# Weekly Australian Climate, Water and Agricultural Update 7 July 2011

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# Summary of key issues

- Rainfall received this week across southern Australia should assist crops following a dry June 2011 in many areas.
- An outbreak of the Hendra virus has resulted in the death of at least seven horses with a number of properties quarantined.
- A reduction in mouse numbers has been reported in some areas in south eastern Australia, possibly due to ongoing baiting and recent cooler weather.
- Rainfall deficiencies remain across much of south-west Western Australia, with below average rainfall during June 2011 adding to the deficiencies (Bureau of Meteorology Drought Statement, 5 July 2011).
- The 2011–12 water trading season has commenced. For the first time since 2002, all
  northern Victorian systems have started the year with high reliability water share
  allocations.
- Fruit prices were largely steady in the week ending 2 July 2011, apart from relatively small movements in rockmelon and banana prices. Bean, broccoli, tomato and lettuce prices have strengthened in recent weeks due to winter production lulls.
- World cotton prices are declining in response to expected record world cotton production in 2011–12.
- Queensland young cattle prices closed at 351 cents per kilogram for the week ending 1 July 2011, 19 cents lower than the previous week and 60 cents lower than late January 2011, which is consistent with a general slowing in the growth in demand in the global beef market.
- Last night (6 July 2011), Minister Ludwig signed the Export Control Repeal Order 2011
  to lift the suspension of trade in live-stock exports to Indonesia, provided supply chain
  assurance principles are in place to achieve internationally agreed animal welfare
  outcomes.

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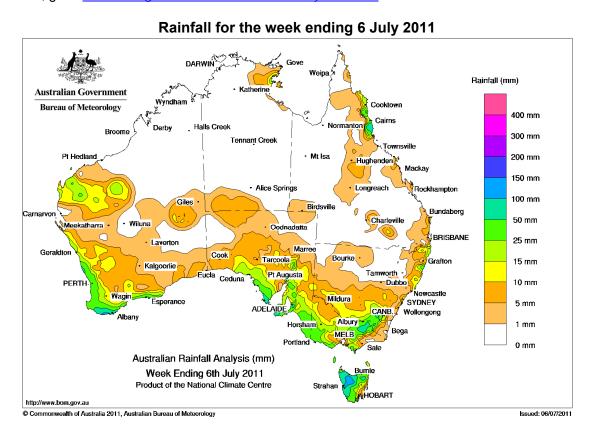
## 1. Climate

## 1.1. Notable events

- For the week ending 6 July 2011, rainfall was mostly recorded across southern Australia. The highest measured total for the week was 113 millimetres at Zeehan in western Tasmania.
- Light to moderate rainfall received this week across southern Australia should assist crops following a dry June 2011 in many areas.
- An outbreak of the Hendra virus has occurred in parts of Queensland and northern New South Wales and has resulted in the death of at least seven horses and a number of properties being quarantined.
- A reduction in mouse numbers has been reported in some areas in south eastern Australia, possibly due
  to ongoing baiting programs and the recent cooler weather.
- Cooler conditions in parts of northern Australia during June 2011 have led to heavy flowering on mango trees, which may lead to a large crop this year.
- Neutral El Niño/Southern Oscillation (ENSO) conditions are firmly established across the tropical Pacific Ocean, with most indicators near normal levels. The majority of climate models indicate that neutral conditions are likely to continue through spring 2011 (Bureau of Meteorology ENSO 'Wrap-up', 6 July 2011)
- Rainfall deficiencies remain across much of south-west Western Australia. Despite rain at the end of last
  month, below average rainfall during June 2011 extended and added to deficiencies in this area. After a
  wet March 2011, rainfall in south-east Australia has been below average, particularly during June 2011.
  This continues a trend in recent decades of dry mid-autumn to early-winter conditions in this part of
  Australia (Bureau of Meteorology Drought Statement, 5 July 2011).

