

2018 Season Update

Despite the impact of recent storms, spot fires and rainfall events, the earlier impact of frosts, a dry September, and the confined strip of very dry conditions across the north and eastern Albany zone, across the Western Australian grain belt grain yields have been better than expected. Total tonnage projections continue to rise as more area is harvested. Harvest is later than usual due to the late break to the season and will push into the Christmas period with just over 50 per cent completed. The northern regions will wind up over the next week or two but the southern regions in the west and south coast still have plenty to go. The cool conditions across the state during October, coupled with rainfall in early October in the central regions and some parts of the southern regions, have contributed to projections of an increase of around 2.5 million tonnes of total grain for WA since the start of harvest.

Cereal grain quality and protein has been very good in the medium and higher rainfall regions, reflecting the extra nitrogen applied following the very good growing conditions early in the season. Proteins are more erratic in the lower rainfall regions with many deliveries of very low grain protein from yield dilution. Some barley deliveries are exceeding protein limits and there are incidences of high screenings for both barley and wheat from “over-cooking” crops with too much nitrogen.

Wheat protein in the lower rainfall regions, and to a lesser extent in the higher rainfall regions, is generally low again this year. This is partly due to new varieties bringing grain yields to a new potential, resulting in protein dilution from higher yields, and partly due to growers managing production risk and grain yields to 80 per cent potential and not chasing premium grades due to the lack of price spread over ASW.

Canola tonnage for the state is now expected to come in at the lower end of recent years’ production rather than well below recent production. Canola yields in the northern and western areas of the state are yielding well and the poorer areas are not the complete write off that was expected.

Clear trends this year are the increase in barley plantings to “non-traditional” areas and the success of some of the new higher-yielding varieties and weed control options they provide. Wide adaptation across the state of the newer noodle varieties has seen a similar expansion in the area planted. These trends are likely to continue. The success this year of hybrid canola again in the north, central and lower rainfall regions on suitable soil types will see an increase in plantings in the future, constrained only by seed supply.

2018 GIWA WA Crop Production Estimates December (tonnes)

Port zone	Wheat	Barley	Canola	Oats	Lupins	Pulses	State total
Kwinana	4,800,000	2,200,000	550,000	285,000	140,000	5,000	7,980,000
Albany	1,450,000	1,190,000	455,000	230,000	55,000	1,000	3,381,000
Esperance	1,340,000	685,000	330,000	20,000	50,000	35,000	2,460,000
Geraldton	2,100,000	240,000	270,000	15,000	350,000	2,000	2,977,000
Totals	9,690,000	4,315,000	1,605,000	550,000	595,000	43,000	16,798,000
% change to Nov 18	6.5%	10.6%	9.9%	0%	0%	-10.4%	7.3%

Note: the grain totals reported are for whole farm production. This includes on-farm seed and feed requirements as well as trade outside of the CBH network.

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Geraldton Zone

Harvest in the Geraldton port zone is about 80 per cent finished in the northern regions and 60 to 75 per cent finished in the south. The trend of crops yielding “better than they look” from the start of harvest last month has continued. Total grain production for the zone will not reach the records of 2016, although it is now obvious the region will go close to, or exceed, three million tones for the year. The above average grain yields coupled with good prices will see growers make up ground quicker than they could have imagined this time last year.

Crops on the lighter soils, deep ripped and limed country have once again handled the very dry finish to the season and the difference between those areas and the compacted, shallow and heavier soils is quite marked.

Canola yields have been good this year and many growers feel they are getting close to “nailing” consistent yields. The combination of hybrid varieties sown early on deeper ameliorated soils is working and this year has really highlighted this.

The relatively small area of barley in the region has performed well and will continue to expand driven by the recent high prices. Varieties are yielding closer to wheat than they have in the past and have the ability to control brome grass following surface amelioration. Wheat is still by far the dominant crop in the region although the area is getting pegged back each year by the increase in canola area, and to a lesser extent barley.

Kwinana Zone

The Midlands

Harvest is halfway through with most of the barley and canola in the bin. Wheat harvesting has ramped up in the eastern areas in the last week with most growers about a week behind where they would normally be at this time of the year due to the cool start and stoppages due to several storm events in the last month. The isolated and very severe storms this last week have resulted in crop loss to hail, although grain quality does not seem to have suffered too much to date. There are reports of growers in the eastern areas struggling with falling numbers in some paddocks.

Crops in the western areas of the region are only just average due to the very wet conditions in July and August. Moving east onto the heavier soils in the medium rainfall areas, crops improve dramatically, with most cereals yielding above average. This continues further east in the zone with areas around Dalwallinu and Kalannie having an excellent year.

