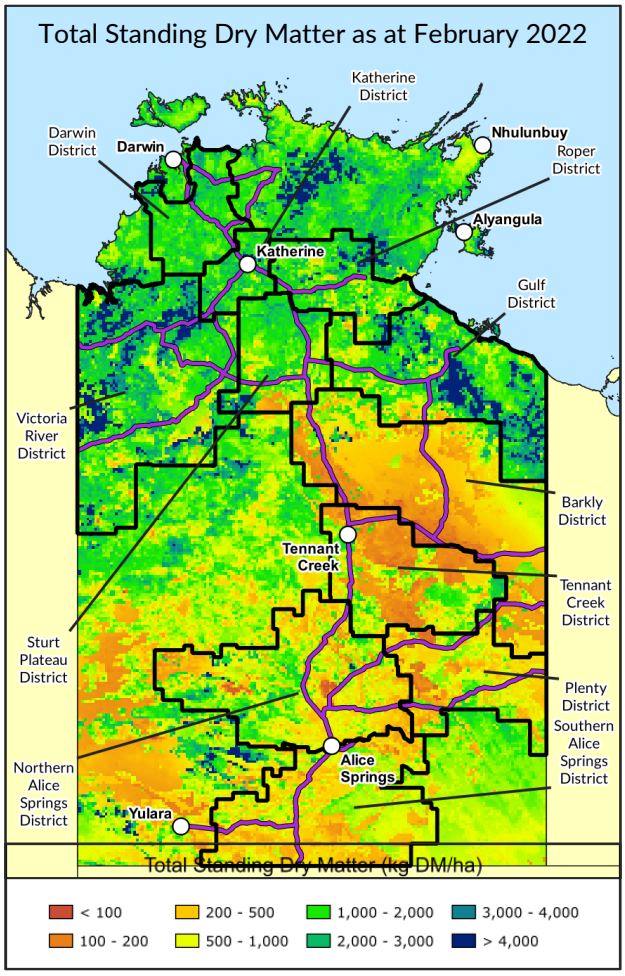
Northern Territory Pastoral Feed Outlook March to May 2022

The purpose of this quarterly outlook is to summarise information relevant to the pastoral industry such as current feed supplies, seasonal conditions, the development of drought conditions and relative fire risk. This edition summarises modelled pasture growth from the end of February 2022.
You can subscribe to receive the Outlook here.

You can see the entire document and all districts by continuing to scroll through this file. If you are interested in selected sections you can click on the links below.



For further information about this Outlook, please contact Chris Materne on 08 8951 8135

Summary of current situation and trends – all districts – March 2022

The 2021-2022 **La Niña** has resulted in **above average** growth across the Alice Springs districts, however north of Tennant Creek many districts have generally only experienced **average** to **below average** pasture growth. This highlights that although an **above average** 2021/22 season may have been anticipated based on the current La Niña, the influence of ENSO is relatively slight in the NT and many La Niña years still receive below average rainfall. During any season, local short-term weather systems can over-ride the broader climate driver's (ENSO and IOD) influences. The BoM's short to medium term predictions, which incorporate all the potential climate drivers, and their interactions have generally been more reliable for 2021-2022.

Most of the NT did experience an **early 2021/22 wet season** as predicted by the BoM. BoM also predicted that, between December 2021 and February 2022, the chance of exceeding median rainfall across the NT varied from **below average** in the Tennant Creek, southern Barkly and Tanami regions, to **above average** for parts of the Darwin, VRD, Gulf, and Alice Springs regions. With the exception of area around the Kidman Springs Research Station in the VRD district and the western half of the Gulf district, which were drier than expected, much of BoM's forecasting eventuated.

Over the next three months, **above average** pasture growth is expected to continue across much of the Alice Springs districts where soil moisture remains sufficient. However, pasture growth in the northern districts (especially Darwin, Katherine and northern VRD disticts) that have received **average** to **above average** pasture growth thus far will begin to be limited by available soil nitrogen levels.

Although last season (2020/21) was considered **average** across much of the NT, the previous two years were **well below average** and the effects are still felt in some areas. In those two consecutive **below average** seasons many districts experienced large areas of **very low** (<500 kg/ha) pasture biomass. These levels still exist in some locations in all districts south of Daly Waters, but the size of affected areas has been significantly reduced. Districts that have experienced only average to below average 2021/22 growth thus far, such as the Barkly and Tennant Creek districts, are still showing relatively large areas of **extremely low** biomass (<200 kg/ha).

The Barkly region is still recovering from the widespread death of perennial grass tussocks as a result of the very dry years between 2018 and 2020. Loss of perennial grasses reduces potential pasture growth. Pastures that have become dominated by annual grasses and forbs provide a less stable forage supply because short-lived plants disintegrate more quickly after the growing season. Land condition recovery will take at least two consecutive years of better seasonal conditions and appropriate grazing management to recover. Protection from grazing for newly germinated young plants over the coming seasons is the key to this recovery.

KEY	Green = low risk	Orange = watch	Red = high risk

KEY ↑ = increasing trend ↓ = decreasing trend ↔ = steady

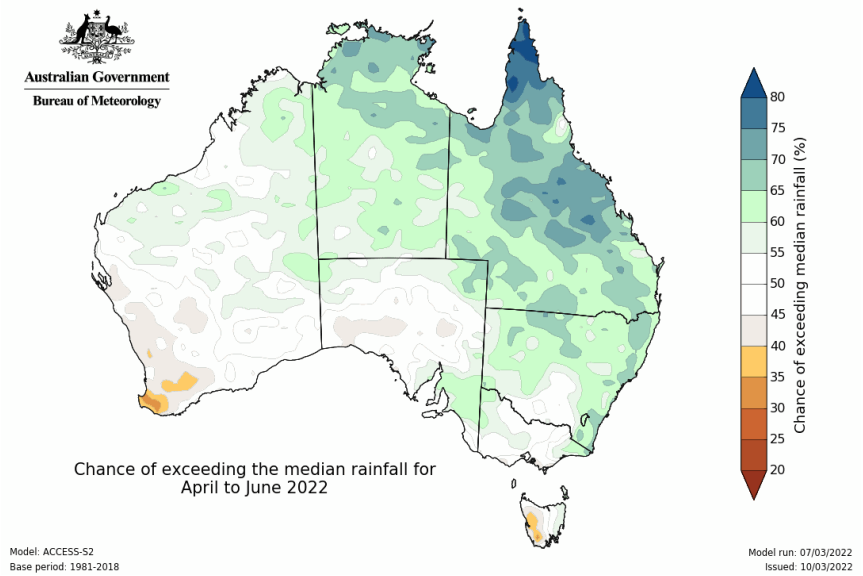
	Northern Territory Pastoral Districts											
Indicator	**Darwin**	**Katherine**	**VRD**	**Sturt Plateau**	**Roper**	**Gulf**	**Barkly**	**Tennant Creek**	**Northern Alice Springs**	**Plenty**	**Southern Alice Springs**	**Comments**
2021/22 total pasture growth (to date)	↔	↔	↓	↓	↓	↓	↓	↓	↔	↑	↑	Arrows indicate trend compared to the long-term median (for this time of year)
Current estimated standing biomass	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	Arrows indicate trend since previous quarter
Current fire risk	↓	↓	↓	↓	↓	↓	↓	↔	↔	↔	↔	Arrows indicate the trend since previous quarter
Current seasonal outlook (the next 3 months)	↓	↔	↔	↑	↑	↓	↔	↔	↑	↑	↑	Arrows indicate the trend since previous quarter and taking into account the forecasted model predictions

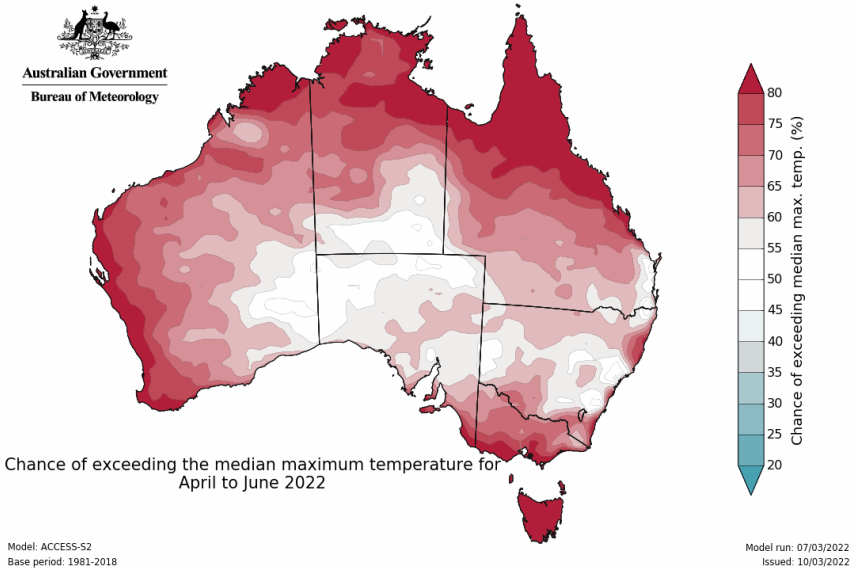
Northern Territory Seasonal Outlook as at March 2022*

Sourced from the Australian Bureau of Meteorology (BoM)
*This seasonal outlook was correct at the time of publication. For the most up-to-date seasonal outlook, please go to the "climate outlook" section of the BoM website.

