

# Northern Territory Pastoral Feed Outlook December 2021 to March 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 November 2021. 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.

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[Northern Territory Seasonal Outlook – as at December 2021](#)

Individual District Summaries:

[Darwin District](#)

[Katherine District](#)

[Victoria River District](#)

[Sturt Plateau District](#)

[Roper District](#)

[Gulf District](#)

[Barkly District](#)

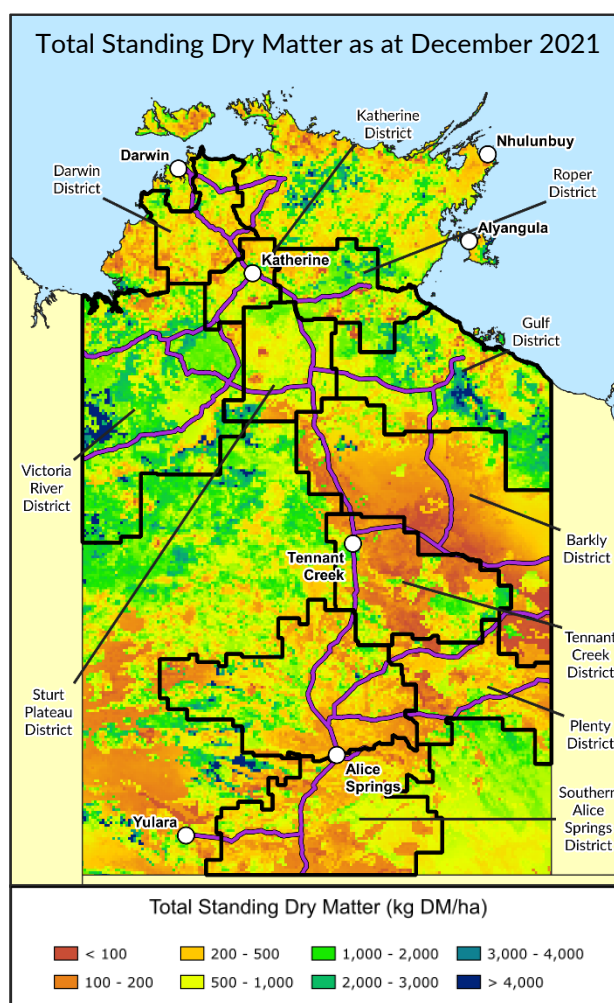
[Tennant Creek District](#)

[Northern Alice Springs District](#)

[Plenty District](#)

[Southern Alice Springs District](#)

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



## Summary of current situation and trends – all districts – December 2021

Most of the NT has experienced an early 2021/22 wet season as predicted by the BoM, with pasture growth thus far considered **average** to **above average** for many districts south of Katherine. Between December and February the chance of exceeding median pasture growth varies 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. Between January and March there is roughly a 50% chance of exceeding the median rainfall for most of the NT.

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) to **critically low** (<200 kg/ha) levels of 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. The Barkly and Tennant Creek districts are still showing relatively large areas of **very low** biomass.

Parts of the Alice Springs and Barkly regions are still recovering from the widespread death of perennial grass tussocks as a result of the very dry years between 2017-2020. Loss of perennial grasses reduces potential pasture growth and provides a less stable forage supply because annual grasses and forbs disintegrate more quickly after the growing season. Land condition recovery will take at least two years of better seasonal conditions and appropriate grazing management to recover. Protection from grazing for newly germinated young plants over the coming season is the key to this recovery.

KEY

Green = low risk

Orange = watch

Red = high risk

KEY

↑ = increasing trend

↓ = decreasing trend

↔ = steady

Indicator	Northern Territory Pastoral Districts											Comments
	Darwin	Katherine	VRD	Sturt Plateau	Roper	Gulf	Barkly	Tennant Creek	Northern Alice Springs	Plenty	Southern Alice Springs	
2021/22 total pasture growth	↔	↔	↑	↑	↓	↑	↑	↑	↑	↑	↑	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	↑	↑	↔	↓	↓	↑	↓	↓	↓	↓	↓	Arrows indicate the trend since previous quarter and taking into account the forecasted model predictions