Grain protein has been very good in the medium rainfall areas where more fertiliser was applied. A high proportion of barley is making malt and the majority of the noodle varieties are also making premium grades. Proteins drop off as you move east due to the grain yield dilution.

In the medium rainfall areas canola yields have only been average, with very good oil percentages around 47 to 50 per cent. Canola yields in the eastern areas have been excellent with some paddocks sown to hybrids yielding in excess of 1.5T/Ha.

Lupin grain yields have been good with most in excess of 1.5T/Ha and milling oats have yielded exceptionally well with some paddock averages close to 4T/Ha.

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Kwinana West

There is some barley left to go and growers have just started to get into the wheat in the past week. The majority of canola is now in the bin and the majority of lupins and oats is finished. Grain yields have been exceptional for all crops except canola and it is not too difficult to find 4T/Ha barley, oat and wheat whole paddock averages. Barley grain quality has been very good with more than 50 per cent of deliveries making malt grade. The general feeling is that total tonnage in West Kwinana will exceed the record year of 2016. Apart from canola, the cereals escaped with little frost damage. It is very obvious now that the late May start has had a major impact on reducing the incidence of frost, particularly in wheat, as areas of paddocks that germinated in mid-May have no grain at all as result of frost.

Barley has been a standout all year and some paddocks harvested to date are yielding between 5 to 6T/Ha on whole paddock bases. It has only been at these very high yields that protein has fallen away from the yield dilution. There was an increase in barley area in the region of around 20 per cent from 2017 and with the high grain yields so far, this region will contribute significantly to produce a record WA tonnage in 2018.

The wheat quality harvested so far is very good with most noodle varieties making the grade. Wheat delivered so far is 80 per cent ASW rather than APW, this may change as more crop is harvested, although the recent trend in previous years for deliveries across the state is that a struggle for protein is likely to continue.

Canola grain yields are generally lower than expected due to most having some frost damage. The total tonnage for the zone will still be up on our November estimates as it is now clear that there was slightly more canola planted in the region than previously reported.

Oat grain yields have been excellent and whilst the cash price is high at present, a price of \$300/tonne with these yields in milling oats competes well as an option with feed barley, particularly when you consider the frost mitigation benefits.

Lupin grain yields have been very good with many crops yielding over 2.0T/Ha. The small area of chickpea has gone well again this year with yields just over the 1.0T/Ha mark.

Kwinana East

The majority of barley in the zone has now been harvested, yielding less than was hoped for. The very dry September was too much for most crops except for the lighter country and fallow from 2017. Barley grain yields have been in the low 1.0T/Ha in the northeast, increasing to 2.0T/Ha plus in the southern areas. Wheat benefited more from the rains in October and most paddocks are easily out yielding those that were in barley. Wheat south of Merredin is yielding around 2T/Ha with some up to 3T/Ha. The grain yields are quite variable reflecting the observations throughout the year where crop growth has been vastly different depending on the intensity of storms, soil type and previous crop type.

The area of canola in the region was reduced from previous years due to the late start and lack of confidence by growers in the crop's ability to return a profit. Paddock grain yields range from 0.4 to 0.5T/Ha up to 1.0T/Ha on the better fallow country. Grain yields for all crops picks up as you move south of the Great Eastern Highway towards Narembeen and Bruce Rock, with cereal grain yields in the 2.0 to 2.5T/Ha range.

Albany Zone

Western Albany

Crops in the Western Albany zone are performing better than was expected a month ago with barley yields well over 4.0T/Ha in most cases and a higher than normal percentage making malt. Canola yields are variable with the better paddocks yielding 1.8 to 2.0T/Ha down to less than 1.5T/Ha in the wet areas, and dropping off to below 0.5T/Ha in the north and eastern areas of the zone from frost.

Little wheat or lupins have been harvested to date.

As harvest gets into full swing over the next month most growers west of the Albany Highway are expecting an above average harvest. Grain yields are expected to drop off in eastern areas of the zone due to low rainfall and frost.

Southern Albany

As harvest cranks up in the region the big surprise in the medium to higher rainfall areas is the yield of barley with many paddocks which were sown late, sandblasted and then frosted achieving in excess of 3T/ha. The grain size is up to 4mm in some cases which is unprecedented. The large grain size is significantly contributing to yield and to many barley crops “yielding higher than they look”. The cool finish to the season has enabled these crops to continue to fill grain and this trend is also evident to a lesser extent in the eastern and north eastern lower rainfall areas of the region.

