PO Box 1081, BENTLEY DC, WA 6983

-61 8 6262 2128 📵 info@giwa.org.au 🕟 👣 @GrainIndustryWA

14 August 2020

The 2020 Season – Early August rain in the WA grainbelt has been a "game changer"

The just in time rainfall across most of the Western Australian grain growing regions has been a "game changer" for the 2020 Season. Widespread rain last weekend 7-9 August has increased the chance of Western Australian grain growers producing at least an average total grain production of around 15 million tonnes. Prior to the weekend rain and good rainfall in the south coastal areas the previous week, crops across the state were starting to go backwards from below average winter rainfall. Many growers were commenting that "it will start to get ugly" if there was no rainfall on the weekend. For some regions, the rain will halt the slide in grain yield potential that was occurring, although for most, it will push grain yield potential up.

The combination of the very warm winter and rapid crop growth has brought crop flowering forward by at least two weeks from where it would normally be from a late May break. On the upside this means less chance of heat shock in the spring, on the downside there is more chance of frost risk over the next weeks. An additional risk factor is the lack of sub-soil moisture in a lot of areas where crops have sucked the soil profile dry with the exceptional growing conditions during the winter. Whilst there are still a number of scenarios that can play out to swing total grain production for the 2020 grain season up or down, the outlook is now quite positive for most areas.

Western Australian growers have planted a record area of crop of close to 8.5m ha, and whilst most growers are saying it is not as good as 2018, the extra area planted is in the potentially better yielding regions west of the Albany Highway and areas of the South Coast that still, potentially, have time to improve. There is also less fallow in the low rainfall areas, and much of this is in better shape than 2018.

The majority of the reduction in barley plantings went to wheat and this could see wheat tonnage exceed 60 per cent of total grain production for the state for the first time in many years. Barley production will be well down due to less area planted. Canola plantings are mainly in the medium to high rainfall regions and even though many suffered from difficult establishment conditions, most have picked up in the warm growing conditions. Oat crops were the first to feel the pinch in the recent drying conditions which is expected to put a cap on potential yield, however overall oat area is up from 2019. The final tonnage could vary based on the split between hay and grain which will not clear for another month. Lupin tonnage will struggle to exceed the estimates due to the reduction in area and later start to the season.

2020 Season GIWA August Western Australia Crop Production Estimates (tonnes)

Port zone	Wheat	Barley	Canola	Oats	Lupins	Pulses	State total
Kwinana	4,750,000	1,350,000	430,000	280,000	150,000	5,000	6,965,000
Albany	1,040,000	1,500,000	380,000	350,000	40,000	10,000	3,320,000
Esperance	1,200,000	780,000	250,000	20,000	30,000	45,000	2,325,000
Geraldton	1,900,000	70,000	170,000	5,000	140,000	2,000	2,287,000
Totals	8,890,000	3,700,000	1,230,000	655,000	360,000	62,000	14,897,000

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.

Geraldton Zone

The recent rainfall has turned the outlook in the Geraldton Port zone around with most of the zone receiving more than 20mm of rainfall. Crops were melting away and could not have gone much longer without rain. The rainfall in the eastern areas on the heavy country has stopped the yield decline whilst for the remainder of the zone has at least held the final grain yield potential of crops. In the eastern fringes of the zone, wheat was pushing up heads and dropping tillers with crops on the lighter country to the west starting to stress from lack of moisture. The result of this has been some pulling back on potential yield that will not be recovered from the rain.

Wheat area is well up from recent years, substituted from canola, lupins and barley. There is also very little fallow this year. With total area in crops high and the majority being wheat there is the potential for an increase in total tonnage for the zone if conditions remain mild.

The last two rainfall events seven days apart has seen the region go from one of the driest Julys on record to one of the wettest Augusts in the last eight years.

Due to the drip feed nature of rainfall this year, crop root development and nitrogen use efficiency has been excellent across the State. Crops have had to forage deep into the profile for moisture and it is hoped this will help support them when the inevitable heat comes in the spring. With more rain forecast this weekend and mild conditions over the next two weeks, the short-term outlook is looking very good.

Canola closer to the coast is looking average to above average, with some sclerotinia although not widespread. Further east and north, the canola is fairly short, and has average grain yield potential at best.

There are very few exceptional lupin crops in the north of the state. This lack of growth is not what you would normally expect in the region. Grain yield potential in the zone has time to catch up if temperatures remain mild.