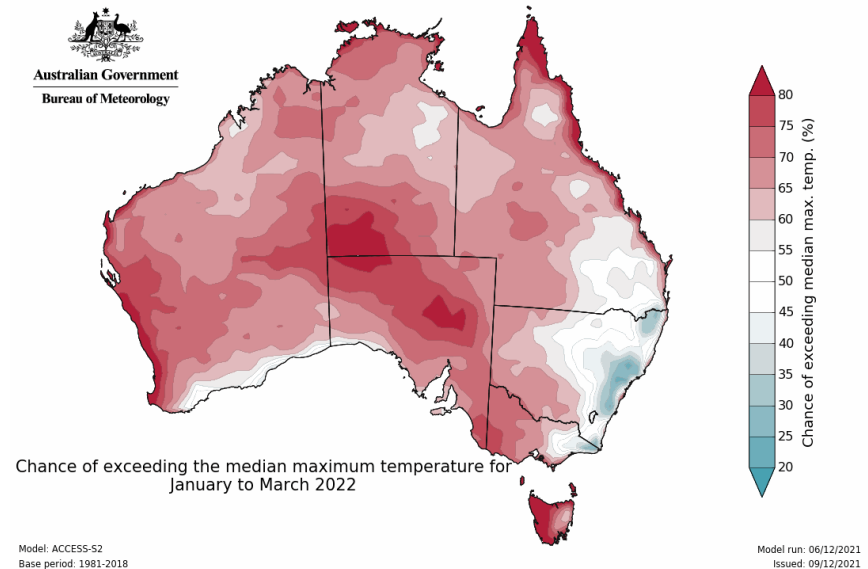
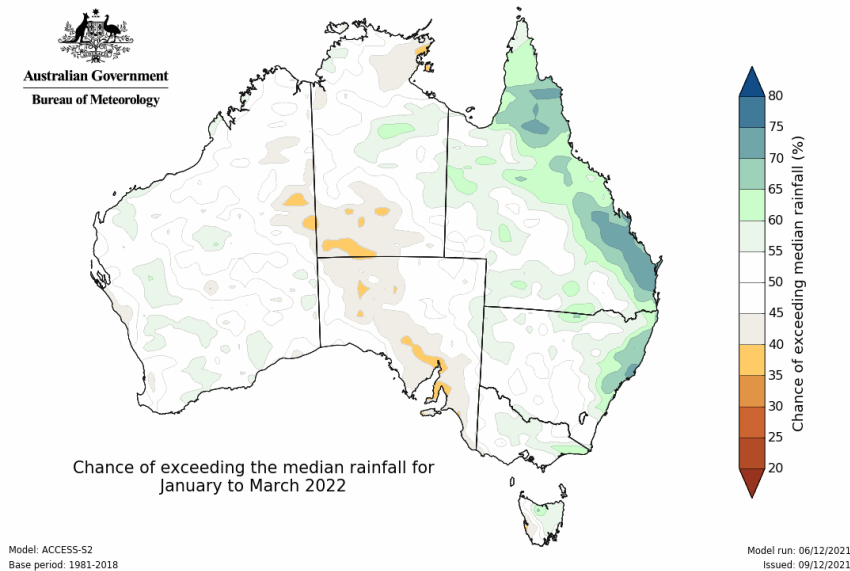
# Northern Territory Seasonal Outlook as at December 2021\*

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.

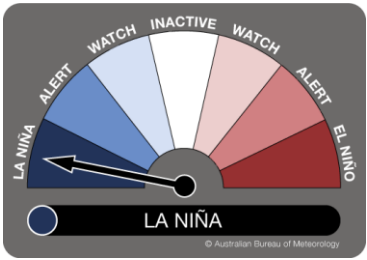
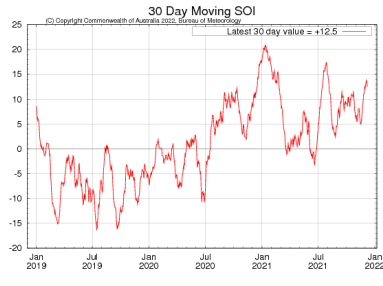
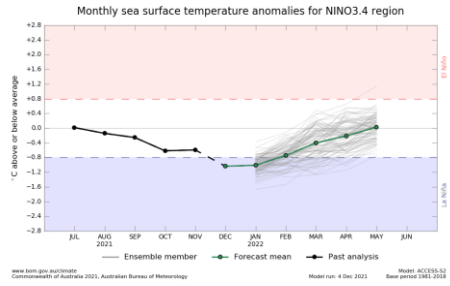
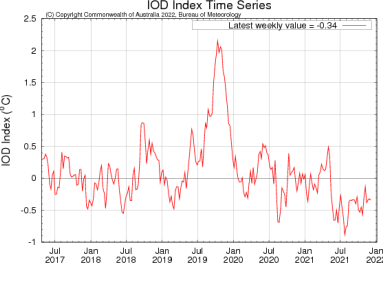
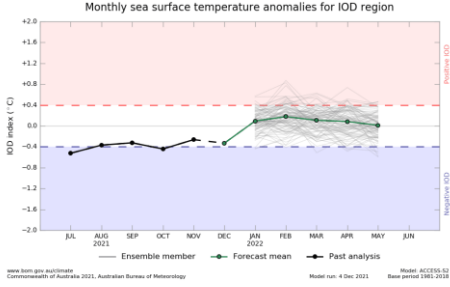
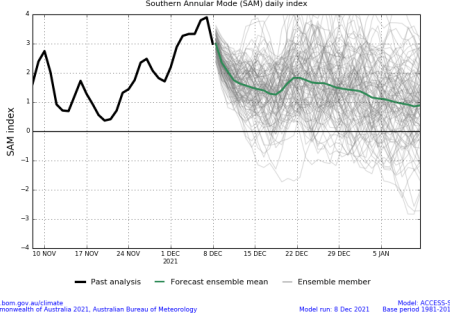
The BoM outlook for January to March 2022 indicates that:

- **Drier** than average conditions (especially during January) are likely, with moderate past accuracy (55-65%) for much of the south-western parts of the NT.
- **Wetter** than average conditions are likely (especially in March) across parts of the Gulf and Barkly and plenty Districts but past accuracy varies considerably from poor (<50%) to moderate (65%).
- **Warmer** than average days are likely across the majority of the NT (especially during January) with moderate to good past accuracy (55-100%).
- **Warmer** than average nights are very likely across the entire NT with moderate past accuracy (55-75%).



## Climate drivers

- **La Niña** has become established in the tropical Pacific and is likely to remain over the summer.
- The **negative** Indian Ocean Dipole (IOD) is approaching its end, in line with its typical seasonal cycle.
- The Southern Annular Mode (SAM) has generally been **positive** for several weeks. It is expected to remain at positive levels until the end of the year.
- The Madden-Julian Oscillation (MJO) has **strengthened** and may assist the development of the monsoonal flow in the southern hemisphere.
- Sea surface temperatures (SSTs) are currently **warmer than average** around tropical Australia and are forecast to remain above average.

<p><b>Climate Influences</b></p>	<p><b>Comments</b> (sourced from the Australian Bureau of Meteorology)</p>
<p><b>El Niño Southern Oscillation (ENSO)</b> ENSO status: <b>La Niña</b></p>  <p><a href="#">Pacific Ocean Update</a></p>	<p><b>La Niña firmly established in the tropical Pacific.</b></p> <p>Climate models suggest this La Niña will be short-lived and of weak to moderate strength. All seven international models anticipate further cooling of tropical Pacific sea surface temperatures, and suggest <b>La Niña</b> conditions will persist until the late summer or early autumn 2022. For 2021–22 to be considered a <b>La Niña</b> year, the event will have to be sustained for at least three months from the start in early November.</p> <p>Regardless of whether <b>La Niña</b> thresholds are sustained for three months or for a shorter period, the presence of <b>La Niña</b>-like patterns in the Pacific increases the chances of above-average rainfall for northern and eastern Australia during spring and the coming summer.</p> <p>To see larger versions of these images, go to the Outlook and SOI tabs at <a href="#">Pacific Ocean Update</a></p>  
<p><b>Indian Ocean Dipole (IOD)</b> Current outlook: <b>Neutral</b></p> <p><a href="#">Indian Ocean Update</a></p>	<p><b>The Indian Ocean Dipole (IOD) is neutral.</b></p> <p>The <b>negative</b> IOD is approaching its end, with oceanic index values in the <b>neutral</b> range. However, cloud and wind patterns across the eastern Indian Ocean suggest some IOD influence remains. All models indicate the IOD will remain <b>neutral</b> for the coming months, consistent with its typical seasonal cycle.</p> <p>A <b>negative</b> IOD increases the chances of above-average spring rainfall for much of southern and eastern Australia.</p> <p>To see larger versions of these images, go to the <a href="#">Outlook tab</a> and <a href="#">IOD Time Series</a></p>  
<p><b>Southern Annular Mode (SAM)</b> Current outlook: <b>Positive</b></p> <p><a href="#">Southern Ocean Update</a></p>	<p><b>The Southern Annular Mode (SAM) is currently strongly positive.</b></p> <p>The SAM has generally been <b>positive</b> for several weeks. It is expected to weaken, but remain generally positive until the end of the year.</p> <p>As we move into summer, the influence of <b>positive</b> SAM towards above average rainfall increases over mainland south-eastern Australia.</p> <p>To see larger versions of these images, go to the <a href="#">Outlook tab</a> and <a href="#">Southern Ocean Update</a></p> 