The BoM outlook for March to June 2022 indicates that:

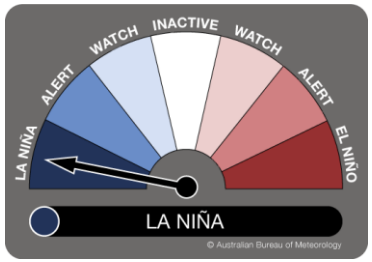
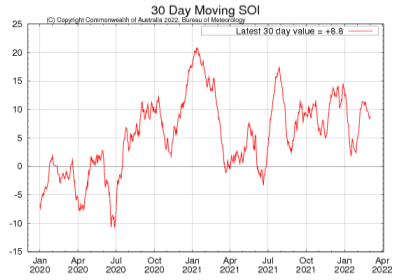
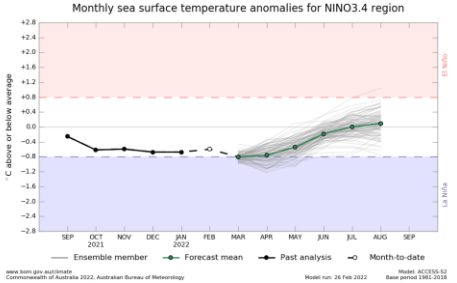
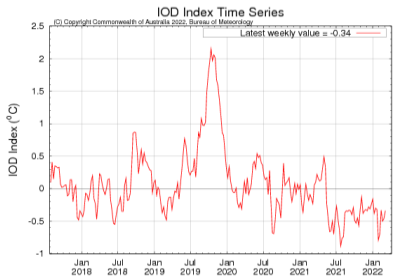
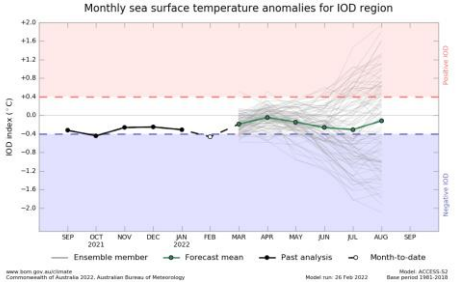
- **Wetter** than average conditions are likely for the majority of the NT (especially in the second half of March), with generally moderate to good accuracy (55-75%). There is a 60 to 65% probability of greater than median rainfall in the northern third of the NT in April, but median rainfall is low for that time of year anyway.
- **Warmer** than average days are likely across the majority of the NT, north of Alice Springs, with good past accuracy (65-100%).
- **Warmer** than average nights are likely across the majority of the NT, north of Alice Springs, with moderate past accuracy (55-75%).

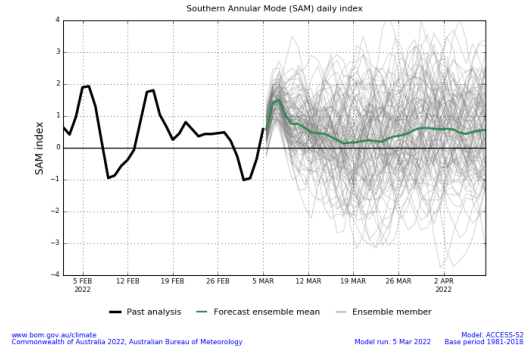
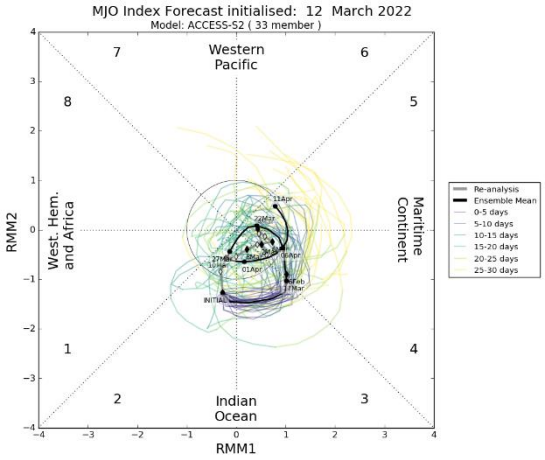




Climate drivers

- Weakening **La Niña** in the Pacific Ocean, expected to return to neutral conditions by April.

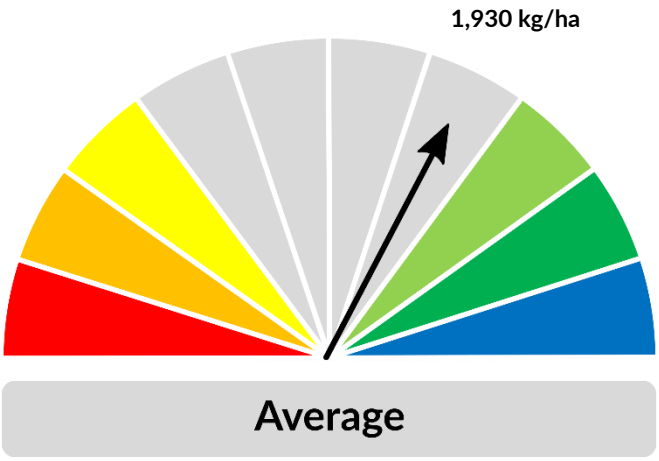
Climate Influences	**Comments** (sourced from the Australian Bureau of Meteorology)
El Niño Southern Oscillation (ENSO) ENSO status: **La Niña**  Pacific Ocean Update	**La Niña likely to persist until mid-autumn**. **La Niña** is active in the tropical Pacific Ocean, but is past its peak. Most of the seven international climate models surveyed by the Bureau anticipate the strength of the **La Niña** will ease over the next three months, with a return to **neutral** conditions in mid-autumn.   The 30-day SOI has dropped slightly over the past week, but remains within **La Niña** thresholds. It is not uncommon during the northern Australian wet season for the SOI to experience fluctuations from transient tropical weather. **La Niña** increases the chance of **above average** rainfall across much of northern and eastern Australia during summer, with a weaker influence during autumn. It is important to note that significant weather can still occur as **La Niña** comes to an end, especially as we approach the peak of the tropical cyclone season. To see larger versions of these images, go to the Outlook and SOI tabs at Pacific Ocean Update
Indian Ocean Dipole (IOD) Current outlook: **Neutral** Indian Ocean Update	**The Indian Ocean Dipole (IOD) is *neutral*.** While the monsoon trough is over the tropical Indian Ocean, it changes wind patterns and IOD events are unable to form. This typically lasts from December to April. A **neutral** IOD has little influence on Australian climate. All five international climate models surveyed by the Bureau indicate the IOD will remain **neutral** for the coming autumn months.   To see larger versions of these images, go to the Outlook tab and IOD Time Series

Seasonal Indicator	Comments (sourced from the Australian Bureau of Meteorology & the NT Department of Industry, Tourism & Trade)
Southern Annular Mode (SAM) Current outlook: **Neutral** Southern Ocean Update	**The SAM is currently neutral.** The Southern Annular Mode (SAM) index is **neutral**. It is forecast to generally remain **neutral** over the next three weeks. A **neutral** SAM has little influence on Australian climate. To see larger versions of these images, go to the Outlook tab and Southern Ocean Update 
Madden–Julian Oscillation (MJO) Outlook: **Indiscernible** Tropics Update	**The MJO has weakened and is currently indiscernible (as at 12 March 2022).** The MJO recently weakened while in the Australian region and is now indiscernible. Most climate models suggest the MJO is likely to remain weak for the coming fortnight, meaning it is unlikely to influence tropical climate during this time. 
Wet Season Onset Outlook 2021/22: **Early** Northern Rainfall Onset Forecast The northern rainfall onset occurs when the rainfall total reaches 50 mm since the 1st of September. It is considered approximately the amount of rainfall required to stimulate plant growth.	**Most of the NT had an early start to the 2021/22 season as predicted.** Most of the NT had an **early** rainfall onset as predicted with the exception of the Darwin and parts of the Katherine districts. However, in the Top End and Katherine regions it was followed by average January and then very below average rainfall in February, which has led to dryland forage crop failures in the region. The onset observations can be found here.

