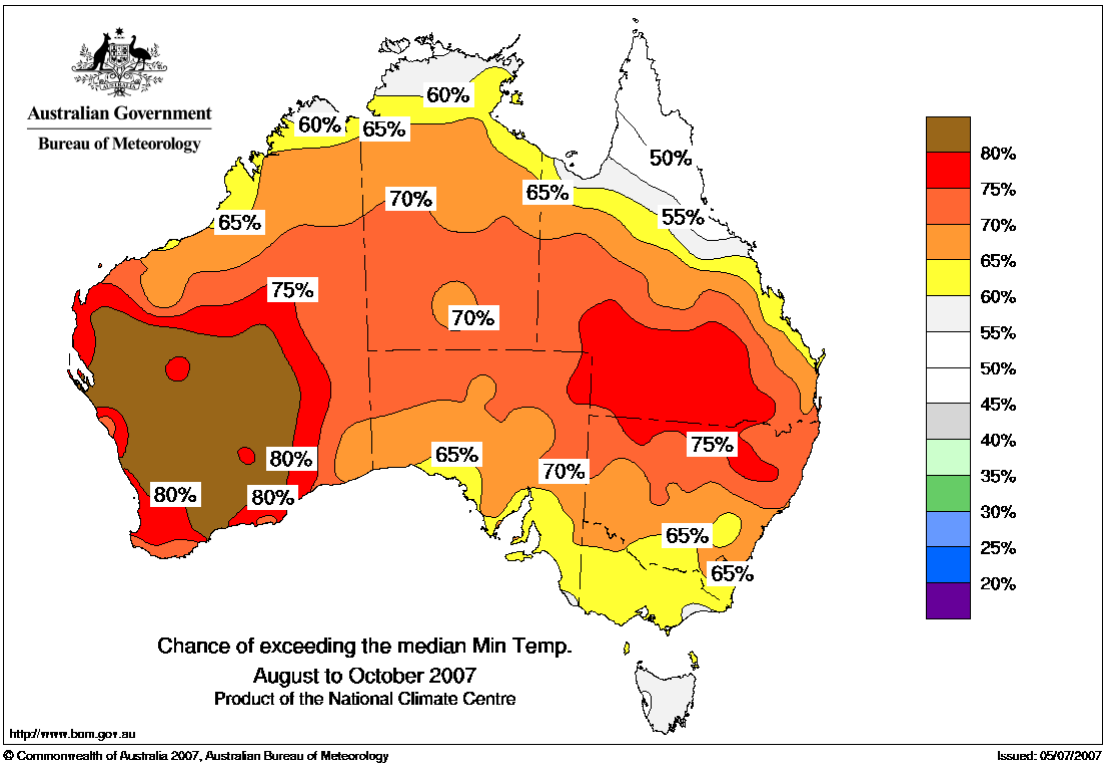
The BoM's latest survey of six international dynamic models predict weak cool conditions, consistent with a La Nina event and their POAMA model which is run daily, also predicts La Nina conditions developing and persisting until the end of 2007.

4.3 Temperature Outlook



The chance of exceeding median maximum temperatures between August 2007 and October 2007

Averaged over August to October, the chances of exceeding the median maximum temperatures are mainly between 55 and over 80% in Queensland, the Northern Territory, Western Australia, northern New South Wales, and northern South Australia (see map). In Victoria, southern South Australia, southern New South Wales, and Tasmania the chances of exceeding the median maximum temperatures are between 55 and 70%.The eastern coast of Cape York and northern coasts of Northern Territory and Western Australia also have a 50 to 60% chance of exceeding the median maximum temperatures.



The chance of exceeding median minimum temperatures between August 2007 and October 2007

Average seasonal minimum temperatures are favoured to be warmer than normal across a broad arc through Australia (see map). The chances of increased overnight warmth (averaged over the coming three months) are between 45 and over 75% in the Queensland/NSW region, and between 60 to over 80% in WA. In remaining areas the probabilities are in the neutral (50 to 60%) range.

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