Crop Report
Andrew H Ware: Matthews Cootra

## Crop: Wheat <br> Cultivar: Calibre

Sowing details: 150 plants $/ \mathrm{m}^{2}$ on 1-Jun
Expected maturity date: $25-\mathrm{Nov}$

Paddock Details
Initial conditions date: 6-Mar
Soil: $\quad$ Sand (Tuckey No366) 1000 mm max rooting depth
Stubble: $500 \mathrm{~kg} / \mathrm{ha}$ of Lentil No till

## Grain Yield Outcome

GNitrogen limited Yield
ONitrogen limited Yield with Frost and heat Effects

Water limited Yield
OWater limited Yield with Frost and heat Effects


Hay Yield Outcome


This graph shows the probability of exceeding a range of yield outcomes this season. It takes into account your pre-season soil moisture, the weather conditions so far, soil N and agronomic inputs. The long term record from your nominated weather station is then used to simulate what would have happened from this date on in each year of the climate record. The yield results are used to produce this graph.

This graph shows the probability of exceeding a range of hay yield outcomes this season. It takes into account the same factors as the grain yield graph above. When above ground dry matter is below 2 t /ha, hay yield is assumed to be $70 \%$ of dry matter, with a moisture content of $13 \%$. When dry matter is between 2 and $12 \mathrm{t} / \mathrm{ha}$, hay yield is assumed to be between 70 and $75 \%$ of dry matter (sliding scale). When dry matter is above $12 \mathrm{t} / \mathrm{ha}$, hay yield is assumed to be between 75 and $80 \%$ (sliding scale).

Current dry matter: Okg/ha

The Season So Far - Growing Season Rainfall Deciles



Current Distribution of PAW

Water (Volumetric \%)


PAW = Plant Available Water
CLL = Crop Lower Limit or Wilting Point
DUL = Drained Upper Limit or Field Capacity
PAWC = Plant Available Water Capacity
Current Crop PAW = Soil water currently accessible to the roots down to the current rooting depth
Soil PAW = Total accessible soil water in the soil profile

|  | PAW |
| :--- | :--- |
| $\cdots$ | PAW Deficit |
| $\cdots \cdots \cdots$ | CLL |
| $\cdots \cdots$ | DUL |
| $\cdots \cdots \cdots$ | Current rooting depth |
|  | Final rooting depth |

Current root depth $=62 \mathrm{~mm}$
Median final root depth $=1000 \mathrm{~mm}$ Current crop PAW available to roots $=10 \mathrm{~mm}$
Total Soil PAW $=66 \mathrm{~mm}$
PAWC $=139 \mathrm{~mm}$

## Water Budget

Initial PAW status @ 6-Mar
Rainfall since 6-Mar
Irrigations
Evaporation since 6-Mar
Transpiration since 6-Mar
Deep drainage since 6-Mar
Run-off since 6-Mar
Current PAW status:
73 mm
11.3 mm

17 mm
0 mm
0 mm
0 mm
66 mm

Probability of Future Waterlogging Events


Current distribution of soil nitrogen (kg/ha)


Current Crop Available $\mathrm{N}=31 \mathrm{~kg} / \mathrm{ha}$
Total Soil $\mathrm{N}=69 \mathrm{~kg} / \mathrm{ha}$

Availability of Water to Growing Roots


Water Stress


Availability of Soil Nitrogen to Growing Roots


Nitrogen Stress


Brief periods of mild to moderate stress do not necessarily lead to reduced yield. To see the likely impacts of additional nitrogen fertiliser rates use the Nitrogen and Nitrogen Profit reports.