Darwin District

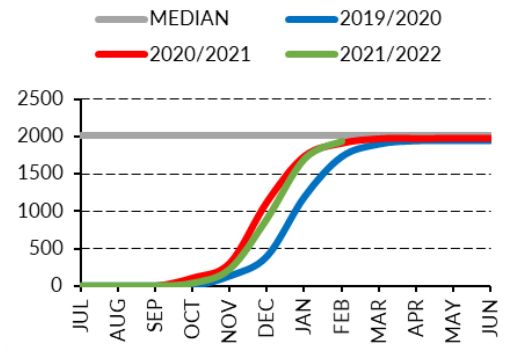
- The 2021/22 pasture growth across the district is nearing the long-term annual **average**, and although soil moisture is still available, any additional growth this season will be minimal due to limited available nitrogen.
- Over the next three months, the chances of exceeding the median growth is **extremely low**.
- In a typical wet season, pasture growth in the Darwin region tends to be limited by available soil nitrogen rather than soil moisture. This means that the annual variation in growth and relative pasture biomass on upland country is quite low.
- 50% of the district has burnt since 1 January 2021. 15% has been burnt since 1 July 2021.

2021/22 Pasture Growth
(as at 1st March 2022)

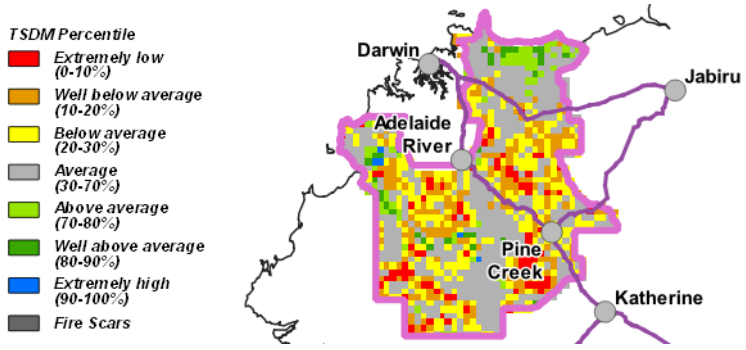


As at 1st March 2022				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	0%	57%	41%	2%
Total Standing Dry Matter	0%	35%	56%	9%

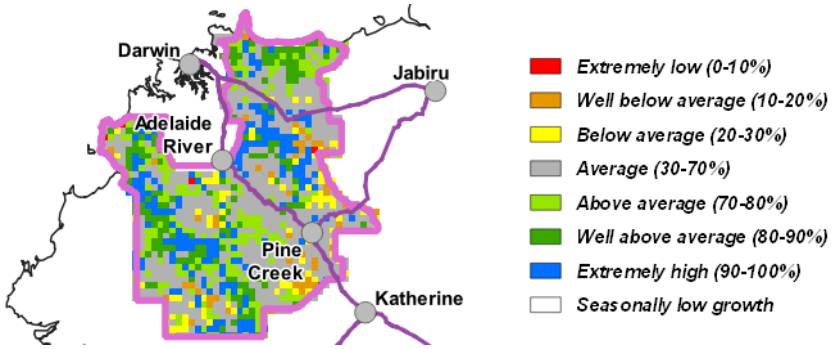
Median Pasture Growth (kg/ha) (Running Total)



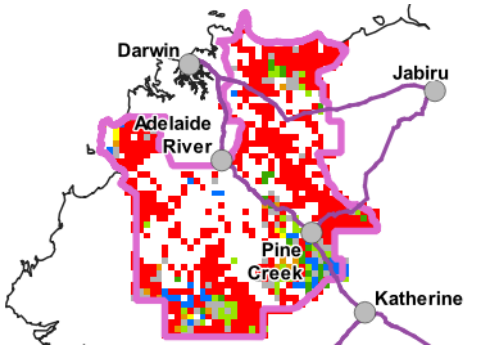
Total Standing Dry Matter Relative to Historical Records (1957-now)



2021/22 Pasture Growth Relative to Historical Records (1957-now)



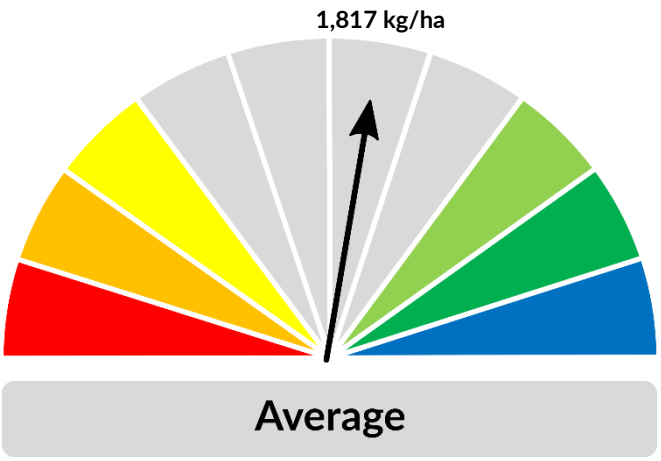
Chance of Exceeding Median Pasture Growth in the next 3 Months



Katherine District

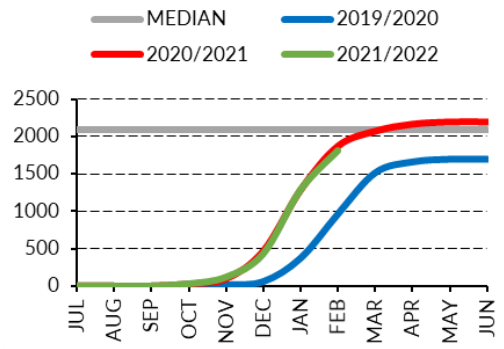
- The 2021/22 pasture growth across the district is **average** to date. The patchy nature of the storms has resulted in average growth for this time of year with **above average** growth west of Katherine and **below average** growth east of Katherine.
- Over the next three months, the chance of exceeding median pasture growth is mixed, but the south western half of the region is predicted to have extremely low growth.
- 35% of the district has burnt since 1 January 2021. 17% has been burnt since 1 July 2021.

2021/22 Pasture Growth
(as at 1st March 2022)

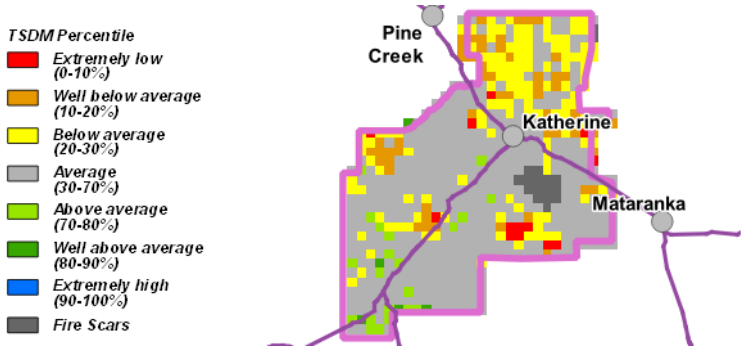


As at 1st March 2022				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	3%	62%	35%	0%
Total Standing Dry Matter	0%	31%	55%	14%

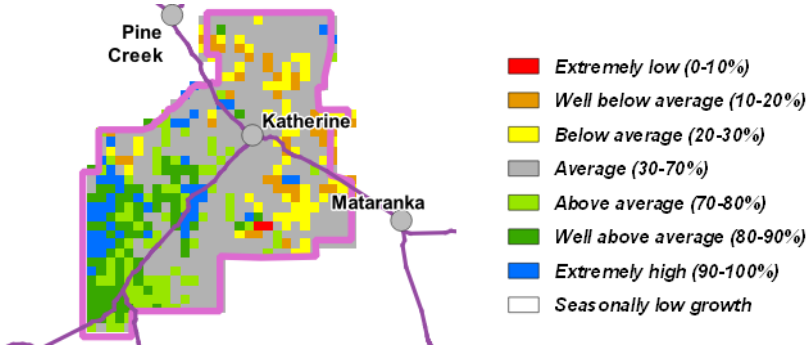
Median Pasture Growth (kg/ha) (Running Total)