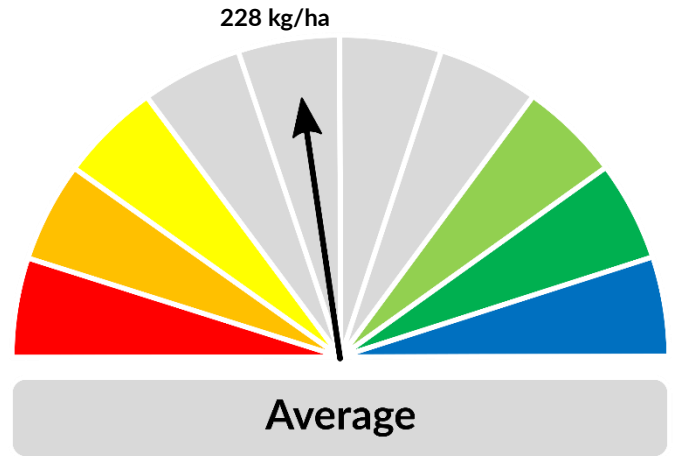
Seasonal Indicator	Comments (sourced from the Australian Bureau of Meteorology & the NT Department of Industry, Tourism & Trade)
<p><b>Madden-Julian Oscillation (MJO)</b>                      Outlook: <b>Moderate (Phase 6)</b>  <a href="#">Tropics Update</a></p>	<p>The MJO is at weak to <i>moderate</i> strength in <b>Phase 6</b> in the <b>Western Pacific</b> (as at <b>8 December 2021</b>).</p> <p>The MJO has moved into the western Pacific Ocean (<b>Phase 6</b>) and <b>strengthened</b>.</p> <p>The MJO is forecast to progress eastwards across the western Pacific over the coming fortnight, which increases the likelihood of above average cloudiness and rainfall across northern Australia and the western Pacific. It also increases the chance that the monsoon will develop in the Australian region in the next week or two, a little earlier than normal.</p> <div data-bbox="1608 161 2141 619"> <p>MJO Index Forecast initialised: 8 December 2021 Model: ACCESS-S2 (33 member)</p> <p>Legend:                      - Re-analysis (black line)                      - Ensemble Mean (thick grey line)                      - 0-5 days (light blue)                      - 5-10 days (medium blue)                      - 10-15 days (dark blue)                      - 15-20 days (teal)                      - 20-25 days (green)                      - 25-30 days (yellow)</p> </div>



