The 2022 Grain Season - Pre-Harvest Update

Perfect conditions for grain fill during September have pushed tonnage estimates for the Western Australian grain harvest to the near record levels of last year's 24 million tonnes.

Mild temperatures across the whole state and the absence of any significant frost events have combined to give the crops every chance of achieving above average yields for all crops in all regions. Most of the extra yield is expected to come from increased grain weight, and early indications from harvested paddocks back this up. Grain protein in cereals is expected to be at the lower end of the scale as you would expect with a finish like this.

Wheat crops in the southern regions are not completely out of the frost risk period due to maturing a little later than normal, although with no major frosts forecast for the next week, that frost risk period will nearly be over.

There is upside to the current predicted wheat tonnage as the large low rainfall areas are likely to yield better than they look and if the southern areas remain frost free, they will also exceed current estimates. The wheat area is down on 2021 hectares planted due to substitution to canola particularly in the low rainfall regions where canola grain yields will be mostly in the 1.0 to1.5T/ha range rather than 2.0T/ha plus for wheat. This will tend to limit the upside in total tonnes for the state.

Canola tonnage has upside potential as well due to the very long grain-fill period setting more pods than normal, as well as expected very large seed size.

Lupin and oat area are down substantially from 2021, ironically though total tonnes of both this year are likely to be equivalent or in the case of lupins possibly more than 2021.

2022 Season GIWA October Western Australia Crop Production Estimates (tonnes)

Port zone	Wheat	Barley	Canola	Oats	Lupins	Pulses	State total
Kwinana	6,400,000	2,200,000	1,600,000	290,000	160,000	10,000	10,660,000
Albany	1,200,000	2,400,000	1,000,000	250,000	60,000	20,000	4,930,000
Esperance	1,650,000	1,200,000	730,000	20,000	60,000	40,000	3,700,000
Geraldton	2,800,000	250,000	480,000	5,000	320,000	2,000	3,857,000
Totawls	12,050,000	6,050,000	3,810,000	565,000	600,000	72,000	23,147,000

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

Harvest is getting underway in the region in some of the early sown canola paddocks with yields better than estimated. Barley crops will not be far behind as many were sown early, the emerging trend in the northern areas. This seems to be paying off with grain yields expected to be very good.

The very early sown wheat struggled at the start of winter and never made-up ground, whilst the wheat paddocks sown a bit later at more traditional planting times are sensational. Lupins are very, very good and more tonnes will be produced off less planted area this year.

With the slow finish, weeds have also continued to proliferate, and many growers are already planning for next year by windrowing chaff to be burnt next autumn.

The incredible turn around in prospects for the region has been mentioned previously and now harvest has started, the few loads that have been delivered confirm this.

Kwinana Zone

Kwinana North Midlands

There has not been a lot of change in the last month other than the cereals continue to be very good, lupins and canola also very good. Grain production in the region is likely to be the "best ever" surpassing the benchmark years of 2016 and 2018.

The recovery in the late emerging crops in the eastern areas of the zone has been substantial and growers have had to continue to increase insurance estimates, which is not a bad problem to have.

The canola area was up 15 to 20 per cent across the region, at the expense of oats destined for hay in the high and medium rainfall regions. The only hiccup in canola plantings this year has been significant lodging in the late March to mid-April plantings, which is going to cause trouble at harvest.

Kwinana South

The higher rainfall regions of the zone have continued to improve from the dry start and now all crops have above average grain yield potential.

Harvest is a few weeks off yet as canola and barley are just starting to "turn" following the few warm days recently. All crops have continued to benefit from the slow, mild finish and large grain size is expected to add significantly to grain weights and final yields.

The flurry of aerial activity in mid-September getting the last of leaf diseases under control is now over and the sky is noticeably quiet again. It was a bad year for leaf disease in wheat, barley and canola from the Midlands to all southern regions and ended up being a costly year to grow crops.



Kwinana North East

The lower rainfall regions of the Kwinana Zone are very good with the dry areas from last year north and east of Merredin having the best crops for many years. Growers in areas that were taken out by frost in 2021 are also looking forward to a good harvest coming up.

The crops generally do not have the same top end potential as last year, but the whole region had more subsoil moisture reserves coming into spring this year than in 2021. So whilst the wheat is more compact than 2021, it looks to have close to the same grain yield potential.

The large area of canola is in good shape and the benefit from being able to insert a break crop into the rotation will provide benefits for several years to come.

The increased input cost pressures in the more variable rainfall environment of the region will almost certainly mean more country will go into fallow in 2023.

Albany Zone

Albany West

Harvest will probably not get underway until the first week in November and the region is again looking forward to a very good harvest. Considering there is less waterlogged country than in 2021, it is likely that the Albany port zone will produce more grain than the record 5 million tonnes in 2021. Now that crops are finishing, the waterlogged areas are starting to show up, although it tends to be in just the very susceptible areas, rather than the big holes in paddocks seen last year.

Powdery mildew is still causing trouble in wheat as it has right across the state, and surprisingly the mice situation seems to have backed off with pod loss in canola dropping away to very low levels.

Albany South

The dry September has helped out with the waterlogging that crops were suffering in the shallow duplex soils north of the Stirling Ranges. These crops have improved, particularly where there is any slope in the landscape.

Swathing has started in canola, which is earlier than normal due to the early plantings rather than the lack of potential yield. Many canola crops were flowering for 8 to 10 weeks and are expected to return very good yields.

There has been some frost damage picked up in barley crops from a "warm" frost near the end of September, where the minimums were just above zero followed by a very warm day and low humidity. The damage is not expected to impact on tonnages significantly.