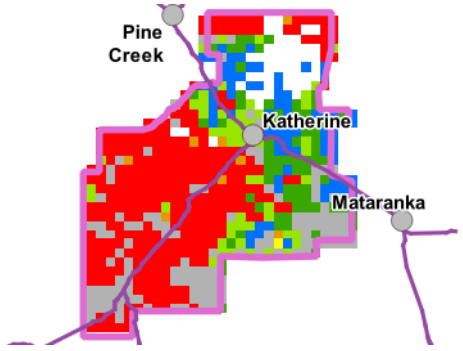
Total Standing Dry Matter Relative to Historical Records (1957-now)



2021/22 Pasture Growth Relative to Historical Records (1957-now)



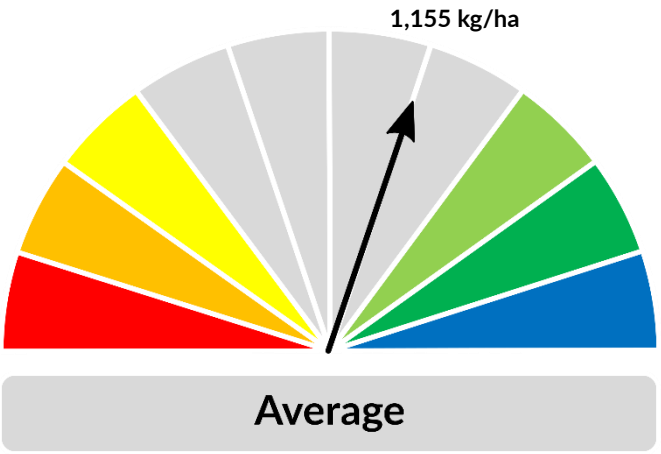
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Victoria River District

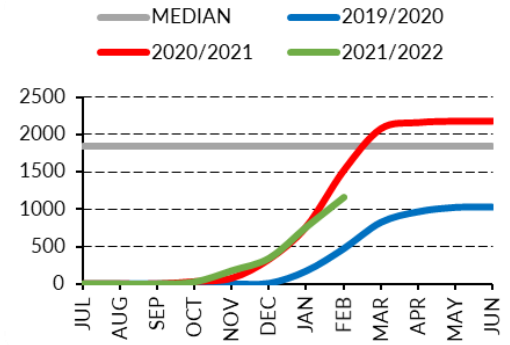
- The 2021/22 district pasture growth as a whole is **average**, but varies considerably from **well above average** across the north to **extremely low** around Kidman Springs Research Station.
- The chance of exceeding median pasture growth over the next three months is mixed, but generally **average** across the south, to **extremely low** across the north because available soil nitrogen levels have already been used this season.
- 19% of the district has burnt since 1 January 2021. 8% has been burnt since 1 July 2021.

2021/22 Pasture Growth
(as at 1st March 2022)

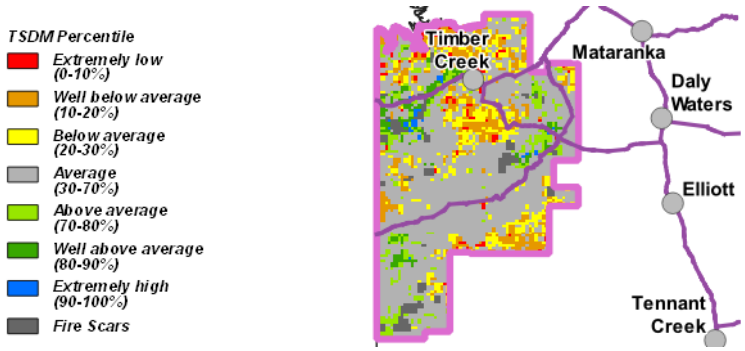


As at 1st March 2022				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	41%	39%	18%	2%
Total Standing Dry Matter	5%	32%	36%	27%

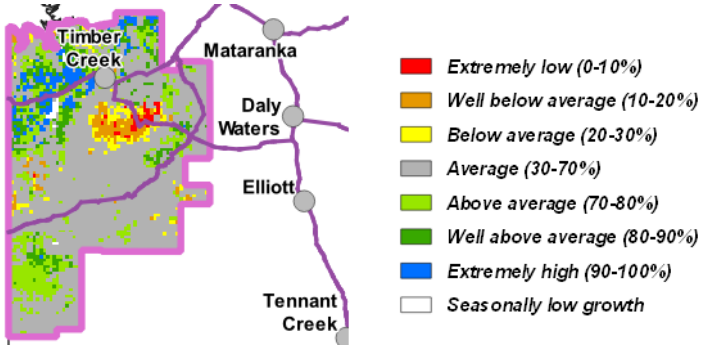
Median Pasture Growth (kg/ha) (Running Total)



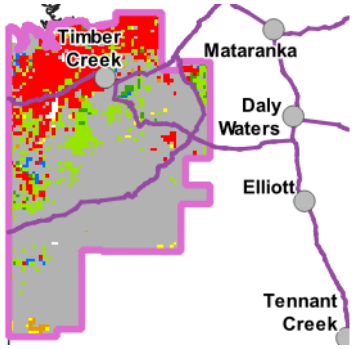
Total Standing Dry Matter Relative to Historical Records (1957-now)



2021/22 Pasture Growth Relative to Historical Records (1957-now)



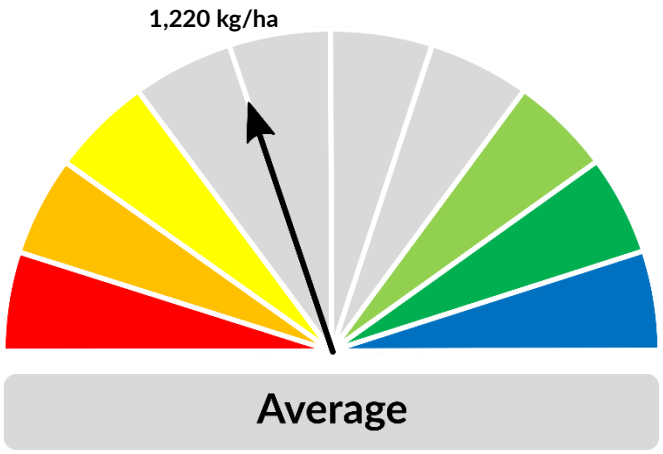
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Sturt Plateau District

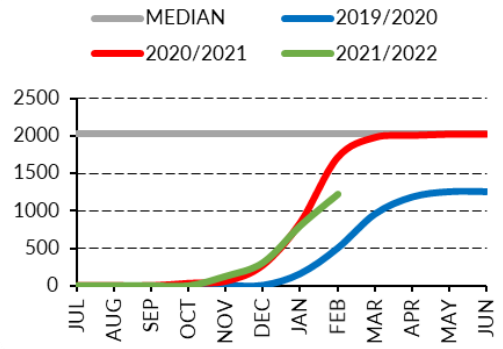
- The 2021/22 district pasture growth has been **average** thus far, but there are areas of **below average** growth across the district, especially across the southern parts.
- Over the next three months the chances of exceeding the median pasture growth will be generally **above average**, with the exception of two areas showing a **below average** chance; one in the central north due to depleted soil nitrogen levels; and the other in the south due to limited water.
- 14% of the district has burnt since 1 January 2021. 11% has been burnt since 1 July 2021.