## Median projected crop performance and requirements for the next 10 days assuming no rain and no added fertiliser

| Date | Growth Stage | Evap. <br> (mm) | Water use (mm) | Nuse (kg/ha) | Water avail. to roots above stress threshold (mm) | Water avail. to roots above CLL (mm) | N avail. to roots (kg/ha) | MineralisationN tie up (kg/ha) (kg/ha) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6-Mar | 9.0 | 0.0 | 0.0 | 0.0 | -7.0 | 0.0 | 11.2 | 1.5 | 0.0 |
| 7-Mar | 9.0 | 0.5 | 0.0 | 0.0 | -6.0 | 0.0 | 11.9 | 1.6 | 0.0 |
| 8-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -5.0 | 1.0 | 12.4 | 1.6 | 0.0 |
| 9-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -4.2 | 1.8 | 12.8 | 1.7 | 0.0 |
| 10-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -3.5 | 2.5 | 13.0 | 1.8 | 0.0 |
| 11-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -3.0 | 3.0 | 13.1 | 1.8 | 0.0 |
| 12-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -2.6 | 3.4 | 13.1 | 1.8 | 0.0 |
| 13-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -2.2 | 3.8 | 13.1 | 1.8 | 0.0 |
| 14-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -1.9 | 4.1 | 13.2 | 1.8 | 0.0 |
| 15-Mar | 9.0 | 0.6 | 0.0 | 0.0 | -1.6 | 4.4 | 13.2 | 1.6 | 0.0 |
| 16-Mar | 9.0 | 1.2 | 0.0 | 0.0 | -1.4 | 4.6 | 13.3 | 1.6 | 0.0 |
| 17-Mar | 9.0 | 0.9 | 0.0 | 0.0 | -1.2 | 4.8 | 13.3 | 1.6 | 0.0 |
| 18-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -1.0 | 5.0 | 13.4 | 1.5 | 0.0 |
| 19-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -0.9 | 5.1 | 13.4 | 1.4 | 0.0 |
| 20-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -0.7 | 5.3 | 13.5 | 1.3 | 0.0 |
| 21-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -0.6 | 5.4 | 13.5 | 1.2 | 0.0 |
| 22-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -0.5 | 5.5 | 13.6 | 1.2 | 0.0 |
| 23-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -0.4 | 5.6 | 13.7 | 1.2 | 0.0 |
| 24-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -0.3 | 5.7 | 13.7 | 1.2 | 0.0 |
| 25-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -0.2 | 5.8 | 13.8 | 1.1 | 0.0 |
| 26-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -0.1 | 5.9 | 13.8 | 1.1 | 0.0 |
| 27-Mar | 9.0 | 0.2 | 0.0 | 0.0 | -0.1 | 5.9 | 13.9 | 1.2 | 0.0 |
| 28-Mar | 9.0 | 0.2 | 0.0 | 0.0 | 0.0 | 6.0 | 13.9 | 1.2 | 0.0 |
| 29-Mar | 9.0 | 0.2 | 0.0 | 0.0 | 0.1 | 6.1 | 14.0 | 1.3 | 0.0 |
| 30-Mar | 9.0 | 0.2 | 0.0 | 0.0 | 0.1 | 6.1 | 14.1 | 1.3 | 0.0 |
| 31-Mar | 9.0 | 0.2 | 0.0 | 0.0 | 0.2 | 6.2 | 14.1 | 1.3 | 0.0 |
| 1-Apr | 9.0 | 0.0 | 0.0 | 0.0 | 0.4 | 6.4 | 14.2 | 1.3 | 0.0 |
| 2-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 0.5 | 6.5 | 14.3 | 1.2 | 0.0 |
| 3-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 0.6 | 6.6 | 14.3 | 1.2 | 0.0 |
| 4-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 0.7 | 6.7 | 14.4 | 1.1 | 0.0 |
| 5-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 0.7 | 6.7 | 14.4 | 1.1 | 0.0 |


