GIWA Crop Report

Grain Industry Association of Western Australia

5th June, 2015

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Summary

Overall, growers in Western Australia are still optimistic that the 2015 season can deliver average yields. Early crop establishment with little or no in-crop weed burden is the basis for this optimism, provided there is a return to an average season with well spaced rainfall events through winter.

Widespread early rains across the WA grainbelt in April provided an early sowing opportunity and planting programs have all but finished with slightly more total crop area planted than in 2014. However, these good opening rains have been followed by a month of dry warm weather across most of the grainbelt.

Accordingly, the WA Plant Available Soil Moisture map for June 1 (page 4), from the Australian Export Grains Innovation Centre (AEGIC), shows a sharp decline in soil moisture in all zones. The west coast portion of the Geraldton zone, the entire Kwinana zone, and the northern half of the Albany zone have all shown a large reduction in available soil moisture over the last 3 weeks.

In contrast to the Bureau of Meteorology forecast for a wetter than average start to winter (May to July), climate modelling work by AEGIC and the Department of Agriculture and Food, Western Australia (DAFWA) is pointing towards a much drier average winter rainfall across the grainbelt. This presents a real risk to the yield potential for the 2015 WA grain crop.

Crop establishment has been generally good in all zones. On difficult soil types, non-wetting sands, pale sands, and heavy textured soils, establishment has been poor due to the lack of soil moisture from the drier than average May.

Where there is a good level of deep soil moisture from Cyclone Olwyn and the early April rains, crops have established well and have good yield potential. On the negative side, these crops are already using the deeper soil moisture which should be the reserve for spring growth and grain development. Additionally, the warm May temperatures have accelerated growth in wheat to the point where some wheat crops in the Geraldton and Kwinana east zones are expected to be in ear by late June.

On the positive side, crops in all zones are mostly free of weed competition due to the extensive pre-sowing weed control enabled by the autumn rain. Growers do not need to control weeds as they normally might be, and the available soil moisture is wholly available to the crop.

Due to the dry May, some wheat area was not planted in the Kwinana east zone, as growers reached decisions on planting the final paddocks in their programs. In the Albany zone, particularly in the northern districts, some pasture paddocks planned for canola or wheat will remain in pasture to provide stockfeed, or because they are too dry to sow now and their yield potential has declined.

WA planting area estimates (hectares)

Port zone	Wheat	Barley	Canola	Oats	Lupins	Field pea	State total
Kwinana	2,457,000	493,000	418,000	136,000	104,000	6,000	3,614,000
Albany	717,000	445,000	316,000	86,000	29,000	4,000	1,597,000
Esperance	500,000	288,000	270,000	6,000	9,000	12,000	1,085,000
Geraldton	894,000	26,000	139,000	8,000	155,000	1,000	1,223,000
Totals	4,568,000	1,252,000	1,143,000	236,000	297,000	23,000	7,519,000
% change from 2014	1.7%	17.8%	-8.3%	31.1%	6.1%	-8.0%	3.2%

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Kwinana Zone

The season potential for the Kwinana zone, is average overall. Potential crop yields across the zone are highly variable due to varying soil moisture levels. Varying management strategies are also a significant factor in the different levels of crop development across the districts in the zone.

Overall, crops in the eastern districts are in good condition, average in the central districts, while crops in the western districts have low germination in paddocks with less crop development because seeding progressed at a slower pace.

The good efficacy of double knock weed control pre-sowing means there are few weed problems now and probably fewer than usual in-crop to control later. The coming weed control program will be as much about reducing the 2016 weed burden as crop competition this year.

The Midlands

Cropping programs have all but finished in the Midlands region. Seeding has gone well and confidence is high. Season potential is above average for districts with more than 80 mm of soil moisture in eastern parts; however it is drier around the Miling district.

Overall, there have been no changes to sowing plans for the various crop types. All crops are very clean with no weeds to speak of after effective pre-sowing control.

Approximately 15% of the crops sown in these districts needs rain to germinate. This is soil type dependent with heavy clay and light sandy soils needing rain most.

Canola crops sown in April are already at the 6 to 7 leaf stage, whilst later sown canola has either just germinated or has reached the 2 leaf stage.

Cereal crops sown early are at the 5 leaf stage whilst later sown crops are just emerging. Early sown cereal crops with advanced development for this time of year may face a heightened frost risk.

Kwinana east

In the Kwinana East zone, crops are all planted with the dry May causing a few growers to drop a small proportion of their planned seeding program, principally wheat. There has been a small shift to more canola where the choice was wheat or canola.