2021/22 Pasture Growth
(as at 1st March 2022)

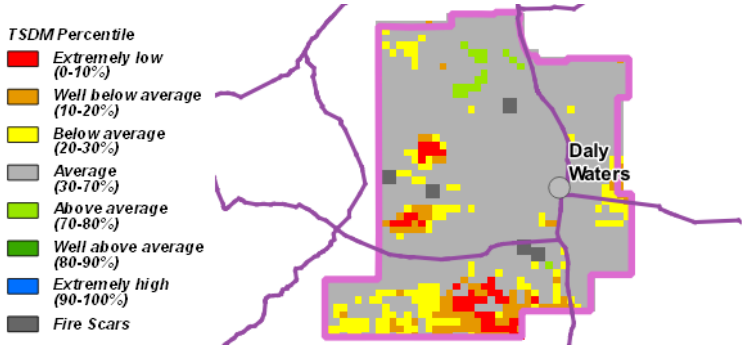


As at 1st March 2022				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	34%	58%	8%	0%
Total Standing Dry Matter	12%	44%	35%	9%

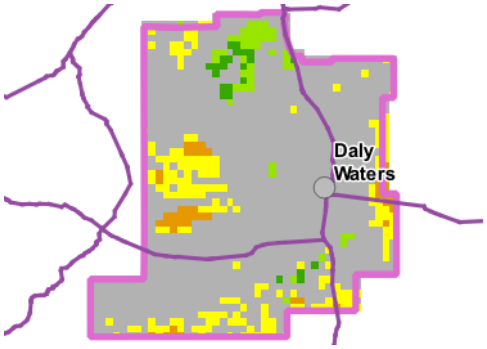
Median Pasture Growth (kg/ha) (Running Total)



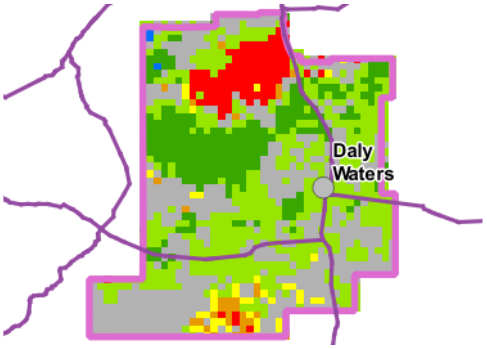
Total Standing Dry Matter Relative to Historical Records (1957-now)



2021/22 Pasture Growth Relative to Historical Records (1957-now)



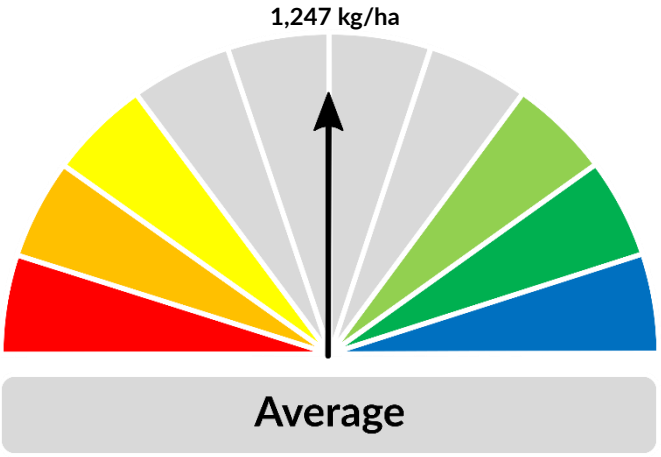
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Roper District

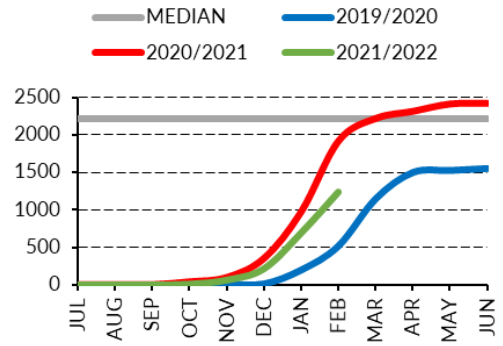
- The 2021/22 district pasture growth is **average** for this time of year. However, growth is patchy and varies considerably across the district from **average** to **above average** in the northeast to **average** to **below average** in the south and west.
- Over the next three months, the chance of exceeding median pasture growth across the district varies from **extremely high** in the west to **extremely low** in the east where available nitrogen will start to limit growth.
- 49% of the district has burnt since 1 January 2021. 27% has been burnt since 1 July 2021.

2021/22 Pasture Growth
(as at 1st March 2022)

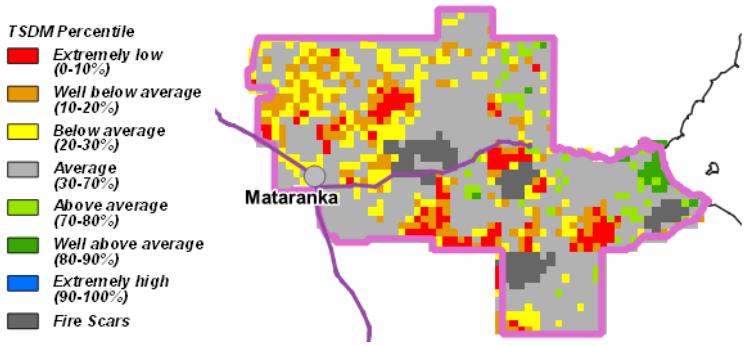


As at 1st March 2022				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	30%	57%	13%	<1%
Total Standing Dry Matter	7%	38%	38%	17%

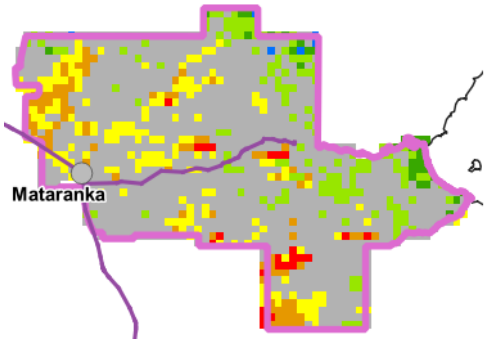
Median Pasture Growth (kg/ha) (Running Total)

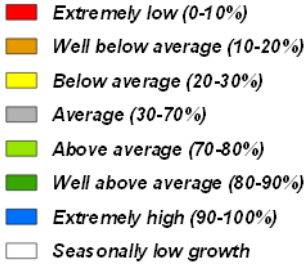


Total Standing Dry Matter Relative to Historical Records (1957-now)

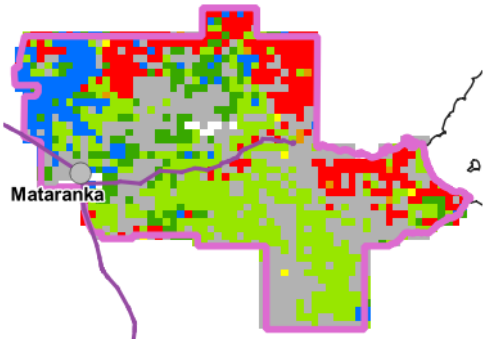


2021/22 Pasture Growth Relative to Historical Records (1957-now)





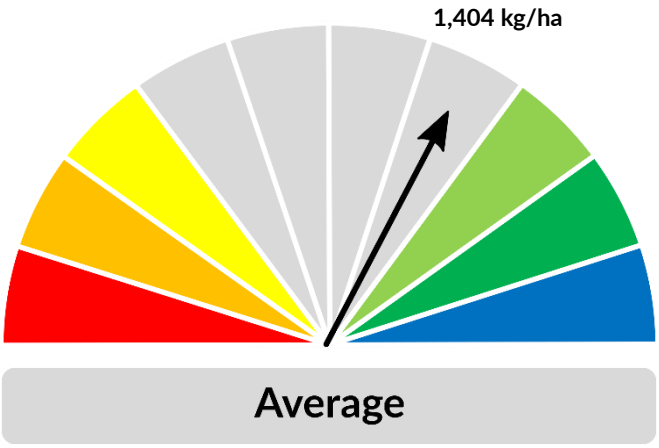
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Gulf District

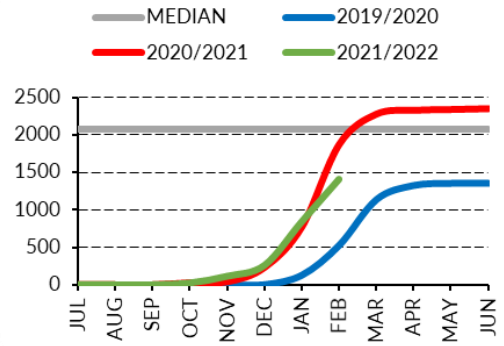
- The 2021/22 district pasture growth has been **average** so far. However, this growth varies considerably from **extremely high** across the central and southern parts of the district to **well below average** in the west.
- Over the next three months, much of the district, especially along the coast, has an **extremely low** chance of exceeding median pasture growth. Further inland, where water has limited growth to date, **average** to **above average** growth is likely.
- 29% of the district has burnt since 1 January 2021. 19% has been burnt since 1 July 2021.