| 6-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 0.8 | 6.8 | 14.5 | 1.1 | 0.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 0.9 | 6.9 | 14.6 | 1.1 | 0.0 |
| 8-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.0 | 7.0 | 14.6 | 1.1 | 0.0 |
| 9-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.0 | 7.0 | 14.7 | 1.0 | 0.0 |
| 10-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.1 | 7.1 | 14.7 | 1.0 | 0.0 |
| 11-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.1 | 7.1 | 14.8 | 1.1 | 0.0 |
| 12-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.2 | 7.2 | 14.8 | 1.0 | 0.0 |
| 13-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.2 | 7.2 | 14.9 | 1.0 | 0.0 |
| 14-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.3 | 7.3 | 15.0 | 1.0 | 0.0 |
| 15-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.3 | 7.3 | 15.0 | 1.1 | 0.0 |
| 16-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.4 | 7.4 | 15.1 | 1.1 | 0.0 |
| 17-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.4 | 7.4 | 15.1 | 1.0 | 0.0 |
| 18-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.5 | 7.5 | 15.2 | 1.0 | 0.0 |
| 19-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.8 | 7.8 | 15.2 | 1.0 | 0.0 |
| 20-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.9 | 7.9 | 15.3 | 1.0 | 0.0 |
| 21-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.9 | 7.9 | 15.3 | 1.0 | 0.0 |
| 22-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.9 | 7.9 | 15.4 | 1.0 | 0.0 |
| 23-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 1.9 | 7.9 | 15.4 | 1.0 | 0.0 |
| 24-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 2.0 | 8.0 | 15.5 | 1.0 | 0.0 |
| 25-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 2.0 | 8.0 | 15.5 | 0.9 | 0.0 |
| 26-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 2.0 | 8.0 | 15.6 | 0.9 | 0.0 |
| 27-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 2.0 | 8.0 | 15.7 | 0.9 | 0.0 |
| 28-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 2.0 | 8.0 | 15.7 | 1.0 | 0.0 |
| 29-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 2.0 | 8.0 | 15.8 | 1.0 | 0.0 |
| 30-Apr | 9.0 | 0.1 | 0.0 | 0.0 | 2.1 | 8.1 | 15.8 | 0.9 | 0.0 |
| 1-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.1 | 8.1 | 35.9 | 0.9 | 0.0 |
| 2-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.1 | 8.1 | 35.9 | 0.9 | 0.0 |
| 3-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.1 | 8.1 | 36.0 | 0.9 | 0.0 |
| 4-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.1 | 8.1 | 36.0 | 0.9 | 0.0 |
| 5-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.1 | 8.1 | 36.1 | 0.9 | 0.0 |
| 6-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.2 | 8.2 | 36.2 | 0.9 | 0.0 |
| 7-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.2 | 8.2 | 36.2 | 0.9 | 0.0 |
| 8-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.2 | 8.2 | 36.3 | 0.9 | 0.0 |
| 9-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.2 | 8.2 | 36.4 | 1.0 | 0.0 |
| 10-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.2 | 8.2 | 36.4 | 1.0 | 0.0 |
| 11-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.2 | 8.2 | 36.5 | 0.9 | 0.0 |
| 12-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.2 | 8.2 | 36.6 | 0.9 | 0.0 |