#### 1.2. Rainfall this week

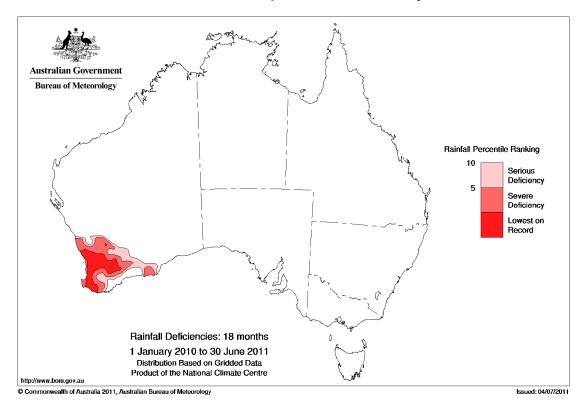
For the week ending 6 July 2011, rainfall was mostly received across southern Australia. For further information, go to <a href="https://www.bom.gov.au/climate/current/weeklyrain.shtml">www.bom.gov.au/climate/current/weeklyrain.shtml</a>.



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#### 1.3. Rainfall deficiencies

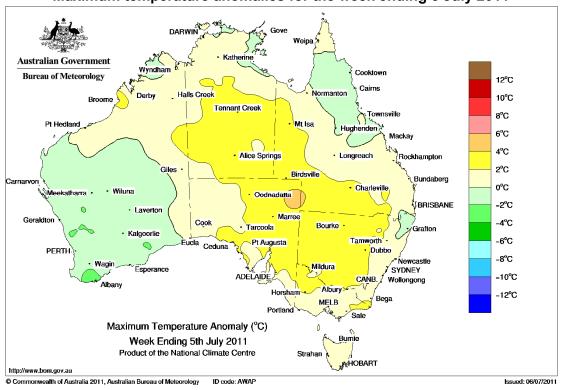
## Rainfall deficiencies for the 18-month period from 1 January 2010 to 30 June 2011



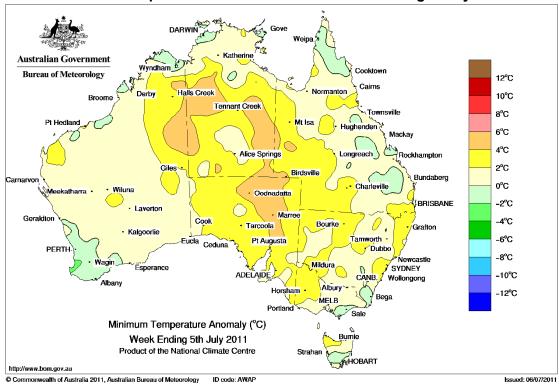
# 1.4. Temperature anomalies this week

Spatial temperature analyses are based on historical weekly 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 using high resolution gridded datasets from 1911 onwards. For further information on temperature anomalies, go to <a href="www.bom.gov.au/jsp/awap/">www.bom.gov.au/jsp/awap/</a>.

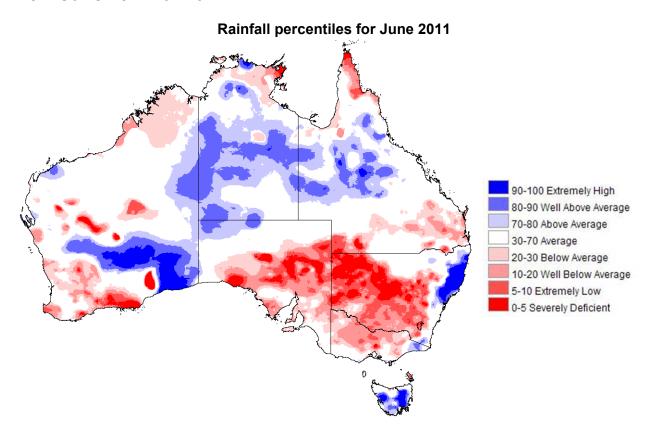
#### Maximum temperature anomalies for the week ending 5 July 2011