2021/22 Pasture Growth
(as at 1st March 2022)

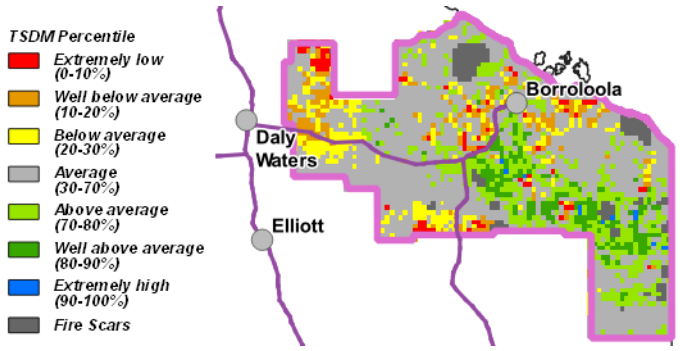


As at 1st March 2022				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	24%	56%	19%	1%
Total Standing Dry Matter	9%	31%	32%	28%

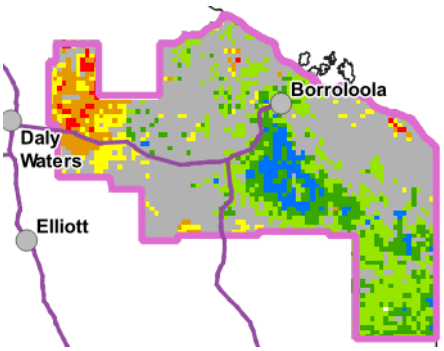
Median Pasture Growth (kg/ha) (Running Total)

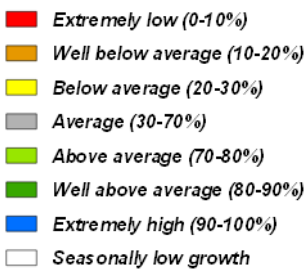


Total Standing Dry Matter Relative to Historical Records (1957-now)

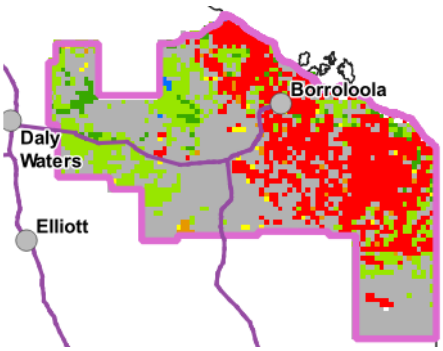


2021/22 Pasture Growth Relative to Historical Records (1957-now)





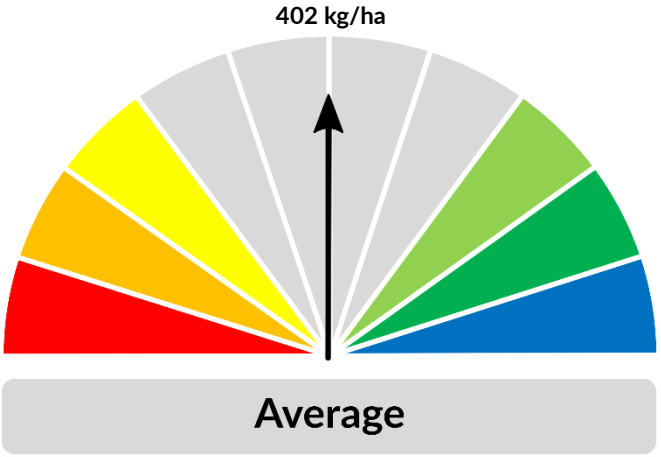
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Barkly District

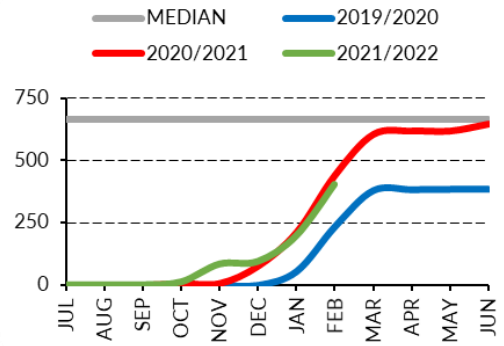
- The 2021/22 pasture growth is considered **average** for this time of year. However, this growth varies from **above average** in the east to **below average** in the northwest.
- Although the 2020/21 rainfall was considered **average**, growth was patchy due to significant Mitchell Grass death as a result of the previous two consecutive **below average** and **extremely low** seasons (2018-2020). This has resulted in large areas of the district with **very low** levels (<500kg/ha) of pasture biomass.
- Over the next three months, the majority of the district has an **average** to **below average** chance of exceeding median pasture growth.
- 1% of the district has burnt since 1 January 2021.

2021/22 Pasture Growth
(as at 1st March 2022)

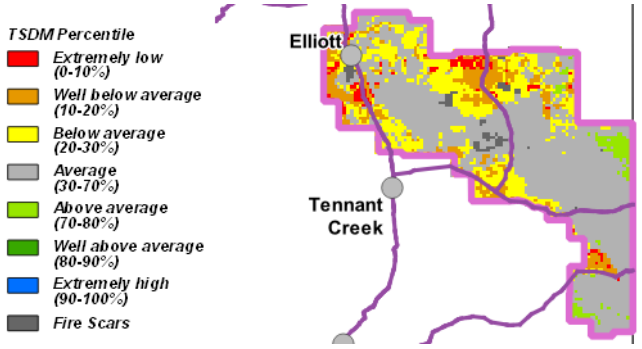


As at 1st March 2022				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	20%	50%	24%	6%
Total Standing Dry Matter	10%	37%	33%	20%

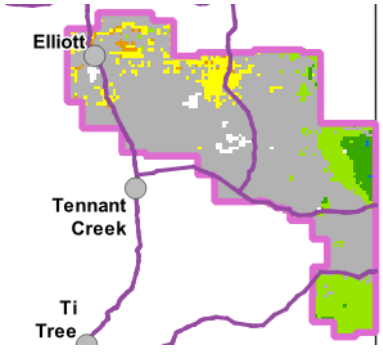
Median Pasture Growth (kg/ha) (Running Total)



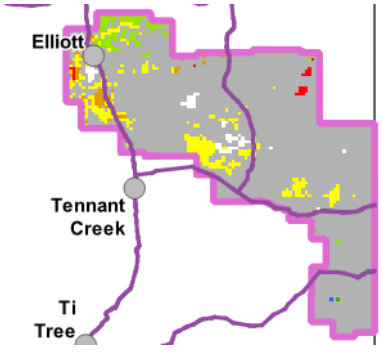
Total Standing Dry Matter Relative to Historical Records (1957-now)

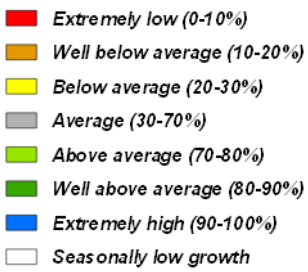


2021/22 Pasture Growth Relative to Historical Records (1957-now)



Chance of Exceeding Median Pasture Growth in the Next 3 Months

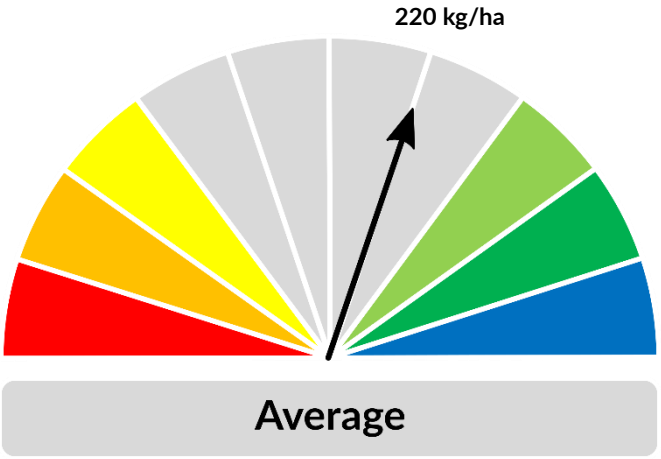




Tennant Creek District

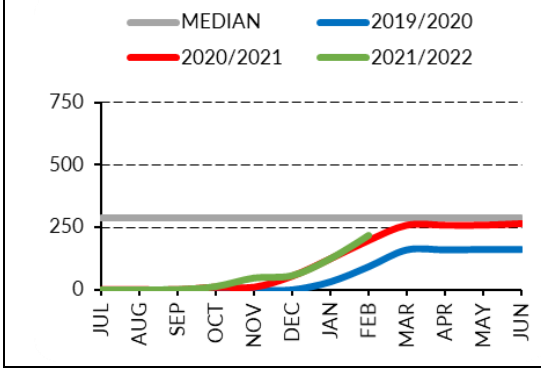
- The 2021/22 pasture growth for the district has been **average** thus far. However, southern parts are showing **above average** growth.
- Although, the 2020/21 season was considered average, the previous two consecutive **below average** seasons, have led to **very-low** levels (<200 kg/ha) of pasture biomass still persisting across large areas of the district.
- Over the next three months, the majority of the district has an **average** chance of exceeding median pasture growth.
- 2% of the district has burnt since 1 January 2021.