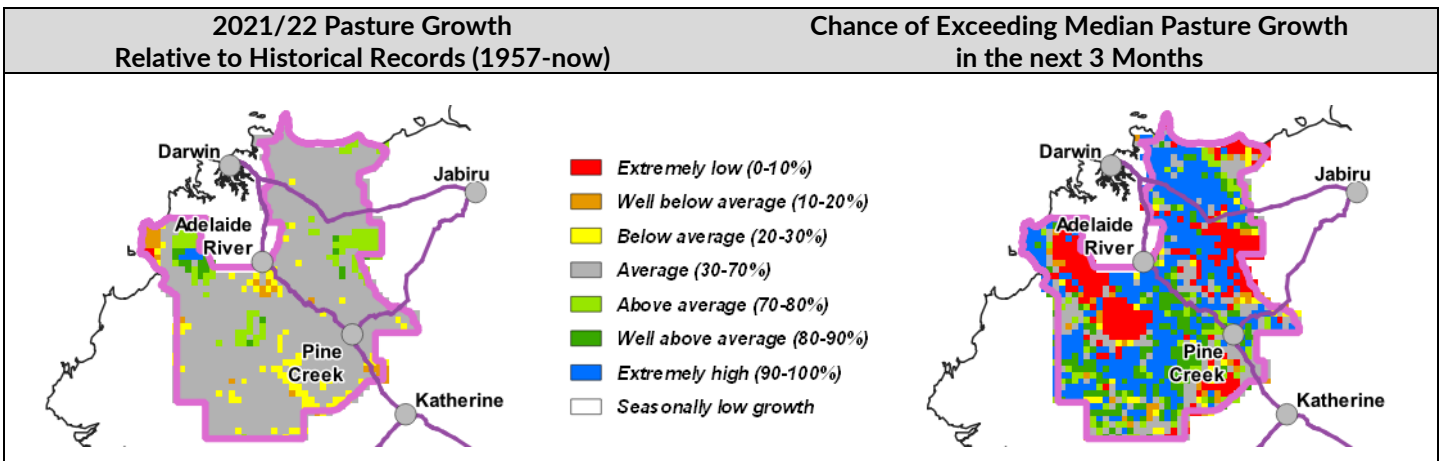
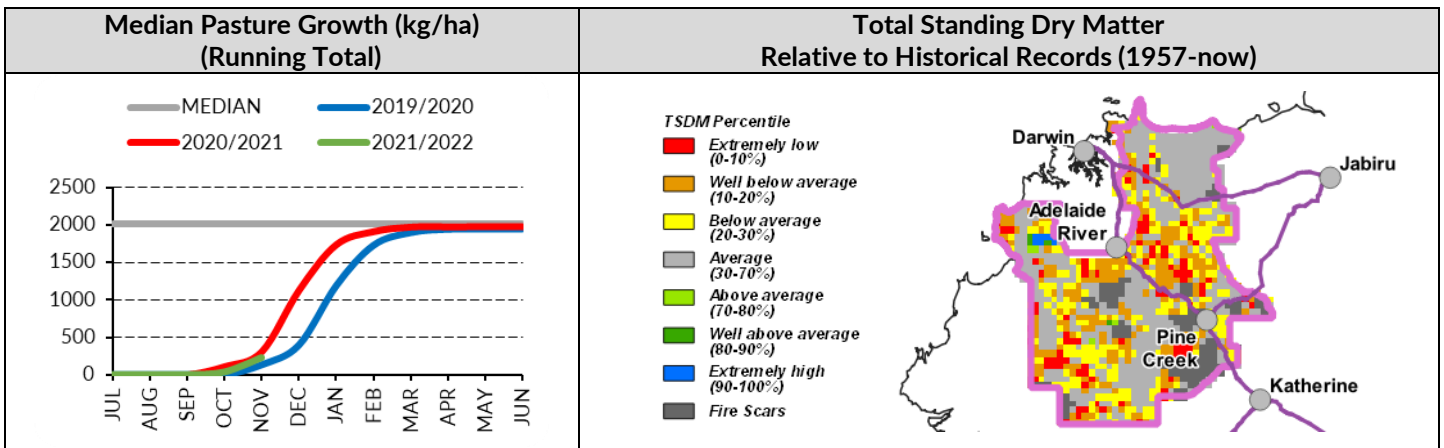
# Darwin District

- Patchy storms have resulted in an **average** start for pasture growth in 2021/22
- Over the next three months, the chances of exceeding the median growth varies considerably from **extremely high** to **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, possibly contributing to the below average pasture yields across much of the district. 34% of this has been since 1 July 2021.

## 2021/22 Pasture Growth (as at 1<sup>st</sup> December 2021)



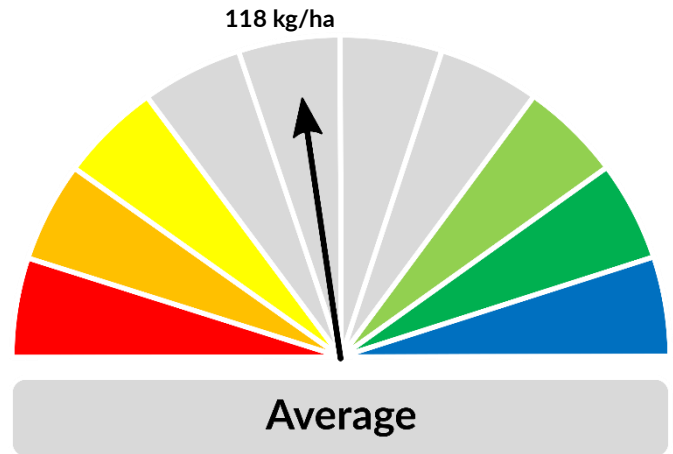
As at 1 December 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	98%	2%	0%	0%
Total Standing Dry Matter	72%	24%	4%	<1%



