### OCTOBER 2012 AGRICULTURAL CONDITIONS REPORT

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(see Dept. Primary Industries agricultural conditions map)

Area in **Drought**: 0% (no change)

Area in **Marginal**: 30.1% (increase from 15.9%) Area in **Satisfactory**: 69.9% (decrease from 84.1%)

### **NEW DECLARATIONS (moved into drought)**

Nil

### **REVOCATIONS** (moved out of drought)

Nil

### **ALTERATIONS** (moved between marginal and satisfactory)

DECLINED (satisfactory to marginal)

Mid-Coast LHPA Whole of district moved from satisfactory to

marginal

New England LHPA Part of district moved from satisfactory to marginal Part of district moved from satisfactory to marginal

### IMPROVED (marginal to satisfactory)

Nil

### **RETROSPECTIVE** (alterations to previous declarations)

Nil

# RAINFALL FOR SEPTEMBER 2012 (see Bureau of Meteorology rainfall maps)

NSW received little rainfall across most areas during September except in a small section in the southern highlands. The western half of NSW generally recorded falls up to 50 mm, though the some areas received no rain. The eastern half of NSW generally recorded falls of 10mm up to 50mm, though some areas in the southern part received falls of up to 200mm.

The three monthly deciles shows that the rainfall has ranged from very much below average in small parts across eastern NSW and a small part in the north western part of NSW through to above average in a part of the central far western part of NSW.

The six monthly deciles shows that the rainfall has ranged from lowest on record in a small part in the south west to average in other parts of State.

The twelve monthly deciles show that all of NSW has received average to highest on record rainfall.

# CROPS AND PASTURES (provided by Peter Matthews, Dept. Primary Industries, 10 October 2012)

The condition of the States 4.79 M ha winter crop has deteriorated, following a downturn in seasonal conditions over the last eight weeks across the State.

Frost damage has been a major concern through late August and early September as many crops began to reach more susceptible growth stages. The State suffered a particularly significant frost event over the period of 31 August through to 3 September which caused significant damage in canola. The level of damage was made worse due to moisture stress.

Reports are indicating that in low lying paddock areas individual yield losses of up to 80% have occurred in canola. The full extent of the damage will not be known until growers are able to assess all crops in more frost prone areas. If frosty conditions continue through early to mid October further crops yield losses will occur, with the focus on cereal crops as the potential for damage increasing as it moves into the more susceptible flowering and early grain fill stages.

Further good rainfall is needed across the entire State to consolidate this year's crop.

Currently in specific regions the cropping outlook is:

**North** – Prospects for the 1.07 M ha of winter crop continue to rely on further rainfall by mid October, particularly for areas that missed useful rainfall on 29 September. The best of the northern region still remains the early sown crops in the area east of Moree, around Croppa Creek and North Star.

**Centre** – Conditions for the estimated 1.90 M ha to be harvested are variable across the centre, with many areas receiving no useful rainfall in August and only 20-30% of the long term average rainfall for September. Crops in these areas were reliant on subsoil moisture built up earlier in the year to carry them through this period. Crops are not as developed as those in the north west, so further rainfall by mid October may help hold yield potentials for later sown crops. Early sown crops have set there yield and now beginning to mature and dry down.

**South** – Currently an estimated 1.77 M ha of winter crop will be harvested. Soil moisture profiles are fast drying down given recent warmer days and drying winds in late September. The southern region has also received below average rainfall over the months of August and September. The best of the region continues to be along the Olympic Highway and east. The rain of 29 September missed most of the Riverina and South West Slopes. The later sown crops that missed the end of September are stressing.

Irrigation allocations vary across the State, with general security allocations currently 0% in the Lachlan, 14% Lower Namoi, 39% Belubula, 49% Gwydir, 57% Macquarie, 64% Murrumbidgee, 78% Peel, with the remaining valleys at 100% allocation. These general security allocations do not include any carry over water from 2011-12.

Pastures have struggled through September in most of the lower tablelands, slopes and plains regions. This period was critical for building up biomass and for flowering and seeding in annual species. In many regions continued hand feeding of stock is an ongoing issue and if pastures do not pick up in October, many growers will need to continue this through summer as standing paddock feed will not be available. With the dry conditions also affecting crops, some growers have taken the option to continue grazing oat crops and other grazing cereals to reduce the need for hand feeding or finish off saleable stock.

### WINTER CROPS

Crop development varies across the regions, with the stages of development depending on sowing time and regional conditions. Development ranges from head emergence to grain fill in early sown crops, to late tillering and stem elongation for June sown crops. Late sown crops have been slow in development, as a result of the drier and colder conditions through the August-September period. If no further major rain events eventuate by mid October, for those regions that missed the rain of 29 September, further reductions in yield estimates and crop area is certain.