2021/22 Pasture Growth (as at 1st March 2022)

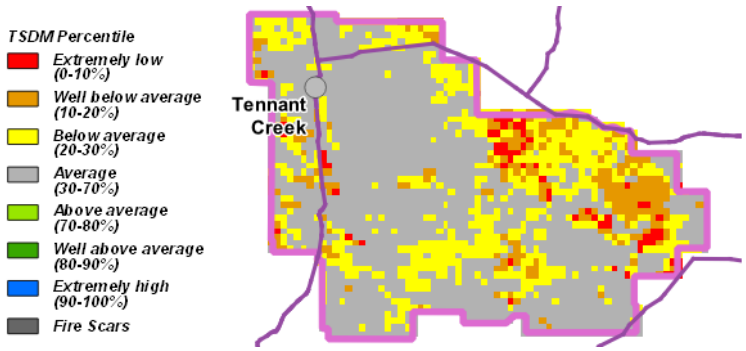


As at 1st March 2022				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	60%	28%	11%	1%
Total Standing Dry Matter	20%	28%	18%	34%

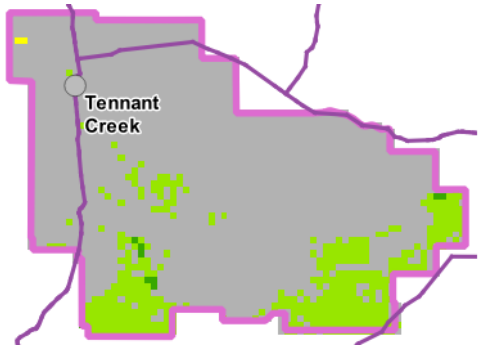
Median Pasture Growth (kg/ha) (Running Total)

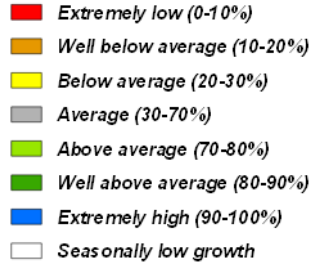


Total Standing Dry Matter Relative to Historical Records (1957-now)

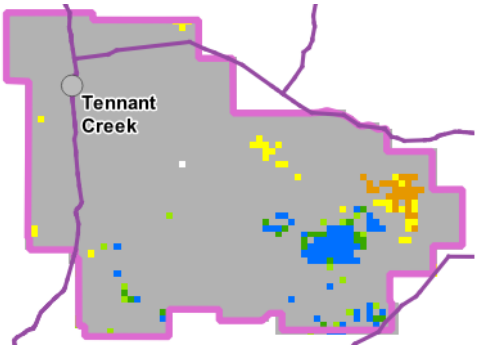


2021/22 Pasture Growth Relative to Historical Records (1957-now)





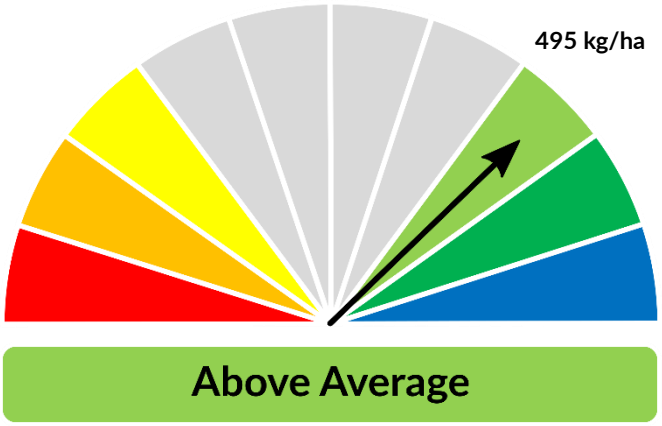
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Northern Alice Springs District

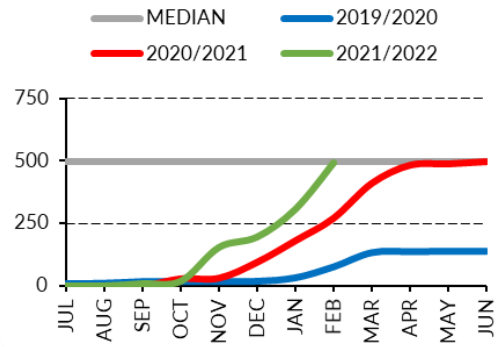
- The 2021/22 pasture growth for the district as a whole is considered **above average** thus far, with large areas throughout the central and eastern parts showing **well above average** growth.
- Over the next three months, much of the district has an **average** to **above average** chance of exceeding median pasture growth, especially across the southern half of the district.
- 3% of the district has burnt since 1 January 2021.

2021/22 Pasture Growth
(as at 1st March 2022)

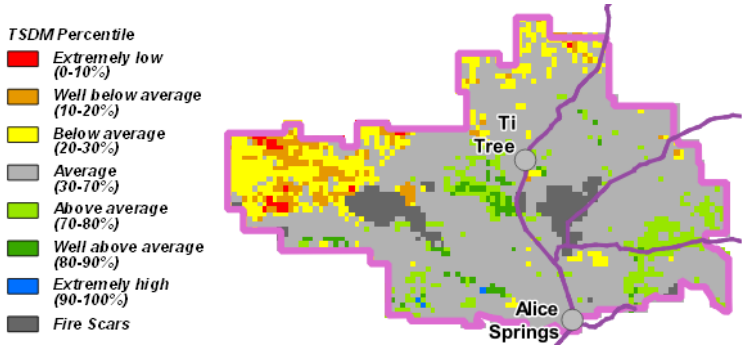


As at 1st March 2022				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	14%	37%	39%	10%
Total Standing Dry Matter	3%	14%	38%	45%

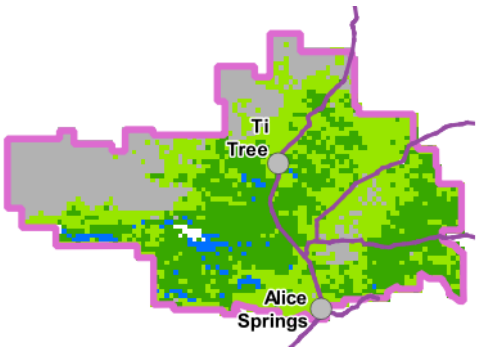
Median Pasture Growth (kg/ha) (Running Total)

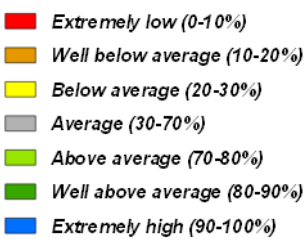


Total Standing Dry Matter Relative to Historical Records (1957-now)

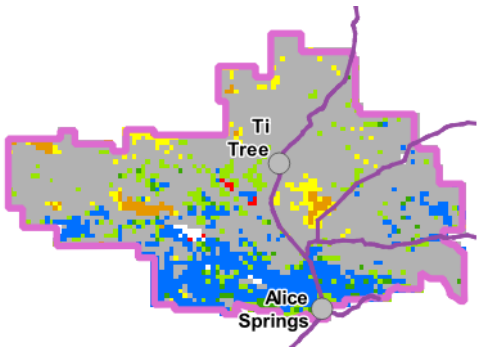


2021/22 Pasture Growth Relative to Historical Records (1957-now)





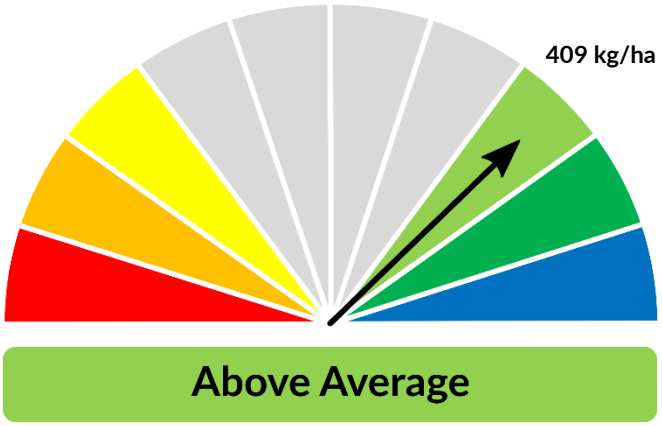
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Plenty District