| 13-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.3 | 8.3 | 36.6 | 0.9 | 0.0 |
| 14-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.3 | 8.3 | 36.7 | 0.9 | 0.0 |
| 15-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.3 | 8.3 | 36.7 | 1.0 | 0.0 |
| 16-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.3 | 8.3 | 36.8 | 1.0 | 0.0 |
| 17-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.3 | 8.3 | 36.9 | 0.9 | 0.0 |
| 18-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.3 | 8.3 | 36.9 | 0.9 | 0.0 |
| 19-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.3 | 8.3 | 37.0 | 0.8 | 0.0 |
| 20-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.3 | 8.3 | 37.0 | 0.8 | 0.0 |
| 21-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.3 | 8.3 | 37.1 | 0.8 | 0.0 |
| 22-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.4 | 8.4 | 37.1 | 0.8 | 0.0 |
| 23-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.4 | 8.4 | 37.2 | 0.8 | 0.0 |
| 24-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.4 | 8.4 | 37.2 | 0.8 | 0.0 |
| 25-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.4 | 8.4 | 37.3 | 0.9 | 0.0 |
| 26-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.4 | 8.4 | 37.4 | 0.9 | 0.0 |
| 27-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.4 | 8.4 | 37.4 | 0.9 | 0.0 |
| 28-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.4 | 8.4 | 37.5 | 0.9 | 0.0 |
| 29-May | 9.0 | 0.1 | 0.0 | 0.0 | 2.4 | 8.4 | 37.6 | 0.9 | 0.0 |
| 30-May | 9.0 | 2.1 | 0.0 | 0.0 | 5.2 | 11.2 | 32.6 | 0.9 | 0.0 |
| 31-May | 9.0 | 0.1 | 0.0 | 0.0 | 5.0 | 11.0 | 32.1 | 0.9 | 0.0 |
| 1-Jun | 9.0 | 1.3 | 0.0 | 0.0 | 4.8 | 10.8 | 31.9 | 0.8 | 0.0 |
| 2-Jun | 9.0 | 0.1 | 0.0 | 0.0 | 4.7 | 10.7 | 31.7 | 0.8 | 0.0 |
| 3-Jun | 9.0 | 0.1 | 0.0 | 0.0 | 4.6 | 10.6 | 31.5 | 0.8 | 0.0 |
| 4-Jun | 9.0 | 0.1 | 0.0 | 0.0 | 4.5 | 10.5 | 31.3 | 0.8 | 0.0 |
| 5-Jun | 9.0 | 0.1 | 0.0 | 0.0 | 4.4 | 10.4 | 31.2 | 0.8 | 0.0 |
| 6 -Jun | 9.0 | 0.1 | 0.0 | 0.0 | 4.4 | 10.4 | 31.1 | 0.8 | 0.0 |
| 7-Jun | 9.0 | 0.1 | 0.0 | 0.0 | 4.3 | 10.3 | 31.0 | 0.8 | 0.0 |
| 8-Jun | 9.0 | 0.1 | 0.0 | 0.0 | 4.2 | 10.2 | 31.0 | 0.8 | 0.0 |
| 9 -Jun | 9.0 | 0.1 | 0.0 | 0.0 | 4.2 | 10.2 | 30.9 | 0.8 | 0.0 |
| 10-Jun | 9.0 | 0.1 | 0.0 | 0.0 | 4.1 | 10.1 | 31.0 | 0.8 | 0.0 |
| 11-Jun | 9.0 | 0.1 | 0.0 | 0.0 | 4.1 | 10.1 | 31.0 | 0.8 | 0.0 |
| 12-Jun | 10.0 | 0.1 | 0.0 | -0.1 | 4.4 | 10.7 | 31.1 | 0.8 | 0.0 |
| 13-Jun | 10.2 | 0.1 | 0.0 | -0.1 | 5.0 | 12.3 | 32.0 | 0.8 | 0.0 |
| 14-Jun | 10.3 | 0.1 | 0.0 | 0.0 | 5.6 | 13.8 | 33.2 | 0.8 | 0.0 |
| 15-Jun | 10.4 | 0.1 | 0.0 | 0.0 | 6.2 | 15.4 | 34.4 | 0.8 | 0.0 |
| 16-Jun | 10.6 | 0.1 | 0.0 | 0.0 | 7.3 | 18.2 | 36.0 | 0.8 | 0.0 |
| 17-Jun | 10.8 | 0.1 | 0.0 | 0.0 | 8.0 | 20.2 | 37.2 | 0.8 | 0.0 |
| 18-Jun | 10.9 | 0.1 | 0.0 | 0.0 | 8.7 | 21.4 | 38.0 | 0.8 | 0.0 |
| 19-Jun | 11.1 | 0.1 | 0.0 | -0.1 | 9.0 | 22.8 | 38.8 | 0.8 | 0.0 |
| 20-Jun | 11.2 | 0.2 | 0.0 | -0.1 | 9.4 | 23.8 | 39.2 | 0.7 | 0.0 |
| 21-Jun | 11.3 | 0.3 | 0.0 | -0.1 | 11.0 | 26.3 | 39.5 | 0.7 | 0.0 |
| 22-Jun | 11.4 | 0.4 | 0.0 | -0.1 | 12.0 | 27.7 | 40.0 | 0.7 | 0.0 |
| 23-Jun | 11.5 | 0.1 | 0.0 | -0.1 | 12.6 | 29.0 | 40.3 | 0.7 | 0.0 |
| 24-Jun | 11.7 | 0.2 | 0.0 | -0.1 | 14.4 | 30.8 | 40.6 | 0.7 | 0.0 |