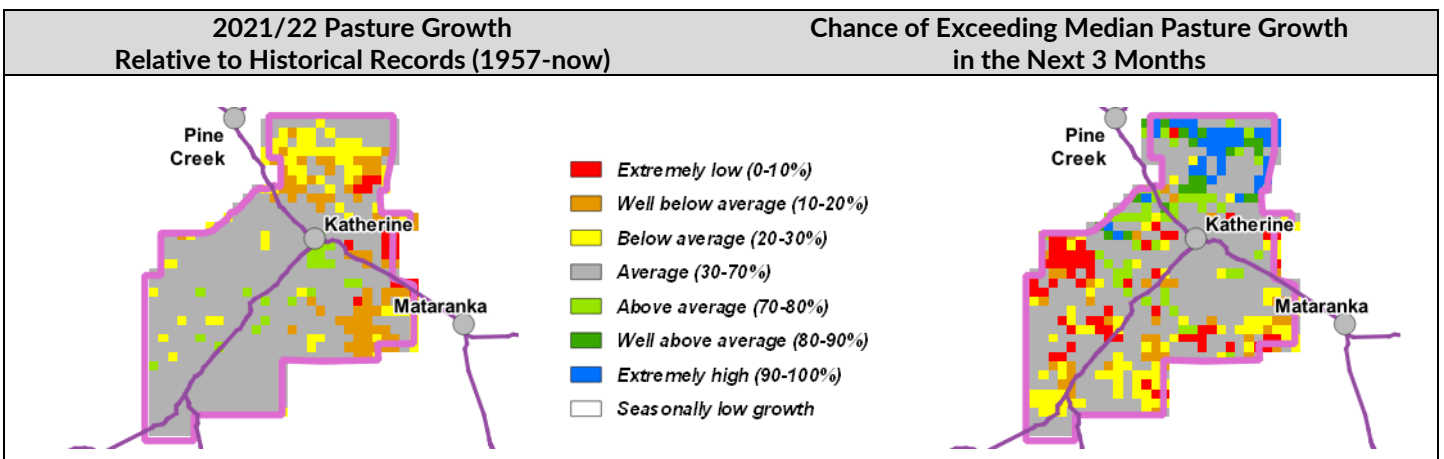
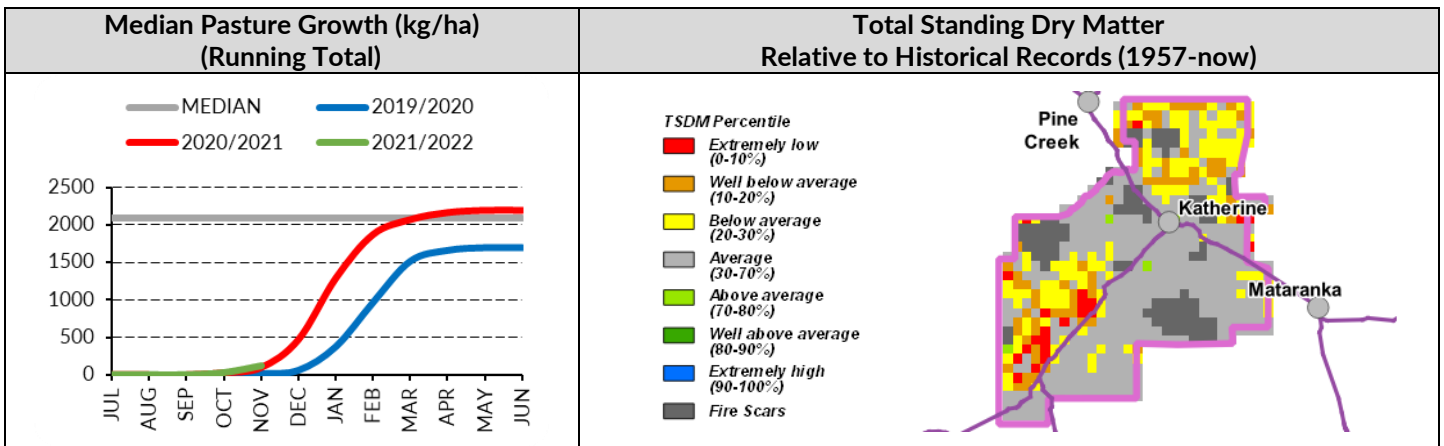
# Katherine District

- The 2021/22 pasture growth across the district has generally been **average** to date. However, the patchy nature of the storms has resulted in large areas across the northern and eastern parts of the district with **below average** growth for this time of year.
- Over the next three months the chance of exceeding median pasture growth is mixed, ranging from **average** to **above average** chance across the northern half of the district, to **average** to **below average** across the southern half.
- 28% of the district has burnt since 1 January 2021. 11% has been burnt since 1 July 2021.