## Minimum temperature anomalies for the week ending 5 July 2011

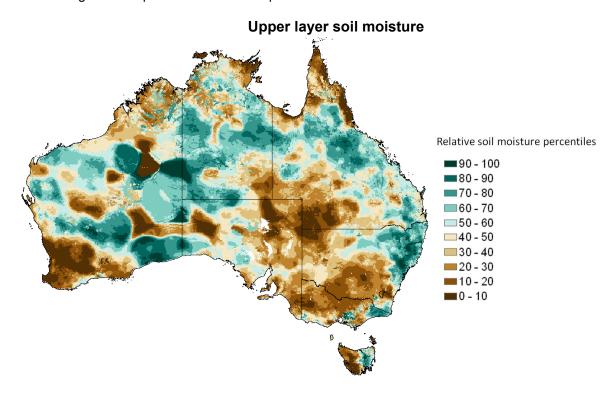


# 1.5. June 2011 rainfall

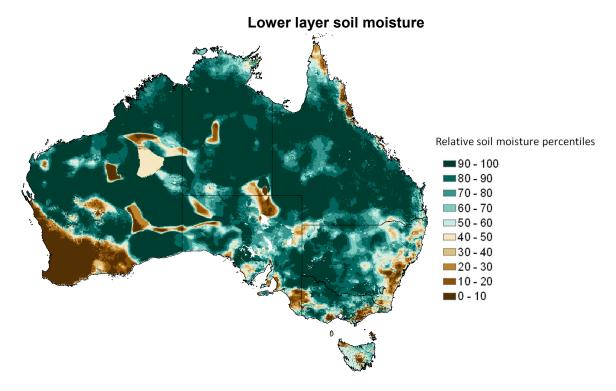


## 1.6. Relative soil moisture

The maps show the relative levels of modelled upper (0 to ~0.2 metres) soil moisture and lower (~0.2 to ~1.5 metres) soil moisture at the end of June 2011. These maps show soil moisture estimates relative to the long-term average with respect to the reference period 1961 to 1990.



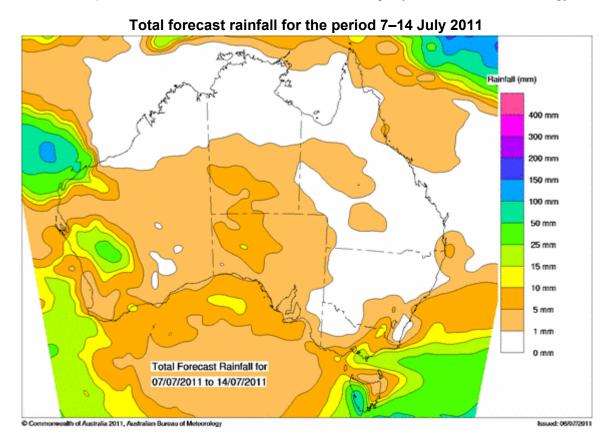
The bulk of plant roots occur in the top 0.3 metres of the soil profile and soil moisture in the upper layer of the soil profile (0.2 metres) is the most appropriate indication of the availability of water, particularly for germinating plants.



The lower layer soil moisture is a larger, deeper store that is slower to respond to rainfall and tends to reflect accumulated events over seasonal and longer time scales.

# 1.7. Rainfall outlook

The rainfall forecast below is produced from computer models. As it contains no input from weather forecasters, it is important to also check local forecasts and warnings by the Bureau of Meteorology.