| 25-Jun | 11.8 | 0.4 | 0.0 | -0.2 | 14.6 | 32.2 | 41.1 | 0.7 | 0.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26-Jun | 12.0 | 0.2 | 0.1 | -0.2 | 15.0 | 33.3 | 41.7 | 0.7 | 0.0 |
| 27-Jun | 12.1 | 0.2 | 0.1 | -0.2 | 15.4 | 34.5 | 42.2 | 0.7 | 0.0 |
| 28-Jun | 12.2 | 0.4 | 0.1 | -0.3 | 15.6 | 35.6 | 42.7 | 0.7 | 0.0 |
| 29-Jun | 12.3 | 0.3 | 0.1 | -0.2 | 18.0 | 38.2 | 43.2 | 0.7 | 0.0 |
| 30-Jun | 12.4 | 0.6 | 0.1 | -0.3 | 19.0 | 39.3 | 43.2 | 0.7 | 0.0 |
| 1-Jul | 12.5 | 0.6 | 0.1 | -0.3 | 19.6 | 40.4 | 43.7 | 0.7 | 0.0 |
| 2-Jul | 12.6 | 0.5 | 0.1 | -0.4 | 20.2 | 41.3 | 44.1 | 0.7 | 0.0 |
| 3 -Jul | 12.7 | 0.5 | 0.1 | -0.4 | 20.8 | 42.6 | 44.5 | 0.7 | 0.0 |
| 4-Jul | 12.8 | 0.6 | 0.1 | -0.4 | 21.2 | 44.3 | 44.9 | 0.7 | 0.0 |
| 5-Jul | 12.9 | 0.6 | 0.1 | -0.4 | 21.8 | 45.2 | 45.2 | 0.7 | 0.0 |
| 6 -Jul | 12.9 | 0.9 | 0.1 | -0.5 | 22.2 | 49.3 | 45.5 | 0.7 | 0.0 |
| 7-Jul | 13.0 | 0.6 | 0.2 | -0.5 | 24.4 | 50.6 | 45.7 | 0.7 | 0.0 |
| 8-Jul | 13.2 | 0.6 | 0.2 | -0.5 | 24.5 | 51.4 | 45.8 | 0.7 | 0.0 |
| 9 -Jul | 13.2 | 0.5 | 0.2 | -0.6 | 25.8 | 53.0 | 45.8 | 0.7 | 0.0 |
| 10-Jul | 13.3 | 0.5 | 0.2 | -0.6 | 26.3 | 54.7 | 45.7 | 0.7 | 0.0 |
| 11-Jul | 13.4 | 0.8 | 0.2 | -0.7 | 27.8 | 56.8 | 45.5 | 0.7 | 0.0 |
| 12-Jul | 13.5 | 0.8 | 0.2 | -0.8 | 29.4 | 58.0 | 45.1 | 0.6 | 0.0 |
| 13-Jul | 13.6 | 0.8 | 0.3 | -0.9 | 30.0 | 58.4 | 44.7 | 0.6 | 0.0 |
| 14-Jul | 13.7 | 0.6 | 0.3 | -0.9 | 29.6 | 58.6 | 44.5 | 0.6 | 0.0 |
| 15-Jul | 13.8 | 0.5 | 0.4 | -1.1 | 30.2 | 60.3 | 43.5 | 0.7 | 0.0 |
| 16-Jul | 13.9 | 0.6 | 0.3 | -1.1 | 30.6 | 60.6 | 42.8 | 0.7 | 0.0 |
| 17-Jul | 14.0 | 0.8 | 0.4 | -1.3 | 30.7 | 61.4 | 42.0 | 0.7 | 0.0 |
| 18-Jul | 14.1 | 0.7 | 0.4 | -1.3 | 30.6 | 61.6 | 41.0 | 0.7 | 0.0 |
| 19-Jul | 14.2 | 0.7 | 0.4 | -1.4 | 30.6 | 63.0 | 40.0 | 0.6 | 0.0 |
| 20-Jul | 14.3 | 0.6 | 0.5 | -1.6 | 30.5 | 63.2 | 39.4 | 0.6 | 0.0 |
| 21-Jul | 14.4 | 0.6 | 0.6 | -1.6 | 30.9 | 63.8 | 37.9 | 0.6 | 0.0 |
| 22-Jul | 14.5 | 0.5 | 0.6 | -1.7 | 34.3 | 66.8 | 36.4 | 0.6 | 0.0 |
| 23 -Jul | 14.6 | 0.6 | 0.6 | -1.6 | 34.6 | 67.0 | 35.8 | 0.6 | 0.0 |
| 24-Jul | 14.7 | 0.8 | 0.6 | -1.5 | 33.6 | 67.3 | 34.4 | 0.6 | 0.0 |
| $25-\mathrm{Jul}$ | 14.8 | 0.8 | 0.7 | -1.5 | 33.3 | 67.6 | 33.4 | 0.6 | 0.0 |
| 26-Jul | 14.9 | 0.8 | 0.7 | -1.4 | 33.7 | 67.6 | 32.4 | 0.6 | 0.0 |
| 27-Jul | 15.0 | 0.7 | 0.8 | -1.3 | 33.0 | 67.9 | 31.5 | 0.6 | 0.0 |
| 28 -Jul | 15.1 | 0.6 | 0.8 | -1.2 | 32.9 | 68.2 | 30.9 | 0.6 | 0.0 |
| 29-Jul | 15.2 | 0.8 | 0.9 | -1.1 | 33.6 | 69.4 | 30.2 | 0.6 | 0.0 |
| 30-Jul | 15.3 | 0.6 | 0.9 | -1.0 | 32.5 | 70.1 | 29.7 | 0.6 | 0.0 |
| 31-Jul | 15.4 | 0.7 | 1.0 | -1.0 | 31.8 | 70.2 | 29.1 | 0.6 | 0.0 |
| 1-Aug | 15.5 | 0.6 | 1.0 | -0.9 | 31.8 | 69.8 | 28.6 | 0.6 | 0.0 |
| 2-Aug | 15.6 | 0.6 | 1.0 | -0.8 | 31.6 | 69.8 | 28.2 | 0.6 | 0.0 |