2021/22 Pasture Growth (as at 1<sup>st</sup> December 2021)



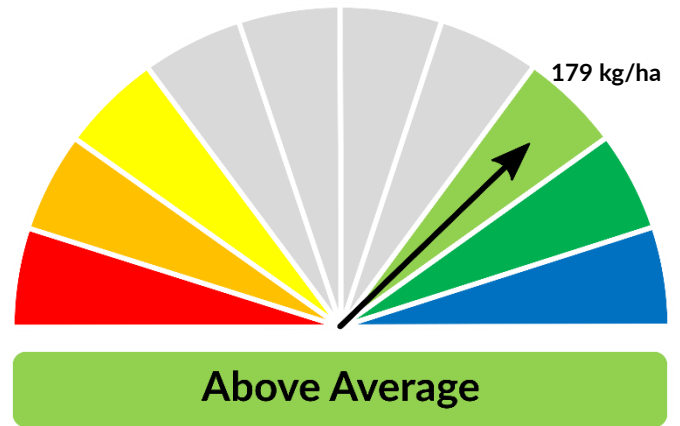
As at 1 December 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	100%	0%	0%	0%
Total Standing Dry Matter	54%	42%	3%	1%



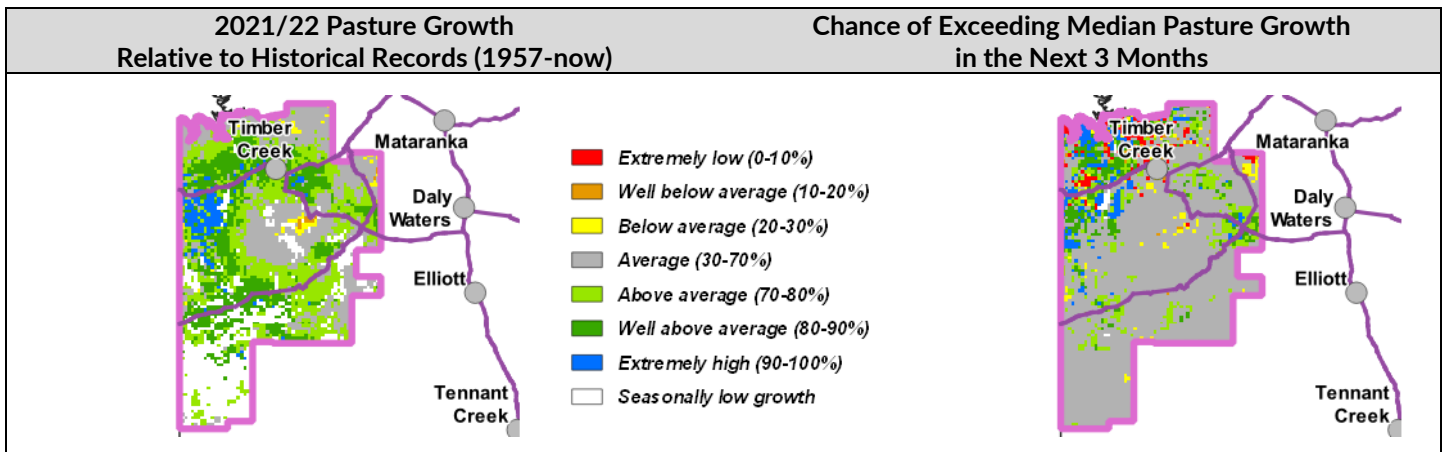
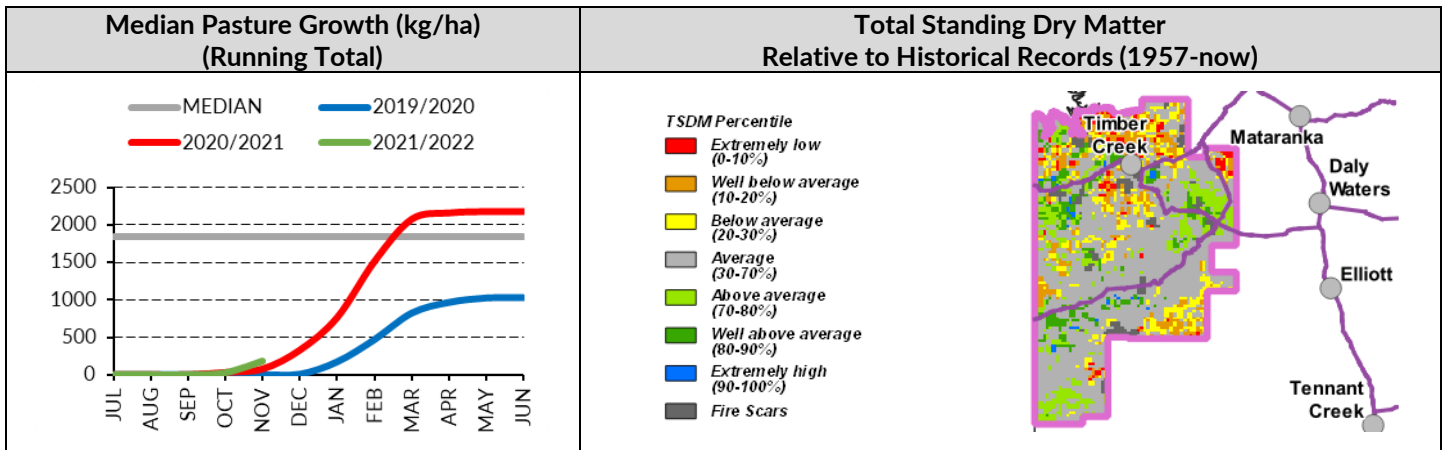
# Victoria River District