Barley grain quality has been affected by the recent rains with loads being downgraded due to colour or germ-end stain. Final tonnage for barley in the region is likely to be similar to recent years as even though the grain yields are down on averages the increase in area planted is up.

Canola deliveries will be down this year in the region by around 15 per cent due to less area planted and lower yields impacted by the difficult start to the season and frost. The intended tightening of delivery standards for snail contamination next year has instigated more grading of loads and growers trialling rollers to reduce the chance of loads being rejected at the bin. There are very few reports of rejected loads to date in the zone for snail contamination.

Harvest has not been as dismal as expected for the areas in the zone to the east and north that received well below average rainfall for the year. Whilst canola grain yields are low, with many less than 0.5T/Ha, wheat is yielding more than expected. Barley and canola was more impacted by the frosts and with the wheat maturing later, has made up some ground from the late rains in October. Grain yields for all crops north and east of the ranges are well below average although many wheat paddocks will at least break even on a gross margin basis.

Eastern Albany (Lakes Region)

There are no surprises in crop performance in the region with most crops harvested to date performing as expected. Barley and canola have had the top taken off them by the frosts and combined with below average rainfall for the year and the very dry September, yields are generally below average. The only bright spot in the region is wheat which has benefited more than barley and canola from the isolated late rains with crops that looked like they may yield 1.5T/Ha returning 2.0 to 2.2T/Ha.

The barley malt to feed ratio is around 50 per cent, with a fine line between low protein and high screenings. For barley and wheat the grain protein percentage is a direct inverse to yield. This is similar to other low rainfall regions of the state.

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Wheat yields range from 3T/ha plus in the better paddocks around Kulin and Kondinin and west to Corrigin, down to 1.8 to 2.0T/ha closer to Lake Grace. The gradient of yield drop off from north of the region to south includes pockets of country that benefited from late rains next to those that received very little and the grain yield ranges reflect this. Areas to the east around Hyden have suffered significant frost damage particularly in the canola, whilst south to Lake Varley, cereals are yielding 2.0 to 2.3T/ha.

Lupins have generally performed well with yields in the 1.0 to 1.5T/ha range which is better than expected considering the slow start to the season.

Frost has had a significant impact for some growers on low lying country due to the growth stages of crops when the frosts hit. In general, comments all year that low yields are more due to the lack of rain than the frost still ring true.

Esperance Zone

Harvest in the zone has been slow this year due to the cool conditions and interruptions from rain events. Most deliveries to date are canola and barley. The barley in the central regions has been sensational with grain yields in excess of 5T/ha common. Yields fall off dramatically in the north to around 1.5T/ha from lack of rain and right on the coast from waterlogging, although other than those areas barley grain yields are up to their new “normal” levels. Canola grain yields are only just average due to the late difficult start. Total tonnage delivered in the zone will be well down.

Wheat harvest is just getting underway and early indications are that yields are excellent in the central regions and protein is very good.

The areas in the west of the zone that have struggled all year from the lack of rain are yielding slightly more than expected. Canola yields are in the order of 0.3 to 0.4T/ha and barley in the low 1.0T/ha region whilst wheat has benefited more from the late rains and in some cases is yielding just over 2T/ha. This is remarkable given there was just over 110mm of effective growing season rainfall.



Season Outlook, December 2018

Ian Foster, Department of Primary Industries and Regional Development

DPIRD Climate Summary

November and December to date have seen thunderstorm activity over the central and eastern parts of the grainbelt. Some heavy falls have been recorded, though they have often been patchy. Rainfall in November was below average for most of the region except the northeast and east. Spring rain totals (September to November) followed this pattern, with western and southern parts of the grainbelt being much drier than normal while the east was wetter than normal.

The seasonal rainfall outlook from DPIRD's statistical model for December 2018 to February 2019 shows normal chances for rainfall over this period, meaning there is no preference towards either wetter or drier conditions. About three quarters of international climate models also have a preference towards drier than normal conditions in this period, with the remainder having a neutral seasonal rainfall outlook. This contrasts with outlooks in recent years, where a minority of models indicated below normal rain for summer.

Bureau of Meteorology seasonal outlook summary

- The summer (December 2018 to February 2019) climate outlook, issued 29 November 2018, indicates large parts of WA, Queensland and the top end of the NT are likely to be drier than average. The rest of the country shows no strong push towards a wetter or drier than average season. See Figure 1.
- Warmer than average days and nights are likely for almost all of Australia for December to February.
- Development towards El Niño in the tropical Pacific Ocean continues, with outlooks suggesting El Niño conditions are likely through the summer months. However, El Niño typically has a weaker influence on rainfall in southeastern Australia during summer than it does in winter and spring.
- The current positive Indian Ocean Dipole (IOD) has been a significant contributor to dry conditions in southeast Australia. However, models expect the positive IOD to follow its normal seasonal cycle, and decay by early summer.