| 3-Aug | 15.7 | 0.6 | 1.1 | -0.8 | 31.4 | 70.4 | 27.9 | 0.6 | 0.0 |
| 4-Aug | 15.8 | 0.7 | 1.1 | -0.8 | 32.1 | 71.1 | 27.6 | 0.6 | 0.0 |
| 5-Aug | 16.0 | 0.7 | 1.1 | -0.7 | 32.4 | 70.6 | 27.2 | 0.6 | 0.0 |
| 6-Aug | 16.0 | 0.6 | 1.2 | -0.7 | 32.4 | 71.9 | 27.0 | 0.6 | 0.0 |
| 7-Aug | 16.0 | 0.7 | 1.3 | -0.7 | 32.7 | 73.0 | 26.6 | 0.6 | 0.0 |
| 8-Aug | 16.0 | 0.6 | 1.3 | -0.6 | 31.6 | 72.0 | 26.0 | 0.6 | 0.0 |
| 9-Aug | 16.0 | 0.6 | 1.3 | -0.6 | 31.2 | 71.2 | 25.6 | 0.6 | 0.0 |
| 10-Aug | 30.2 | 0.6 | 1.2 | -0.6 | 32.9 | 73.7 | 25.4 | 0.6 | 0.0 |
| 11-Aug | 30.4 | 0.6 | 1.4 | -0.5 | 33.6 | 74.6 | 25.0 | 0.6 | 0.0 |
| 12-Aug | 30.6 | 0.6 | 1.5 | -0.5 | 33.9 | 75.2 | 24.6 | 0.6 | 0.0 |
| 13-Aug | 30.8 | 0.6 | 1.5 | -0.5 | 33.3 | 74.6 | 24.2 | 0.6 | 0.0 |
| 14-Aug | 31.2 | 0.6 | 1.4 | -0.4 | 30.8 | 72.6 | 23.8 | 0.6 | 0.0 |
| 15-Aug | 31.4 | 0.6 | 1.6 | -0.4 | 28.4 | 70.2 | 23.4 | 0.6 | 0.0 |
| 16-Aug | 31.4 | 0.6 | 1.6 | -0.4 | 27.0 | 68.6 | 22.9 | 0.6 | 0.0 |
| 17-Aug | 31.6 | 0.6 | 1.5 | -0.4 | 26.4 | 68.1 | 22.5 | 0.6 | 0.0 |
| 18-Aug | 31.8 | 0.6 | 1.8 | -0.4 | 25.6 | 67.4 | 22.2 | 0.6 | 0.0 |
| 19-Aug | 32.0 | 0.6 | 1.8 | -0.3 | 24.5 | 66.2 | 21.8 | 0.6 | 0.0 |
| 20-Aug | 32.3 | 0.6 | 1.9 | -0.3 | 21.8 | 63.6 | 21.4 | 0.6 | 0.0 |
| 21-Aug | 32.4 | 0.6 | 2.0 | -0.3 | 20.0 | 61.8 | 21.2 | 0.6 | 0.0 |
| 22-Aug | 32.6 | 0.6 | 1.8 | -0.3 | 17.8 | 59.6 | 20.8 | 0.6 | 0.0 |
| 23-Aug | 32.8 | 0.6 | 1.8 | -0.3 | 15.9 | 57.6 | 20.5 | 0.6 | 0.0 |
| 24-Aug | 33.0 | 0.6 | 2.0 | -0.3 | 14.7 | 56.4 | 20.2 | 0.6 | 0.0 |
| 25-Aug | 34.1 | 0.6 | 2.0 | -0.3 | 13.1 | 54.8 | 19.9 | 0.6 | 0.0 |
| 26-Aug | 36.2 | 0.6 | 2.2 | -0.2 | 13.2 | 54.9 | 19.6 | 0.6 | 0.0 |
| 27-Aug | 38.2 | 0.6 | 2.4 | -0.2 | 12.2 | 53.8 | 19.4 | 0.6 | 0.0 |
| 28-Aug | 39.0 | 0.6 | 2.2 | -0.2 | 9.9 | 51.6 | 19.2 | 0.6 | 0.0 |
| 29-Aug | 39.7 | 0.6 | 2.1 | -0.2 | 8.5 | 50.2 | 18.9 | 0.6 | 0.0 |
| 30-Aug | 40.7 | 0.6 | 2.2 | -0.2 | 7.6 | 49.4 | 18.6 | 0.6 | 0.0 |
| 31-Aug | 41.5 | 0.6 | 2.1 | -0.2 | 4.8 | 46.6 | 18.4 | 0.6 | 0.0 |
| 1-Sep | 42.5 | 0.5 | 2.3 | -0.2 | 5.2 | 47.0 | 18.1 | 0.6 | 0.0 |
| 2-Sep | 43.4 | 0.6 | 2.2 | -0.2 | 4.2 | 45.8 | 17.9 | 0.6 | 0.0 |
| 3-Sep | 44.4 | 0.7 | 2.2 | -0.2 | 5.4 | 47.2 | 17.6 | 0.6 | 0.0 |
| 4-Sep | 45.2 | 0.7 | 2.3 | -0.2 | 2.8 | 44.4 | 17.5 | 0.6 | 0.0 |
| 5-Sep | 46.0 | 0.6 | 2.2 | -0.2 | 0.6 | 42.3 | 17.3 | 0.6 | 0.0 |
| 6-Sep | 46.9 | 0.6 | 2.0 | -0.1 | -1.2 | 40.5 | 17.2 | 0.6 | 0.0 |
| 7-Sep | 47.6 | 0.6 | 2.2 | -0.1 | -1.5 | 40.2 | 17.0 | 0.6 | 0.0 |
| 8-Sep | 48.6 | 0.6 | 2.3 | -0.1 | -2.6 | 39.1 | 17.0 | 0.6 | 0.0 |
| 9-Sep | 49.8 | 0.7 | 2.4 | -0.1 | -3.7 | 38.0 | 16.8 | 0.6 | 0.0 |
| 10-Sep | 50.8 | 0.7 | 2.7 | -0.1 | -5.1 | 36.6 | 16.6 | 0.6 | 0.0 |
| 11-Sep | 51.8 | 0.6 | 2.2 | -0.1 | -7.4 | 34.2 | 16.6 | 0.6 | 0.0 |
| 12-Sep | 52.6 | 0.7 | 2.2 | -0.1 | -8.4 | 33.4 | 16.4 | 0.6 | 0.0 |