Kwinana Zone

Kwinana North Midlands

The recent rainfall has recovered the potential grain yield in the dry corridor running north to south in the centre of the region. Prior to the rain on the weekend, the rainfall split the region in half with the better areas to the west having twice as much rainfall as directly adjacent to the east. Further east, the summer rains have kept crops ticking along until this last series of fronts. The crops in the areas that did receive the summer rain are now set up for at least average grain yields. The west coastal regions have been light on for rain all year and whilst the nitrogen use efficiencies have been exceptional from the lack of leaching rains, more is needed to reach average grain yield potential.

The most notable difference this year in the region has been the way various varieties have stood up to the dry / warm growing conditions. Longer season wheat varieties such as Scepter have crashed and will struggle to recover grain yield potential from now on, irrespective of what the spring brings. The quicker wheat varieties and particularly the noodle wheats have held up well and will be able to make use of the recent rain. The same can be said for barley in the region with Spartacus and Maximus also holding up well in the tough conditions.



Crops had completely exhausted the available sub-soil moisture prior to the recent rain events and whilst most crops "look way better than they should for the rainfall we have had", more will be needed to hit overall average tonnages for the region.

Kwinana South

The two rainfall events of 10 to 25mm in the first week of August, followed by a further 10 to 15mm a week later, has turned the season around just in time. The dry central corridor picked up good falls of rain and for some, 20mm was the highest single rainfall total for the year to date. West and east areas of the zone had feared better all year and now the whole region is set up for at least an average grain production year. For individual growers who received higher totals of summer rain, grain yield potential is as good as 2018 which was a record production year for the region.

Crops have accelerated their development from the late May start and are at growth stages now similar to an early May start. For most crops, this very quick development has not come at the cost of lack of biomass, with most cereals having tillered well. Canola and lupins have been flowering for a few weeks which is earlier than the last couple of years. Lupin height is good this year, a relief for growers for a change as they will not need to get the "vacuum cleaner" out.

The projected flowering window for cereals looks to be in the "sweet spot" between heat stress and frost risk and if the rest of spring brings more rain, there could be a bit of grain around at harvest time.

Kwinana North East

There are crops with some terrific potential in the lower rainfall regions that received the summer storms in a line starting north of Koorda, across to Trayning, south east of Merredin and south across to Hyden. The very good crops in the southern strip missed out on the most recent rain with growers mostly receiving less than 10mm, although no one there is complaining.

Growers either side of this very good stretch of country have been a bit light on for rain during the winter and will need a pretty good spring to hit average grain yields. There are still some very poor areas on the north eastern and eastern fringes of the zone where grain yields will be well down, although the net result across the zone is likely to be an average grain production year.

There is a lot of wheat in the ground in the region and less fallow than in recent years. Some growers have "forced fallow" where crops were sown and have not germinated, although this is confined to the lower rainfall fringes.

Albany Zone

Albany West

The West Albany area has had dream run and is shaping up to be similar to last year for potential grain production.

Total winter rainfall has been below average, although this has resulted in less waterlogging and very few areas of the zone are showing crop stress from this at the moment. Crops have bulked up well and will be better able to handle any waterlogging that occurs from now on.

Canola has been flowering for almost a month and is still not in full flower, so the top end grain yield potential is very high. Cereal crops have tillered well and are very dense. Some were going off from the dry spell although they have greened up overnight following the rain last weekend. Barley has the flag leaf on the way out and wheat is mostly at the 2 to 3 node stage. Cereals were racing along up until the



recent cooler temperatures and this made many nervous around the increased frost risk. Crops have slowed down a little now and the earlier emerged cereals will flower by the end of August which could cause still trouble.

Barley crops have had little Spot Type Net Blotch (STNB) to be concerned about although sclerotinia is starting to show up in canola crops with most requiring a spray.

The zone will still need some good rains in spring to finish crops off and dodge the frost to hit the yield levels of the last two years. With top end grain yield potential high, it is shaping up to be a very good year for growers in the region if the season goes their way.

Albany South

The dismal season for many has been completely turned around with falls of between 30 to 200mm from the intense low pressure system in early August. For many in the epicentre of the "no rain" area southeast of the Stirling Ranges, it was their best rain for a couple years and has halted the run of record low rainfall. It is incredible what one rain event can do, with some areas of the zone going from the driest July/August period to the wettest on record.

Many growers received surface run-off to put some water in dams that have been dry for three years. Pasture is still tight for most.