Additional information can be sourced from:

[DAFWA: Seasonal Climate Information](#)

[DAFWA: Soil Water Tool](#)

[BoM: Seasonal Rainfall Outlook, next 3 months](#)

[BoM: Decile rainfall for September to November 2018](#)

[BoM: Landscape soil water balance](#)

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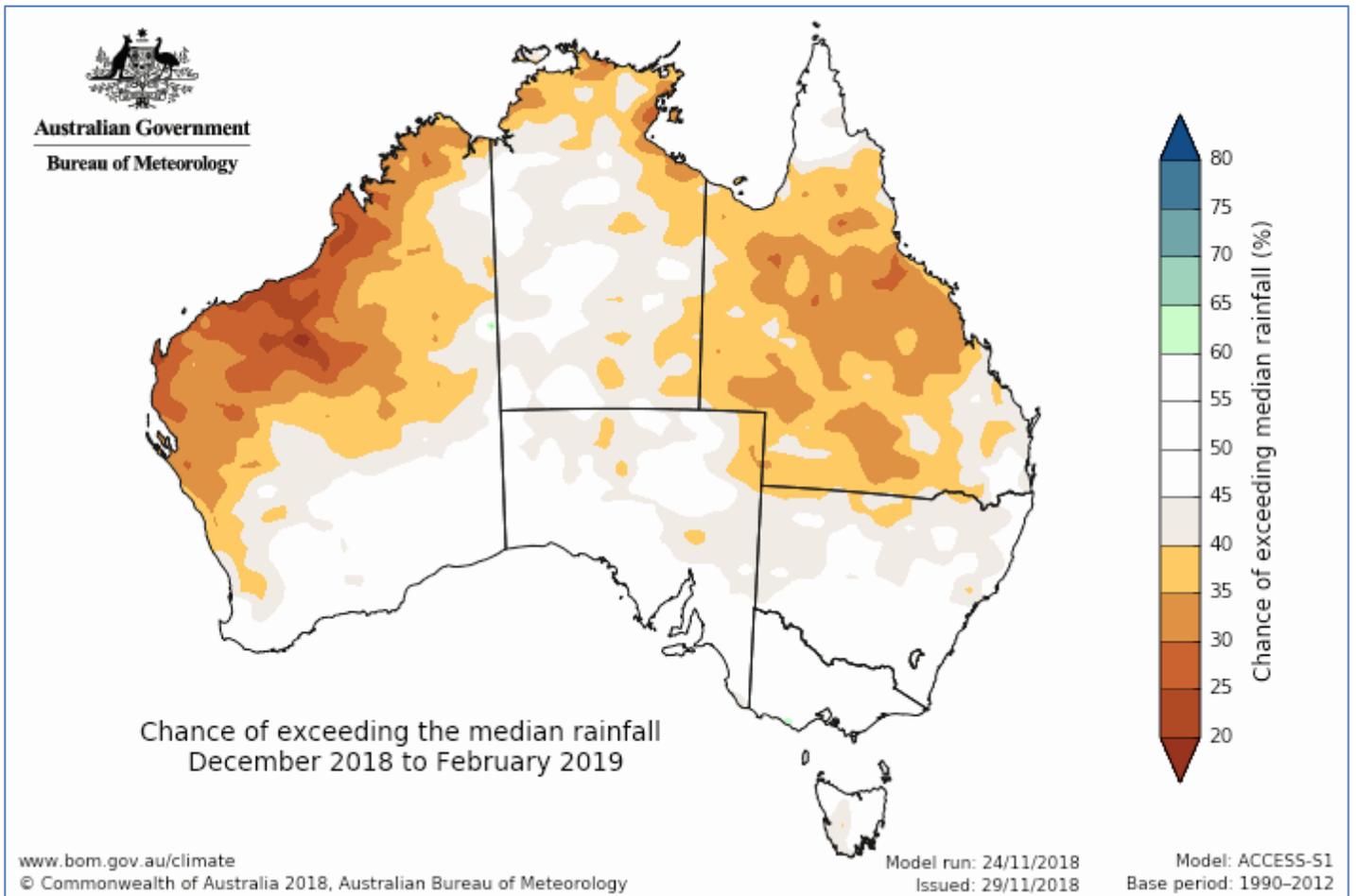


Figure 1. Seasonal rainfall outlook for summer 2018/19, from Bureau of Meteorology.

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