| 13-Sep | 53.4 | 0.7 | 2.4 | -0.1 | -7.9 | 33.8 | 16.3 | 0.6 | 0.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14-Sep | 54.5 | 0.7 | 2.6 | -0.1 | -9.8 | 31.8 | 16.2 | 0.6 | 0.0 |
| 15-Sep | 56.0 | 0.7 | 2.6 | -0.1 | -11.0 | 30.7 | 16.1 | 0.6 | 0.0 |
| 16-Sep | 57.8 | 0.7 | 2.2 | -0.1 | -11.6 | 30.2 | 16.0 | 0.6 | 0.0 |
| 17-Sep | 59.4 | 0.7 | 2.3 | -0.1 | -11.8 | 29.9 | 15.9 | 0.6 | 0.0 |
| 18-Sep | 60.9 | 0.6 | 2.3 | -0.1 | -13.3 | 28.4 | 15.8 | 0.6 | 0.0 |
| 19-Sep | 62.6 | 0.6 | 2.4 | -0.1 | -14.4 | 27.4 | 15.6 | 0.6 | 0.0 |
| 20-Sep | 64.6 | 0.5 | 2.2 | -0.1 | -14.2 | 27.4 | 15.5 | 0.6 | 0.0 |
| 21-Sep | 65.4 | 0.5 | 2.2 | -0.1 | -15.8 | 25.8 | 15.4 | 0.6 | 0.0 |
| 22-Sep | 66.2 | 0.4 | 2.3 | -0.1 | -16.2 | 25.5 | 15.3 | 0.6 | 0.0 |
| 23-Sep | 67.0 | 0.4 | 2.0 | -0.1 | -17.7 | 24.0 | 15.2 | 0.6 | 0.0 |
| 24-Sep | 67.8 | 0.5 | 2.1 | -0.1 | -18.5 | 23.2 | 15.2 | 0.6 | 0.0 |
| 25-Sep | 68.5 | 0.4 | 1.8 | -0.1 | -19.2 | 22.4 | 15.1 | 0.6 | 0.0 |
| 26-Sep | 69.2 | 0.5 | 2.1 | -0.1 | -20.9 | 20.8 | 15.0 | 0.6 | 0.0 |
| 27-Sep | 69.9 | 0.5 | 2.0 | -0.1 | -22.2 | 19.5 | 14.9 | 0.6 | 0.0 |
| 28-Sep | 70.6 | 0.6 | 1.7 | -0.1 | -23.2 | 18.4 | 14.8 | 0.6 | 0.0 |
| 29-Sep | 71.2 | 0.5 | 1.8 | -0.1 | -23.6 | 18.0 | 14.8 | 0.6 | 0.0 |
| 30-Sep | 71.6 | 0.4 | 1.7 | -0.1 | -24.3 | 17.4 | 14.7 | 0.6 | 0.0 |
| 1-Oct | 72.1 | 0.4 | 1.7 | -0.1 | -23.5 | 18.2 | 14.6 | 0.6 | 0.0 |
| 2-Oct | 72.5 | 0.4 | 1.2 | -0.1 | -23.2 | 18.4 | 14.6 | 0.6 | 0.0 |
| 3-Oct | 72.9 | 0.4 | 1.4 | -0.1 | -23.7 | 18.0 | 14.6 | 0.6 | 0.0 |
| 4-Oct | 73.3 | 0.4 | 1.6 | -0.1 | -24.7 | 17.0 | 14.5 | 0.6 | 0.0 |
| $5-\mathrm{Oct}$ | 73.8 | 0.4 | 1.3 | 0.0 | -25.2 | 16.6 | 14.4 | 0.6 | 0.0 |
| 6-Oct | 74.3 | 0.4 | 1.2 | 0.0 | -26.2 | 15.4 | 14.4 | 0.6 | 0.0 |
| 7-Oct | 74.8 | 0.5 | 1.0 | 0.0 | -26.7 | 15.0 | 14.4 | 0.6 | 0.0 |
| 8-Oct | 75.2 | 0.4 | 0.8 | 0.0 | -27.5 | 14.2 | 14.4 | 0.6 | 0.0 |
| 9-Oct | 75.7 | 0.4 | 1.0 | 0.0 | -27.6 | 14.0 | 14.4 | 0.6 | 0.0 |
| 10-Oct | 76.1 | 0.4 | 0.6 | 0.0 | -28.5 | 13.2 | 14.3 | 0.6 | 0.0 |
| 11-Oct | 76.5 | 0.4 | 0.6 | 0.0 | -29.4 | 12.4 | 14.3 | 0.6 | 0.0 |
| 12-Oct | 77.0 | 0.4 | 0.5 | 0.0 | -30.1 | 11.6 | 14.2 | 0.6 | 0.0 |
| 13-Oct | 77.4 | 0.3 | 0.4 | 0.0 | -27.6 | 14.1 | 14.2 | 0.6 | 0.0 |
| 14-Oct | 77.8 | 0.4 | 0.4 | 0.0 | -28.4 | 13.3 | 14.2 | 0.6 | 0.0 |
| 15-Oct | 78.2 | 0.4 | 0.4 | 0.0 | -27.6 | 14.0 | 14.2 | 0.5 | 0.0 |
| 16-Oct | 78.6 | 0.4 | 0.2 | 0.0 | -28.3 | 13.4 | 14.1 | 0.5 | 0.0 |
| 17-Oct | 79.1 | 0.3 | 0.2 | 0.0 | -28.3 | 13.4 | 14.1 | 0.5 | 0.0 |
| 18-Oct | 79.6 | 0.3 | 0.2 | 0.0 | -28.8 | 12.9 | 14.0 | 0.5 | 0.0 |
| 19-Oct | 80.0 | 0.3 | 0.1 | 0.0 | -29.0 | 12.8 | 14.0 | 0.5 | 0.0 |
| 20-Oct | 80.4 | 0.3 | 0.1 | 0.0 | -29.4 | 12.3 | 14.0 | 0.5 | 0.0 |
| 21-Oct | 80.9 | 0.3 | 0.1 | 0.0 | -30.2 | 11.6 | 14.0 | 0.5 | 0.0 |
| 22-Oct | 81.4 | 0.3 | 0.1 | 0.0 | -30.8 | 10.9 | 14.1 | 0.6 | 0.0 |
| 23-Oct | 81.8 | 0.3 | 0.1 | 0.0 | -31.4 | 10.2 | 14.1 | 0.5 | 0.0 |
| 24-Oct | 82.2 | 0.3 | 0.1 | 0.0 | -32.0 | 9.6 | 14.1 | 0.5 | 0.0 |
| 25-Oct | 82.6 | 0.3 | 0.1 | 0.0 | -32.7 | 9.0 | 14.1 | 0.5 | 0.0 |
| 26-Oct | 83.1 | 0.3 | 0.1 | 0.0 | -33.2 | 8.5 | 14.1 | 0.6 | 0.0 |