The small areas planned for Chickpea plantings were also largely deleted from seeding programs.

Cereal crops sown in mid-April are at the 4 leaf stage, while later sown crops have yet to germinate and need rain. The warm temperatures in May have caused accelerated development of early sown cereals, especially for the Mace variety.

Canola crops sown early are at the 6 leaf stage, while later sown canola is at the cotyledon stage.

Crops are generally free from weeds at this stage. There is some damage to canola from Bryobia mite which will require attention.

There is enough nitrogen in the ground now for average yields, with the need for further applications to be assessed later.

Kwinana west

For the central and western parts of the Kwinana west zone, subsoil moisture levels will be the key to success this year. Growers who pushed hard to plant while moisture was in the topsoil have established crops with roots accessing deeper moisture. Canola crops sown deep to 50mm early in the program into warm soil and good soil moisture levels have germinated well. Crops sown into heavier textured soils have a poorer overall germination. There is mostly adequate nitrogen in the ground for now.

Growers' cropping programs have finished with little change to the planned area and commodity mix. Pasture paddocks destined for a late sown cereal crops will now stay in pasture because the topsoil is too dry and hard or the feed is needed for livestock.

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Albany Zone

The cropping programs in the Albany zone are almost complete. There is good soil moisture levels throughout the Lower Great Southern region. Further north, cropping programs are 90% complete.

In the Lakes region, cropping is about 95% complete. Crops have mostly germinated and crops in the Newdegate to Pingrup, and Lake King to Mt Madden districts are looking very good.

All crops are clean at this stage after good pre-sowing weed control, but the next rainfall events are likely to see weed loads increase and require attention.

Canola crops are well established, with early sown crops at the 4 leaf stage with the majority at cotyledon to the 2 leaf stage. Cereals crops are reaching the 2 leaf stage, with the majority of cereal crops just emerging. Lupin crops look very good and are at the 6 leaf stage with fast growth.

Soil moisture conditions vary across the districts with soils in southern parts, such as the Kendenup district, still damp whilst soils in northern districts like Tambellup are quite dry. In the Woodanilling to Arthur River districts growers are very concerned about the lack of rain. Some canola crops in these districts, sown 4 to 6 weeks ago in poor soils such as gravel and non-wetting sands, still haven't germinated. Likewise, crops sown on non-wetting soils in the Kojonup-Frankland area are struggling to germinate

Potential crop yields in these districts are on a knife edge after a very dry and cold May resulting in slow to stopped growth, and poor germination in canola sown since early May.

Esperance Zone

Conditions are generally good in the Esperance zone. Cropping plans didn't change significantly during seeding.

All crops are largely weed free, mostly havegerminated well with adequate soil moisture for young plants. Growers in the Ravensthorpe district growers reported an excellent seeding season. Crops sown on some patches of non-wetting sands are still to fully germinate. The north and north east districts (Beaumont and Grass Patch to Salmon Gums) are dry and need a soaking rain to progress.

Rainfall of 10 to 25mm across the zone in late May is helping maintain average potential. Grower confidence at this stage is high.

It's too early to make nitrogen applications so growers generally are waiting to see how the season shapes up.

Some canola crops are at cotyledon stage but most have reached the 4 to 5 leaf stage.

Cereal crops are at least at the 2 to 3 leaf stage

Widespread rainfall events by the middle of June are needed to ensure the full potential for crops in the zone.

Geraldton Zone

There are distinct differences in the potential of crops in the Geraldton zone. Crops that were sown in April and early May into paddocks with good soil moisture conditions look very good. Extensive summer rainfall has the Mullewa/Morawa/Perenjori districts all looking excellent.

Crops in the Irwin, west of Mingenew, Three Springs and Carnamah districts were generally late sown and not much has germinated to date. This is mostly due to the lack of summer rain, and growers held back seeding to gain pre-sowing weed control.

Overall, 90 % of programs are finished, while seeding in the districts north and east of Geraldton is complete. Crops on sandplain soils are up and away with later sown crops mostly germinated. Crops sown in districts north and east of Geraldton, are 80% germinated, while in districts south of Geraldton, only 15% of crops have germinated especially those sown on light sands. Generally there are no significant weed problems.

Some Crusher and variety 404 canola crops are starting to flower after early April sowing of these crops on the better quality sands and loams. There is a hint of wilting in some crops but nothing dramatic. Roundup Ready canola has had one roundup spray and won't require a second. Weed Web moth and Diamond Back moth are requiring control to prevent widespread damage later.