## 2. Water

# 2.1. Water availability and trading

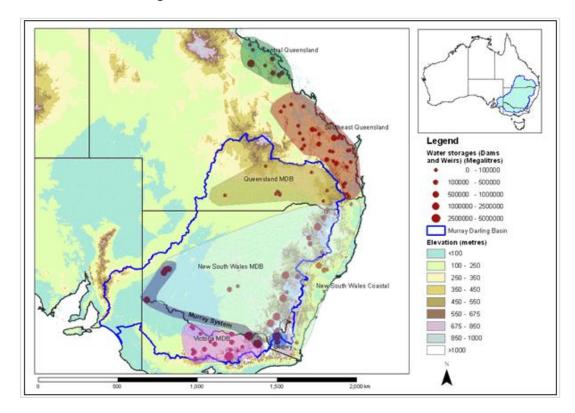
- Water storage levels in the Murray-Darling Basin (MDB) increased this week by 142 gigalitres (GL) to approximately 84 per cent of total capacity. This is 50 percentage points or 11 207 GL more than this time last year.
- The 2011–12 water trading season has commenced and opening allocations have been announced.
- High security allocations for the New South Wales Murrumbidgee and Murray Valley are 95 and 97 per cent, respectively. General security allocations are 45 and zero per cent, respectively (see section 2.3).
- Murray Valley general security access water licence holders have full access to carryover water held at the start of 2011, which is an average of 77 per cent of entitlement.
- For the first time since 2002, all northern Victorian river systems have started the 2011–12 water trading year with high reliability water share allocations. The Victorian Broken, Goulburn and Murray systems have started at 18, 48 and 21 per cent, respectively. Low reliability water share allocations for all systems started at zero per cent, with the exception of the Campaspe system, which started at 47 per cent (see section 2.3).
- South Australian Murray Valley high security allocations for the 2011–12 water trading year have started at 100 per cent (see section 2.3).
- There was no trade in the three representative major temporary water markets over the past week.

## 2.2. Water storages

Changes in regional water storage for June 2011 and the previous 12 months are summarised in the table and graphs below (current at 7 July 2011).

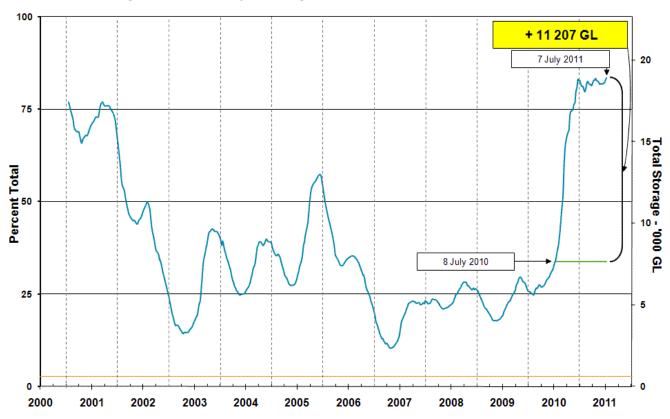
Region	Total capacity	Current volume	Current volume	Monthly change	Monthly change	Annual change
	(GL)	(GL)	(%)	(GL)	(%)	(GL)
Murray-Darling Basin (MDB)	22557	18462	84	+375	+2	+11207
Snowy Scheme	5744	2243	39	+10	0	+858
Murray-Darling Basin Authority (MDBA)	9352	7562	78	+279	+3	+3772
Queensland MDB	186	176	95	-4	-2	+69
Central Queensland	3154	3136	99	-12	0	+141
South-east Queensland	3517	3480	99	+17	0	+737
New South Wales MDB	13884	12167	88	+170	+1	+7376
Coastal New South Wales	1074	1011	94	+123	+11	+269
Victoria MDB	8488	6495	77	+211	+2	+3761

## Water storages in Queensland, New South Wales and Victoria



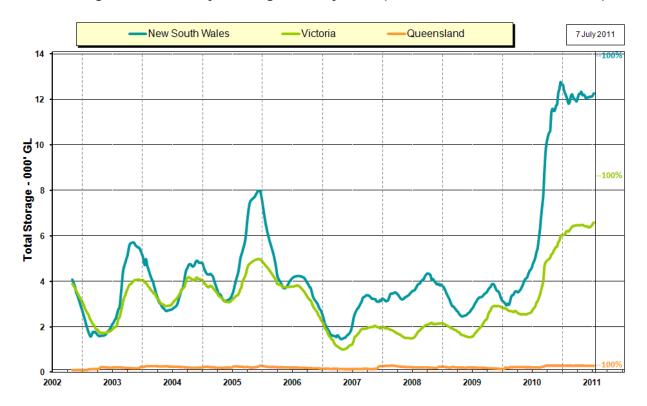
The blue line indicates the extent of the Murray–Darling Basin and the shaded areas denote the coverage of the individual reporting regions.