Wheat –The current estimates place the area to be harvested at 2.76 M ha. The area is down 6.1% on the July forecast of 2.93 M ha following drier conditions, resulting in some crop area lost in western areas and used for grazing. The frosty conditions in early September have caused concern, with isolated damage being reported in earlier sown crops, particularly those in the central and north western areas that were more advanced and in the late boot and early head emergence stage.

Nitrogen management in crops has been a widespread challenge for many growers in central and southern NSW as low soil nitrogen levels led to crops showing nitrogen deficiency symptoms. Dry conditions in August and early September, limited topdressing opportunities and a shortage of nitrogen fertiliser added to the problem with demand exceeding fertiliser stocks on hand in Australia. Low grain protein levels were a concern for those crops that did not receive additional nitrogen through the season. However, with current dry conditions likely to continue in the short term, the drop in yield prospects may offset some of the potential for low protein grain.

Stripe rust was slow to develop through August due to the drier cold weather in most regions. The warmer conditions in mid September favoured quick development in central and southern NSW, with any susceptible varieties suffering damage if they were not protected with fungicide.

Yellow leaf spot has been reported in many of the susceptible varieties through late July and early August. Some early canopy damage has occurred in crops but the drier conditions in late August and early September have stalled disease development in most areas. A prolonged wet period would now be needed for the disease to cause any major damage to crops.

**Barley** – The estimated 626,970 ha to be harvested is only 14,570 ha lower than predicted earlier. Earlier sown crops in the north-west are in the early stages of grain fill, with later crops in the south-east at late tillering to early booting stage. Further rainfall in early October will be needed to maintain yield potentials.

**Oats** – Current estimates for harvest are 246,220 ha, down 129,400 ha on the estimated sown area in July. 55% of the drop in area of oats is in the northern western region which has been grazed out, as growers use crops for stock feed. With continuing dry conditions forecast, production may drop further as growers consider continuing to graze crops in the centre and south to provide much needed feed for stock.

**Triticale** – The current harvest estimates are for 112,320 ha. The major production areas remain in the South West Slopes and eastern Riverina which have been more fortunate with rainfall so far this season.

**Canola** – Current estimates are for the harvest of 676,850 ha. Yield potential has been reduced by dry conditions across the centre and north from mid July and from late August in the south. Severe frosts in late August-early September have impacted crops right across the State, with losses as high as 80% being reported from western areas of the centre and up to 50% in some eastern crops. Damage estimates will be difficult to make on many crops prior to harvest. Rainfall by mid October is desperately needed to consolidate current estimates.

**Chickpea** – An estimated 203,565 ha is expected to be harvested. Chickpeas have been impacted by cold temperatures, dry conditions and some frosts which have delayed flowering and pod set and therefore reduced yield potential.

**Faba bean** – An estimated 59,280 ha is expected to be harvested, about 95% of the crop is in the north where an early sowing opportunity has enabled the crop to achieve good yield potential. The effects of frost can be easily seen in many crops but has not been detrimental. Harvest of faba beans in the north west has commenced.

**Field pea** – An estimated 45,000 ha will be harvested, with potentially a further 10% of this area sown to be sprayed out (brown manured) to meet weed and soil nitrogen management objectives.

**Lupin** – 50,890 ha is expected to be harvested across the State. Later sown crops are being affected by the dry spring conditions, with yield potential now dropping.

### **SUMMER CROPS**

Prospects are optimistic for summer irrigated crops but dryland areas in the north are in need of a planting rain. Subsoil moisture is good in the north but seedbeds are now too dry to sow in most areas. Sowing of irrigated crops has commenced in all regions.

Early estimates are for plantings of 564,820 ha (excluding rice), 55% of which is cotton.

# RAINFALL & TEMPERATURE OUTLOOK – October to December 2012 (see Bureau of Meteorology rainfall and temperature outlook and El Nino Southern Oscillation [ENSO] wrap-up)

The chances of receiving above median rainfall are from 35% along parts of the southern border up to 60% along parts of the far north western border NSW.

The chances that the average maximum temperature will exceed the long-term median maximum temperatures is from 65% along the mid to north coast of NSW, with up to 80% in the south western half of NSW.

The chances that the average minimum temperature will exceed the long-term median minimum temperatures range from 60% in the eastern half and a smaller section of the central far western part of NSW up to 65% across the majority of the western half of NSW.

Oceanic indicators remain close to El Niño thresholds. However, atmospheric indicators, such as the Southern Oscillation Index (SOI) and trade wind strength, remain near-normal. Climate models surveyed by the Bureau of Meteorology suggest sea surface temperatures in the tropical Pacific Ocean will maintain values around typical El Niño thresholds before easing towards more normal values by the end of 2012 or early 2013. Observations also suggest that current Indian Ocean temperature patterns are typical of those historically associated with decreased spring rainfall over parts of southern, central and northern Australia.