Cereals crops are at the 4 to 5 leaf stage and this means a change of chemical type for post emergent weed control with more hormone sprays (esters) needed. There are indications that some early sown Mace wheat crops may 'bolt' with very warm daytime temperatures. The Yield Prophet model is indicating adequate nitrogen levels for cereals for now with the need for more applications to be assessed as the season unfolds. However, the model doesn't account for early heat stress which looks like it may impact on yield potential.

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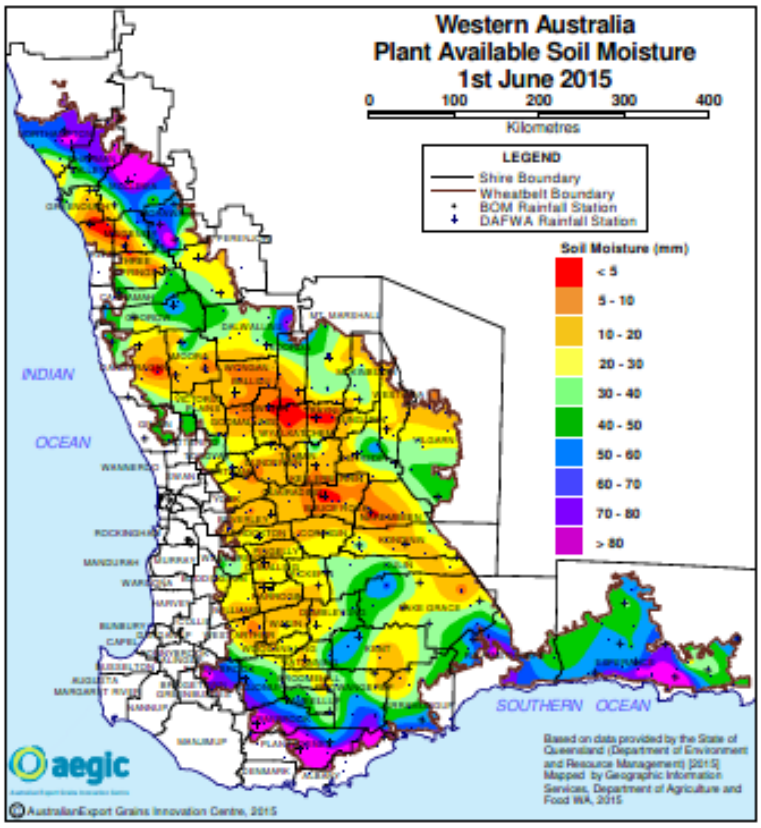
Season Outlook

The largely negative outlook from climatology staff at DAFWA and AEGIC contrasts strongly with the positive three month outlook for rainfall from the Bureau of Meteorology (May to July). Unfortunately, the immediate weather forecast supports the negative outlook.

Soil moisture conditions- Dr David Stephens
Australian Grains Export Innovation Centre

The following maps show the current (June 1) soil moisture conditions in Western Australia.

- The current conditions in the Kwinana zone and North Albany zone are ranked below average compared to all years, 1916 to 2014. All other regions are about average in comparison.
- The level of plant available moisture remains high in the north east districts, the lower south west and the south coast. Elsewhere, the amount of available moisture has declined markedly since May 18, particularly for the west coast of the Geraldton zone, the Kwinana zone and large portions of the Albany zone.



Weather Ahead Summary – Outlook Winter 2015, Courtesy BoM issued 28 May 2015

- A wetter-than-normal winter is likely for the southern half of WA. Odds for above average winter totals are close to 50% for the remainder of the country.
- There are two main climate influences for the current outlook. Elevated sea surface temperatures in the Indian Ocean, coupled with warm temperatures in the tropical Pacific Ocean, are tending to enhance rainfall in WA.
  The El Niño pattern in the tropical Pacific is having a drying influence in the eastern half of the country.
- Outlook accuracy for winter is moderate over the southern half of WA.
- Parts of inland WA may see a cooler season

Additional information can be sourced from:

- **AEGIC: Yield and Seasonal Forecasting**
- **AEGIC: ENSO Summary webpage**
- **DAFWA: Statistical Seasonal forecast**
- **BoM: WA Seasonal Rainfall Outlook, next 3 months**
- **BoM: Month to date rainfall for WA**
- **16 day rainfall outlook (WX maps)**
- **BoM: Decile rainfall for March to May 2015**

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