## Water storages in the Murray-Darling Basin (NSW, Victoria and Queensland)



Information on irrigation water available in the Murray–Darling Basin from 1 January 2001 to 7 July 2011 is shown above. The green line indicates the storage level at the same time last year. The orange line indicates the amount of 'dead' or unusable storage.

# Water storages in the Murray-Darling Basin by state (NSW, Victoria and Queensland)



# 2.3. Water allocations

The closing water allocations for the 2010–11 water trading season and opening allocations for the 2011–12 water trading season for all licence holders in New South Wales, Victoria and South Australia water systems are summarised in the following table.

	Closing allocations 2010–11 (%)	Allocations at 1 July 2011 (%)
NSW Murray Valley	, ,	· · · ·
High security	100	97
General security	100	0*
NSW Murrumbidgee Valley		
High security	100	95
General security	100	44*
NSW Lower Darling		
High security	100	100
General security	100	100
NSW Macquarie Valley		
High security	100	100
General security	100	28*
NSW Hunter Valley		
High security	100	100
General security	100	100
NSW Lachlan Valley		
High security	100	100
General security	117	0*
NSW Border Rivers		
High security	100	100
General security	100	100
NSW Peel Valley		
High security	100	100
General security	100	78
Victoria Murray Valley		
High reliability	100	21
Victoria Goulburn		
High reliability	100	48
Victoria Campaspe		
High reliability	100	100
Victoria Loddon		
High reliability	100	48
Victoria Bullarook		
High reliability	100	39
Victoria Broken		
High reliability	100	18
South Australia Murray Valley		
High security	67	100

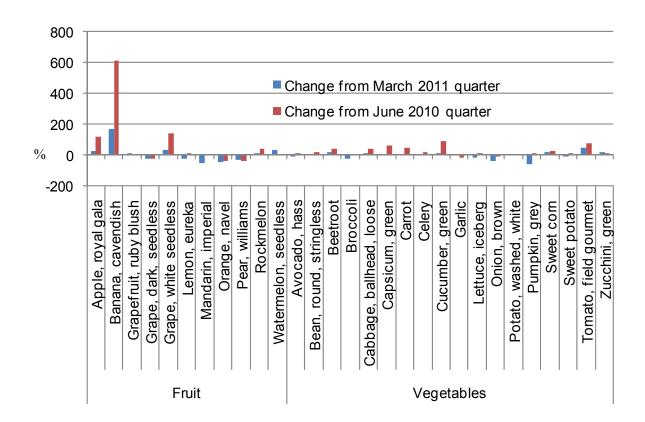
<sup>\*</sup>Carryover water may also be available.