Tropical Pacific Ocean temperatures have generally cooled over the past fortnight, easing towards neutral values (neither El Niño nor La Niña). Other ENSO indicators such as the Southern Oscillation Index (SOI) and tropical cloud patterns have remained at neutral levels. Given September is the time of year when El Niño events consolidate, this recent cooling is considered somewhat unusual, hence the risk of an El Niño event remains.

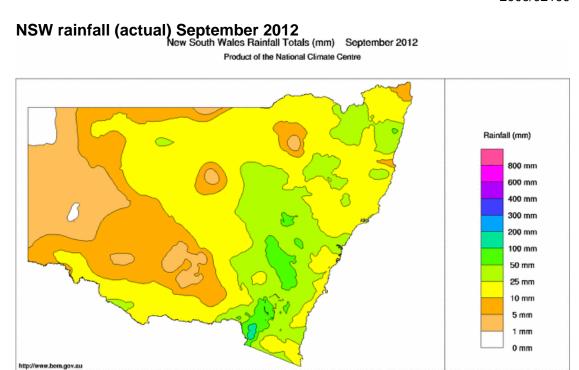
Despite the shift towards neutral conditions, the tropical Pacific remains warmer than average. When combined with the patterns of cloud and ocean temperatures in the Indian Ocean, conditions continue to favour below average spring rainfall over much of Australia.

The Indian Ocean Dipole (IOD) is currently positive, with weekly values of the IOD index consistently above positive thresholds for the past two months. Outlooks from the Bureau's climate model indicate the IOD will most likely remain positive throughout the remainder of spring. A positive IOD is typically associated with decreased winter and spring rainfall over parts of southern, central and northern Australia.

# **STATE WATER STORAGES**

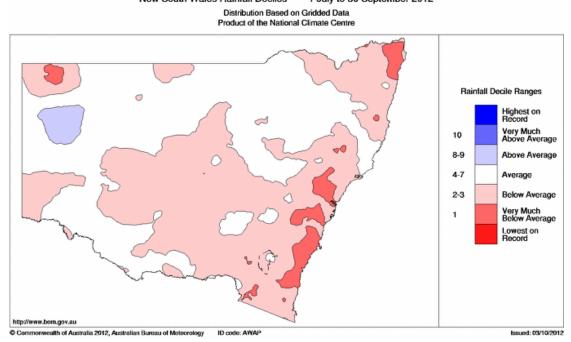
River Valley	11 September 2012	8 October 2012	Change
Storage Dam, Nearest Town	Level %	Level %	%
Border Rivers			
Pindari Dam, Inverell	91	89	2
Lower Darling			
Menindee Lakes, Broken Hill	unk	n/a	unk
Ourselle Weller			
Gwydir Valley	400	0.7	0
Copeton Dam, Inverell	100	97	3
Namoi Valley			
Keepit Dam, Gunnedah	99	95	4
Split Rock Dam, Manilla	87	87	0
Chaffey Dam, Tamworth	100	100	0
•			
Macquarie Valley			
Burrendong Dam, Wellington	100	97	3
Windamere Dam, Mudgee	60	60	0
Oberon Dam, Oberon	98	n/a	unk
Lachlan Valley			
Lachlan Valley	99	98	1
Wyangala Dam, Cowra Carcoar Dam, Carcoar	100	100	0
Carcoar Dam, Carcoar	100	100	U
Murrumbidgee Valley			
Burrinjuck Dam, Yass	99	98	1
Blowering Dam, Tumut	97	92	5
Murray Valley	0.5	00	(0)
Dartmouth, Mitta Mitta (Vic)	95	98	(3)
Hume Dam, Albury	97	98	(1)
Hunter Valley			
Glenbawn Dam, Scone	100	100	0
Glennies Ck Dam, Singleton	97	96	1
Lostock Dam, Singleton	99	98	1
On and all Arran			
Coastal Area	400	00	
Toonumbar Dam, Kyogle	100	99	1
Brogo Dam, Bega	100	100	0

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# NSW rainfall (3 month decile) July to September 2012 New South Wales Rainfall Deciles 1 July to 30 September 2012

Commonwealth of Australia 2012, Australian Bureau of Meteorology



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### Information sources:

# NSW rainfall maps

http://www.bom.gov.au/jsp/awap/rain/index.jsp?colour=colour&time=latest&step=0&map=totals&period=month&area=ns

# Rainfall outlook

http://www.bom.gov.au/climate/ahead/rain.seaus.shtml

# Temperature outlook

http://www.bom.gov.au/climate/ahead/temps\_ahead.shtml

### ENSO Wrap-Up

http://www.bom.gov.au/climate/enso/

# Drought Statement

http://www.bom.gov.au/climate/drought/drought.shtml

# State Water Storage Report

http://waterinfo.nsw.gov.au/water.shtml?ppbm=STORAGE\_SITE&da&3&dakm\_url