| 27-Oct | 83.5 | 0.3 | 0.1 | 0.0 | -33.7 | 8.0 | 14.2 | 0.6 | 0.0 |
| 28-Oct | 84.0 | 0.3 | 0.1 | 0.0 | -34.2 | 7.6 | 14.2 | 0.6 | 0.0 |
| 29-Oct | 84.5 | 0.3 | 0.1 | 0.0 | -34.6 | 7.1 | 14.2 | 0.5 | 0.0 |
| 30-Oct | 84.9 | 0.2 | 0.1 | 0.0 | -34.9 | 6.8 | 14.2 | 0.5 | 0.0 |
| 31-Oct | 85.4 | 0.3 | 0.1 | 0.0 | -35.0 | 6.8 | 14.2 | 0.5 | 0.0 |
| 1-Nov | 85.8 | 0.2 | 0.1 | 0.0 | -35.2 | 6.4 | 14.3 | 0.5 | 0.0 |
| 2-Nov | 86.3 | 2.6 | 0.1 | 0.0 | -37.8 | 3.9 | 14.3 | 0.5 | 0.0 |
| $3-\mathrm{Nov}$ | 86.8 | 0.9 | 0.1 | 0.0 | -38.0 | 3.6 | 14.4 | 0.4 | 0.0 |
| 4-Nov | 87.8 | 0.8 | 0.1 | 0.0 | -37.2 | 4.6 | 14.4 | 0.5 | 0.0 |
| $5-\mathrm{Nov}$ | 89.1 | 0.7 | 0.1 | 0.0 | -35.7 | 6.0 | 14.3 | 0.5 | 0.0 |
| 6-Nov | 90.0 | 0.6 | 0.1 | 0.0 | -36.3 | 5.4 | 14.3 | 0.5 | 0.0 |
| 7-Nov | 90.0 | 0.6 | 0.1 | 0.0 | -38.0 | 3.6 | 14.3 | 0.4 | 0.0 |
| 8-Nov | 90.0 | 0.6 | 0.1 | 0.0 | -37.8 | 3.8 | 14.3 | 0.4 | 0.0 |
| 9-Nov | 90.0 | 0.6 | 0.1 | 0.0 | -38.4 | 3.3 | 14.3 | 0.4 | 0.0 |
| 10-Nov | 90.0 | 0.5 | 0.1 | 0.0 | -38.8 | 3.0 | 14.3 | 0.4 | 0.0 |
| 11-Nov | 90.0 | 0.2 | 0.1 | 0.0 | -38.3 | 3.4 | 14.3 | 0.4 | 0.0 |
| 12-Nov | 90.0 | 0.5 | 0.1 | 0.0 | -38.3 | 3.4 | 14.3 | 0.4 | 0.0 |
| 13 -Nov | 90.0 | 0.5 | 0.1 | 0.0 | -39.0 | 2.8 | 14.3 | 0.4 | 0.0 |
| 14-Nov | 90.0 | 0.4 | 0.1 | 0.0 | -39.0 | 2.7 | 14.3 | 0.5 | 0.0 |
| $15-\mathrm{Nov}$ | 90.0 | 0.3 | 0.1 | 0.0 | -39.6 | 2.1 | 14.3 | 0.4 | 0.0 |
| 16-Nov | 90.0 | 0.4 | 0.1 | 0.0 | -39.8 | 1.9 | 14.4 | 0.4 | 0.0 |
| 17-Nov | 90.0 | 0.3 | 0.1 | 0.0 | -39.2 | 2.5 | 14.4 | 0.4 | 0.0 |
| 18-Nov | 90.0 | 0.4 | 0.1 | 0.0 | -38.4 | 3.3 | 14.4 | 0.5 | 0.0 |
| 19-Nov | 90.0 | 0.4 | 0.1 | 0.0 | -39.7 | 2.0 | 14.4 | 0.5 | 0.0 |
| 20-Nov | 90.0 | 0.5 | 0.1 | 0.0 | -40.4 | 1.3 | 14.4 | 0.5 | 0.0 |
| 21-Nov | 90.0 | 0.4 | 0.1 | 0.0 | -40.6 | 1.0 | 14.4 | 0.4 | 0.0 |
| 22-Nov | 90.0 | 0.4 | 0.1 | 0.0 | -41.2 | 0.5 | 14.2 | 0.4 | 0.0 |
| 23-Nov | 90.0 | 0.4 | 0.1 | 0.0 | -41.7 | 0.0 | 14.4 | 0.4 | 0.0 |
| 24-Nov | 90.0 | 0.2 | 0.1 | 0.0 | -41.9 | 0.0 | 14.0 | 0.4 | 0.0 |
| 25-Nov | 90.0 | 0.2 | 0.1 | 0.0 | -41.4 | 0.4 | 14.0 | 0.4 | 0.0 |
| 26-Nov | 90.0 | 0.3 | 0.1 | 0.0 | -41.0 | 0.7 | 14.0 | 0.4 | 0.0 |
| 27-Nov | 90.0 | 0.2 | 0.1 | 0.0 | -43.0 | 0.0 | 13.9 | 0.4 | 0.0 |
| 28-Nov | 90.0 | 0.2 | 0.1 | 0.0 | -41.5 | 0.2 | 13.6 | 0.4 | 0.0 |
| 29-Nov | 90.0 | 0.2 | 0.1 | 0.0 | -40.6 | 1.2 | 13.4 | 0.4 | 0.0 |
| 30-Nov | 90.0 | 0.3 | 0.1 | 0.0 | -38.2 | 3.6 | 13.5 | 0.6 | 0.0 |
| 1-Dec | 90.0 | 0.3 | 0.1 | 0.0 | -32.1 | 9.6 | 12.3 | 0.6 | 0.0 |


| 2-Dec | 90.0 | 0.3 | 0.1 | 0.0 | -30.4 | 11.3 | 12.3 | 0.6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3-Dec | 90.0 | 1.6 | 0.0 | 0.0 | -26.4 | 15.3 | 0.0 |  |
| 4-Dec | 90.0 | 0.6 | 0.0 | 0.0 | -10.3 | 33.7 | 0.3 |  |
| 5-Dec | 90.0 | 0.1 | 0.1 | 0.0 | -46.4 | 0.0 | 0.3 |  |
| 6-Dec | 90.0 | 0.1 | 0.1 | 0.0 | -46.5 | 0.0 | 0.0 |  |

The water available to roots above the stress threshold is the amount of PAW ( mm ) above one third of the total water holding capacity of this soil. If the water values are below this stress threshold the water available to roots above the stress threshold will be negative

Bureau of Meteorology Seasonal and Monthly Outlooks