Ryegrass is starting to poke through the barley and wheat crops as it is in other areas. The good run of seasons has resulted in a build up of weeds that will require "re-setting" back to low levels in 2023. Growers are very aware of this, and most are already planning to tackle it with lower cost knockdowns next year and maybe sacrifice time of sowing.



Noteworthy in the region and across to the Esperance port zone, is the difficulty in controlling net-type net blotch in Planet barley. Up to three applications of fungicides have been unsuccessful in halting the infection. Whether this is due to initial fungicide applications being a little late and very good conditions for disease build up, or resistance, is unknown at this stage. Nevertheless, it is likely there will be a general shift away from Planet next year to newer, more resistant varieties.

Albany East (Lakes Region)

The total rainfall for August and September this year has been more than the combined amount for the same period in the last three years in the region. This has pushed grain yield potential to very good levels and with the absence of any significant frost, the region is looking at one of its best harvests for a very long time.

The good soil moisture reserves coming into spring and the continued rainfall together with mild temperatures has pushed all crops to well above average grain yield potential. The cool conditions have slowed crop maturity and most growers in the region will have a late start to harvest.

Cereal crops were looking a bit washed out from being underdone for nitrogen coming into spring, although as the soil remained moist and started to warm up, crops seemed to noticeably get a new lease of life from mineralised organic soil nitrogen. This is incredible considering the nitrogen removal from the very high yielding crops in 2021, and highlights the value soil organic matter can play in keeping crops on track right to the end of the season if the conditions are favourable.

Large areas of oats have now been cut for hay, with yields likely to be very good. Lupins have podded up well and will yield very well.

Esperance Zone

The region has not had the dream run of 2021, although the grain yield potential of all crops has improved in the last two months to now possibly coming close to the record tonnage of 2021. In saying that, the crops have "turned" noticeably quicker than many expected.

Canola is expected to be lower yielding than in 2021, wheat as good as 2021, and barley better than 2021. The mild finish has impacted on grain size in the region with the barley looking "ugly" due to the ragged direction of the awns from oversized grains in the heads.

Leaf disease was a challenge in all crops in 2022, although most seemed to be under control in the finish. Growers regularly have issues with wheat, barely and canola leaf disease in the Esperance port zone and tend to react quicker and apply fungicides earlier than regions further north in the state. And this year was one where the early applications really paid off in keeping inoculum levels low in the canopy and avoiding the "blow outs" later in the year if the season kicks on.





Season Outlook, October 2022

lan Foster, Department of Primary Industries and Regional Development

Climate summary

August and September rain was well above average across northern, central and eastern agricultural areas. Most of the South Coast had near-average rain. Soil water storage is now near average for time of year over most of the cropping region.

Temperatures were generally mild over August and September, with average daytime temperatures mostly below average. A near-average number of frosts have occurred, mostly in central and eastern cropping areas.

Most climate models show neutral to slightly wetter rainfall outlooks for October to December 2022 for the agricultural area of WA, although four models (including BoM's) have a drier outlook for the region. See Figure 1 for the BoM rainfall outlook, noting the contrast with eastern Australia. October rainfall is predicted to be more likely below normal across the Southwest, with a lower than normal risk of temperature extremes.

Bureau of Meteorology seasonal outlook summary, issued 29 September 2022:

- October to December rainfall is likely to be above median for the eastern half of Australia, but below median for the west coast and the northern and central Western Australia.
- For the fortnight 3 to 16 October, above median rainfall is very likely (greater than 80% chance) for much of the eastern half of Australia. For western parts of the South West Land Division of Western Australia, there is a moderate chance of below median rainfall.
- October to December maximum temperatures are likely to be above median for the northern tropical coastline, the Kimberley district and west coast of Western Australia, and Tasmania; cooler than median days are likely across much of the south-eastern half of the mainland.
- Minimum temperatures are generally likely to be warmer than median for October to December
 for northern Australia, the west coast, and south-eastern Australia; cooler nights are likely for
 south-east parts of Queensland, north-east parts of New South Wales and the south-east interior
 of Western Australia extending into far west South Australia.
- La Niña, a negative Indian Ocean Dipole event, a positive phase of the Southern Annular Mode and warmer waters around Australia are all contributing to wetter outlooks over large parts of Australia.



Additional information is available from:

DPIRD: Seasonal Climate Information

DPIRD: Soil Water Tool

BoM: Decile rainfall for April to September 2022

BoM: Rainfall outlook for the next week

<u>BoM: Seasonal Rainfall Outlook</u> <u>BoM: Australian Water Outlook</u>

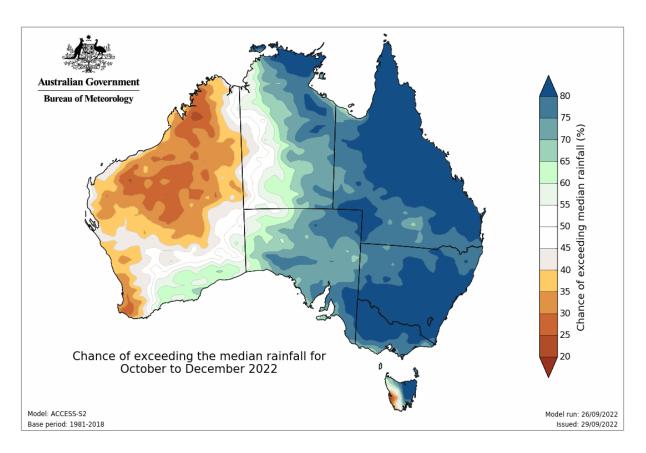


Figure 1. Rainfall outlook for October to December 2022. From BoM.