# 3. Commodities

#### 3.1. Production and commodities

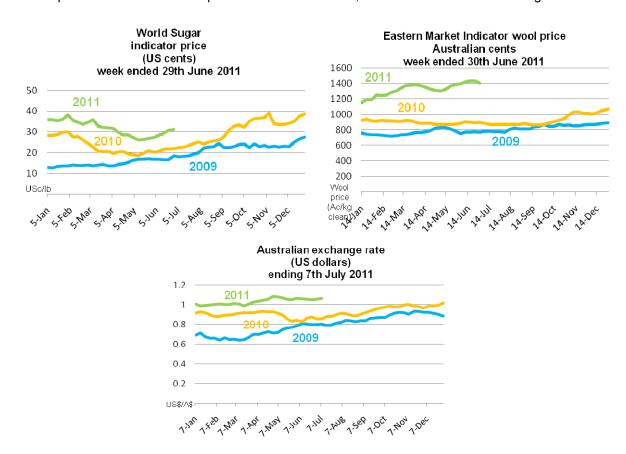
- Fruit prices were largely steady in the week ending 2 July 2011, apart from a small increase in prices for rockmelons and a small decline in prices for bananas.
- Bean and tomato prices remained high in the week ending 2 July 2011, but broccoli prices declined sharply. Lettuce prices also increased sharply. Higher vegetable prices in mid winter are a normal seasonal pattern, with a significant part of production in southern Australia in this period coming from greenhouse production systems.
- Prices for a selected basket of vegetables in the Melbourne wholesale market in the June quarter of 2011 averaged 4.5 per cent lower compared with the March quarter of 2011, but 22 per cent higher than the June quarter of 2010 (figure A).
- Prices for a selected basket of fruit (excluding bananas) in the June quarter of 2011 averaged 8.3 per cent lower compared with the March quarter of 2011, but 18 per cent higher compared with the June quarter of 2010 (figure A). Due to production losses from Cyclone Yasi in early February 2011, banana prices in the June quarter of 2011 were nearly 170 per cent higher than in the March quarter of 2011 and 615 per cent higher than in the June quarter of 2010.
- The world wheat indicator price (US Hard Red Winter, free on board Gulf ports) averaged lower at US\$297 a tonne in the week ending 4 July 2011 compared with US\$311 a tonne last week.
- The world coarse grains indicator price (US Corn, free on board Gulf ports) averaged slightly lower at US\$284 a tonne in the week ending 5 July 2011 compared with US\$292 in the previous week.
- World cotton prices are declining in response to expected record world cotton production in 2011–12.
   The forward Cotlook 'A' Index, reflecting the price for new season (2011–12) cotton, was US131.2 cents a pound on 6 July 2011. This compares with the last quote on 9 June 2011 for the 2010–11 (August to July) Cotlook 'A' Index of US157.9 cents a pound.
- Queensland young cattle prices closed at 351 cents per kilogram for the week ending 1 July 2011,
   19 cents lower than the previous week and 60 cents lower than late January 2011, which is consistent with a general slowing in growth in demand in the global beef market.
- Last night (6 July 2011), Minister Ludwig signed the Export Control Repeal Order 2011 to lift the suspension of trade in live-stock exports to Indonesia, provided supply chain assurance principles are in place to achieve internationally agreed animal welfare outcomes.

Figure A: Changes in fruit and vegetable prices, June 2011 quarter, Melbourne wholesale market



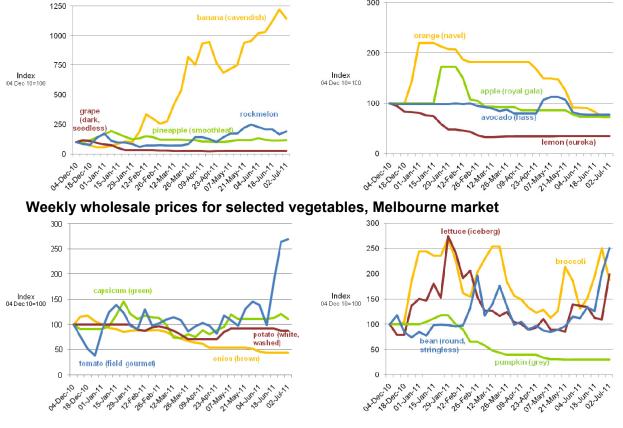
# 3.2. Selected world indicator prices\*

\*The cotton price series has been unquoted since 9 June 2011, but will recommence on 1 August 2011.

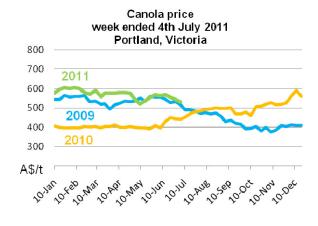


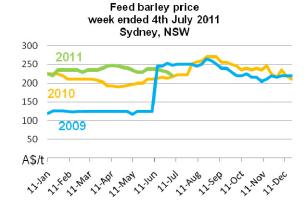
# 3.3. Recent movements in fruit and vegetable prices

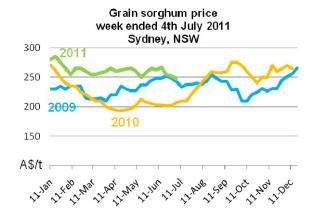
Weekly wholesale prices for selected fruit, Melbourne market