The patchy crops in the region will have time to benefit from the rain even though they had been pushed along from the warm dry conditions. Cereals were running up to head prior to the rain and lack canopy density. It is hoped the recent rain and cool temperatures will put the "brakes" on crop development and let cereals produce some late tillers to top up grain yield potential.

Canola tonnage for the region will be capped at below average due to "gappy" establishment, with the better crops possibly hitting 1.5T/ha for whole paddock averages.

Frost is a major concern for many growers as there is still a long way to go before frost risk drops off for the season.

Albany East (Lakes Region)

The region had been experiencing the best year in recent times with excellent crop growth from the good start and small regularly spaced rainfall. Crops were just starting to run out of moisture and showing the signs of stress prior to the rain last week. The region mostly missed out on the higher totals which were received further north, with most growers receiving less than 10mm. The potential is still there for a well above average year, although the next month will decide, as total rainfall for many growers is below average.

The region will need a couple of good falls of rain in August and September as the crops have a lot of top on them, and without the sub-soil reserves of moisture, will quickly fade if the weather comes in hot and dry. The general comment from the region is that "we are starting to get nervous now that we have exhausted sub-soil moisture" and are living "hand to mouth".

Crop development is at least two to three weeks in front of where it would normally be for the timing of the start of the season, which takes the pressure off potential heat shock to some degree, although it also pushes crops into more frost risk during spring.

Canola and lupin crops are the best they have been for several years with more biomass and grain yield potential above average.



Esperance Zone

Grain yield potential for the Esperance Port zone is "all over the shop" and the various sub-zones in the region have widely different potential.

The western strip from Ravensthorpe north, currently has above average grain yield potential and areas closer to the coast are good from the lack of waterlogging. The central regions north of town have picked up some good falls of rain and are now on track for at least average grain yields for all crops. Areas around Salmon Gums, Grass Patch and Cascades missed out on the "dump" of rain that areas to the west received in early August. Most of the zone only received light rainfall from the most recent fronts that passed across the State last week.

In general, across the whole zone the turnaround from the patchy start has been amazing and whilst crops are not perfect, most except for the very dry areas will now have the potential to reach average grain yields. Fertiliser management has been very difficult due to the lower potential at the start and gradually creeping improvement in the season. Crops are well ahead of normal development and whilst most growers are not expecting the zone to hit the records of 2018, it could still well be a good year.

Crops have been relatively clean from disease, as they have for most of the state until now. Insects have been ticking along at low levels all year and with the weather warming up, aphids and budworm are increasing in numbers where spraying is warranted.





Season Outlook, August 2020

Ian Foster, Department of Primary Industries and Regional Development

DPIRD climate summary

- Western Australia has experienced a very dry July, this meant seasonal rain from 1 April to 31
 July was well below average for most parts.
- Significant rain occurred in early August across much of the south coast from a cut-off low pressure system.
- While some locations had 100mm plus, the rain has been patchy, with places in the Esperance Port zone missing out.
- The front that came through on the weekend of 7-9 August brought good falls of rain for majority of the rainbelt except for the south coast.
- Seasonal rain outlooks for the next three months remain generally neutral for southern WA, in contrast to much of eastern Australia.
- The wetter outlook for the east comes from warmer than normal sea surface temperatures in the tropical Indian Ocean and a predicted La Nina event in the Pacific Ocean from spring.

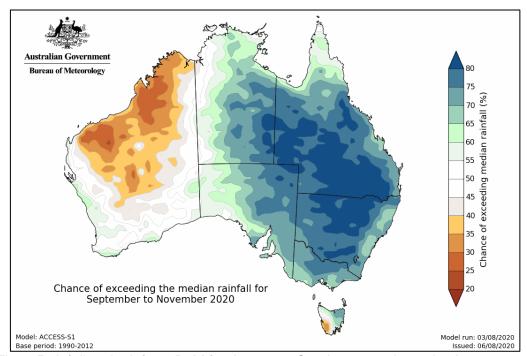


Fig 5. Rainfall outlook from BoM for August to October 2020, issued 6 August 2020.

Additional information is available from:

DPIRD: Seasonal Climate Information

DPIRD: Soil Water Tool

BoM: Seasonal Rainfall Outlook - weeks, months and seasons.

BoM: Decile rainfall for February to April 2020

BoM: Seasonal Outlook video

BoM: Landscape soil water balance