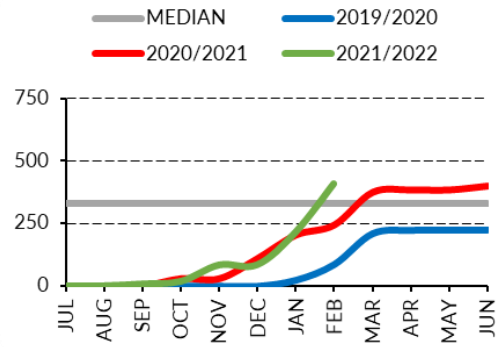
- The 2021/22 pasture growth for the district has been above average for this time of year, with large areas showing well-above average growth.
- Over the next three months, the chance of exceeding median pasture growth is generally **average** to above average across the western half of the district while the eastern half has an **average** to below average chance.
- <1% of the district has burnt since 1 January 2021

2021/22 Pasture Growth
(as at 1st March 2022)

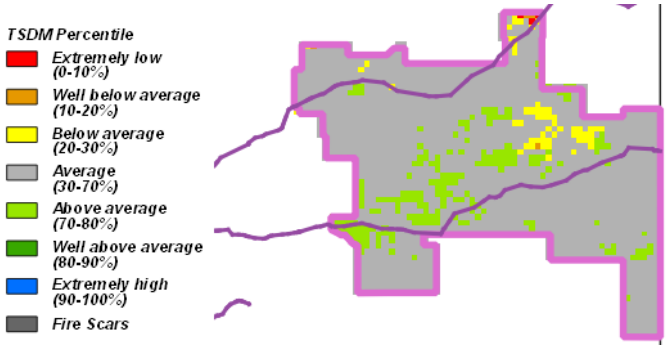


As at 1st March 2022				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	28%	44%	28%	0%
Total Standing Dry Matter	7%	16%	46%	31%

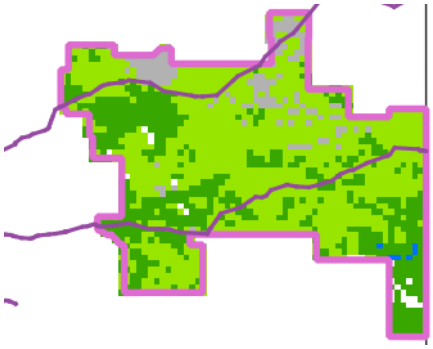
Median Pasture Growth (kg/ha) (Running Total)



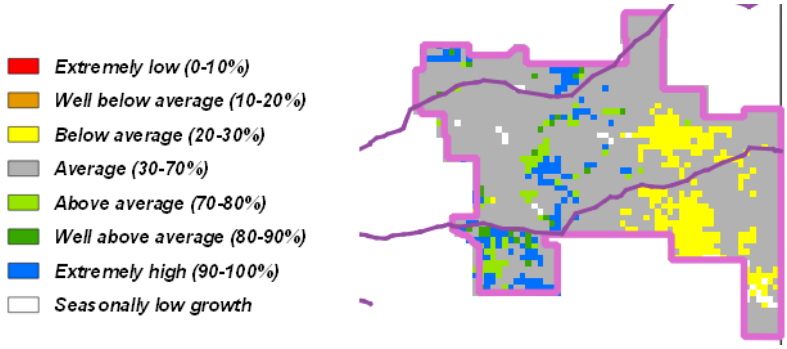
Total Standing Dry Matter Relative to Historical Records (1957-now)



2021/22 Pasture Growth Relative to Historical Records (1957-now)



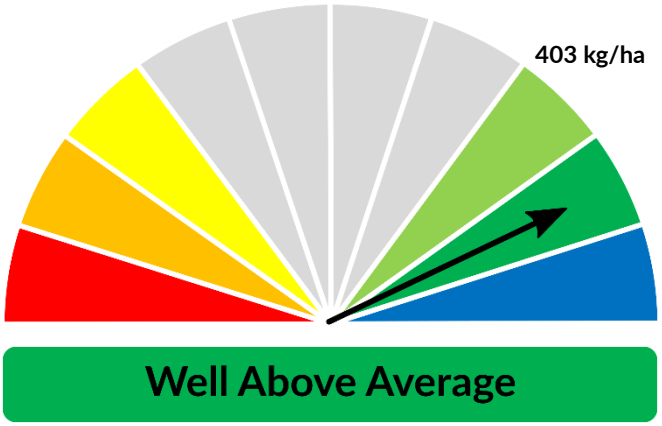
Chance of Exceeding Median Pasture Growth in the Next 3 Months



Southern Alice Springs District

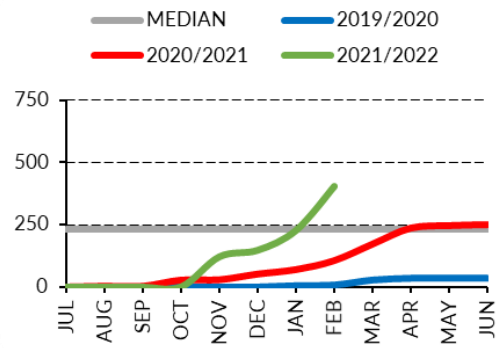
- The 2021/22 pasture growth for the district is **well above average** for this time of the year.
- Over the next three months the majority of the district has an **average** to **extremely high** chance of exceeding median pasture growth.
- 1% of the district has burnt since 1 January 2021

2021/22 Pasture Growth
(as at 1st March 2022)

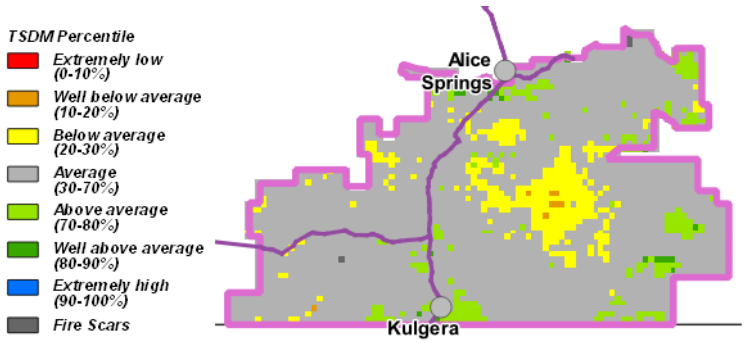


As at 1st March 2022				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	27%	51%	19%	3%
Total Standing Dry Matter	1%	22%	43%	34%

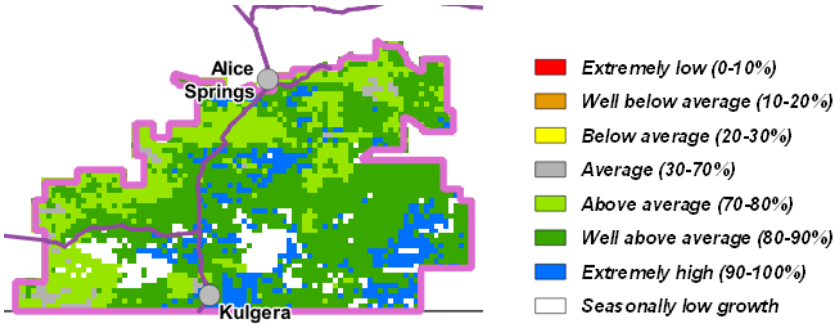
Median Pasture Growth (kg/ha) (Running Total)



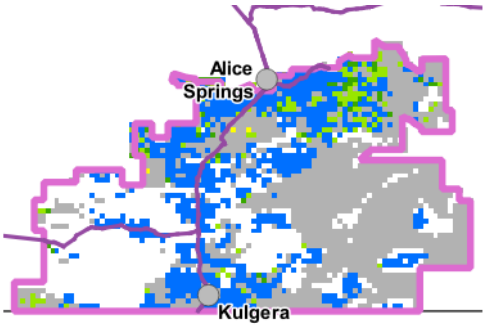
Total Standing Dry Matter Relative to Historical Records (1957-now)



2021/22 Pasture Growth Relative to Historical Records (1957-now)



Chance of Exceeding Median Pasture Growth in the Next 3 Months



Pasture information

The pasture and fire information in this document is derived from AussieGRASS. AussieGRASS is a model that simulates pasture growth and standing biomass using climate data, vegetation mapping, fire history and regional estimates of grazing pressure. The model can be used to track simulated pasture growth and total standing pasture biomass at the landscape scale.

Note that the model does not use stocking rate data for individual properties. Where stock numbers are significantly higher or lower than typical for a district, model estimates of total standing dry matter may be erroneous.

Disclaimer