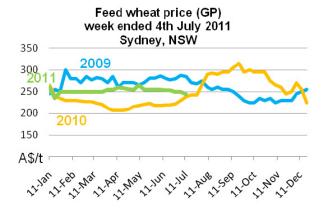


# 3.4. Crop indicator prices

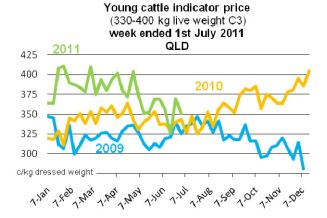


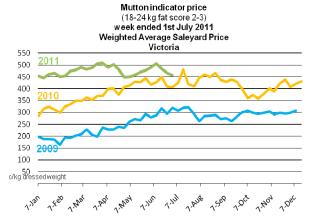




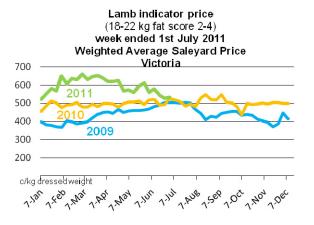


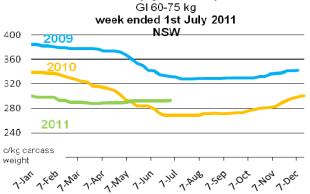
# 3.5. Livestock indicator prices





Baconer pig indicator price





# 4. Data attribution

#### Climate

#### **Bureau of Meteorology**

- Weekly rainfall totals: <a href="www.bom.gov.au/jsp/awap/rain/index.jsp">www.bom.gov.au/jsp/awap/rain/index.jsp</a>
- Monthly and last 3-months rainfall percentiles <a href="http://www.bom.gov.au/jsp/awap/">http://www.bom.gov.au/jsp/awap/</a>
- Temperature anomalies <a href="http://www.bom.gov.au/jsp/awap/">http://www.bom.gov.au/jsp/awap/</a>
- Rainfall forecast: <a href="www.bom.gov.au/jsp/watl/rainfall/pme.jsp">www.bom.gov.au/jsp/watl/rainfall/pme.jsp</a>
- Seasonal outlook: www.bom.gov.au/climate/ahead
- Drought statement: www.bom.gov.au/climate/drought/drought.shtml
- ENSO Wrap-Up: www.bom.gov.au/climate/enso/
- Soil moisture (BoM, CSIRO and the former Bureau of Rural Sciences): www.eoc.csiro.au/awap/

## Water

#### Murray-Darling Basin

Murray–Darling Basin Authority: <a href="www.mdba.gov.au/water/waterinstorage">www.mdba.gov.au/water/waterinstorage</a>

#### **New South Wales**

- New South Wales Water Information: <a href="http://waterinfo.nsw.gov.au/">http://waterinfo.nsw.gov.au/</a>
- New South Wales Office of Water, Department of Environment, Climate Change and Water: www.water.nsw.gov.au/Home/default.aspx
- Available water determinations register:
   www.wix.nsw.gov.au/wma/DeterminationSearch.jsp?selectedRegister=Determination
- Snowy Hydro: www.snowyhydro.com.au/lakeLevels.asp?pageID=47&parentID=61&grandParentID=4

#### Queensland

- Sunwater: www.sunwater.com.au
- seqwater: <a href="http://seqwater.com.au">http://seqwater.com.au</a>

#### **South Australia**

- SA Water: www.sawater.com.au/SAWater/Environment/TheRiverMurray/River+Murray+Levels.htm
- South Australian Department of Water: <a href="www.waterforgood.sa.gov.au/">www.waterforgood.sa.gov.au/</a>

#### **Victoria**

• Goulburn-Murray Water: www.g-mwater.com.au

#### Water trading

• Waterexchange: www.waterexchange.com.au

#### **Commodities**

#### Fruit and vegetables

Datafresh: <u>www.datafresh.com.au</u>

## Mutton, lambs, wheat, barley and grain sorghum

The Land: hardcopy or online at <a href="http://theland.farmonline.com.au/markets.aspx">http://theland.farmonline.com.au/markets.aspx</a>

#### Cattle, mutton, lambs and pigs

Meat and Livestock Australia: <a href="www.mla.com.au/Prices-and-markets">www.mla.com.au/Prices-and-markets</a>

#### Canola

Weekly Times: hardcopy