- The 2021/22 district pasture growth to date has varied from **average** to **extremely high**, due to early patchy rainfall, and actual growth levels so far are still quite low in many areas.
- Although the 2020/21 season was considered **above average** it had followed two consecutive **below average** seasons prior that had significantly reduced the district's pasture biomass levels. These areas of **very-low** pasture biomass have been significantly reduced to only a few very small pockets across the district.
- The chance of exceeding pasture growth over the next three months is mixed, but generally ranges from **average** to **above average**.
- 17% of the district has burnt since 1 January 2021. 10% has been burnt since 1 July 2021.
- As at 1st December 2021, 98% of the district has a high fire risk.

2021/22 Pasture Growth  
(as at 1<sup>st</sup> December 2021)



As at 1 December 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	100%	0%	0%	0%
Total Standing Dry Matter	18%	51%	22%	9%

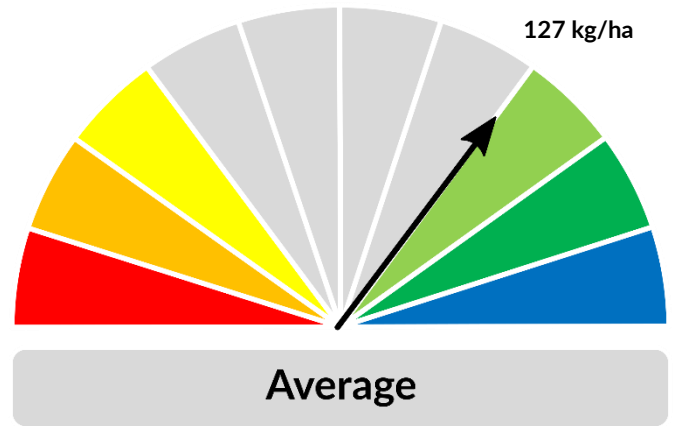




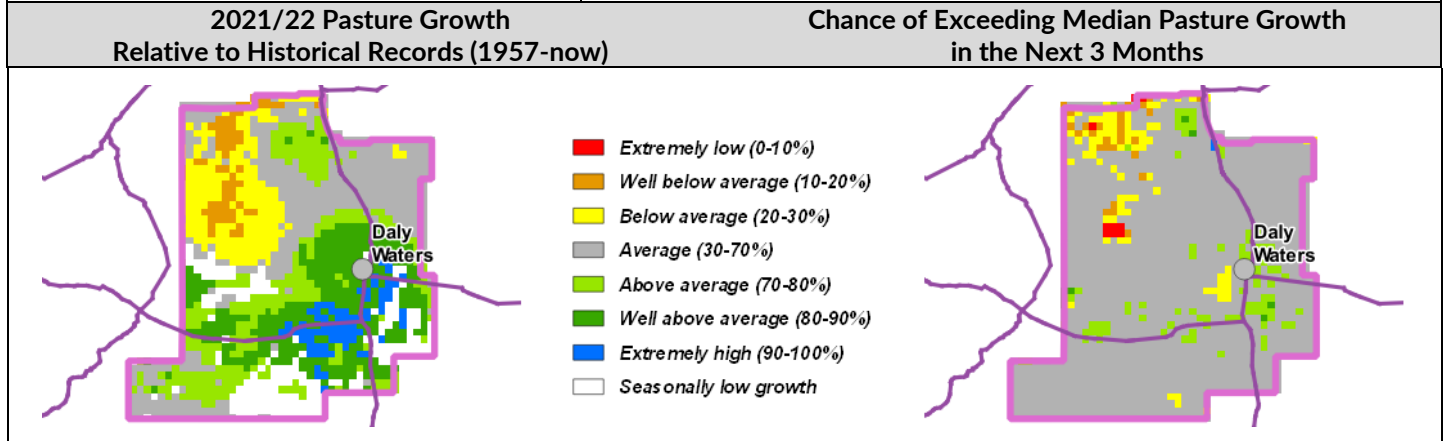
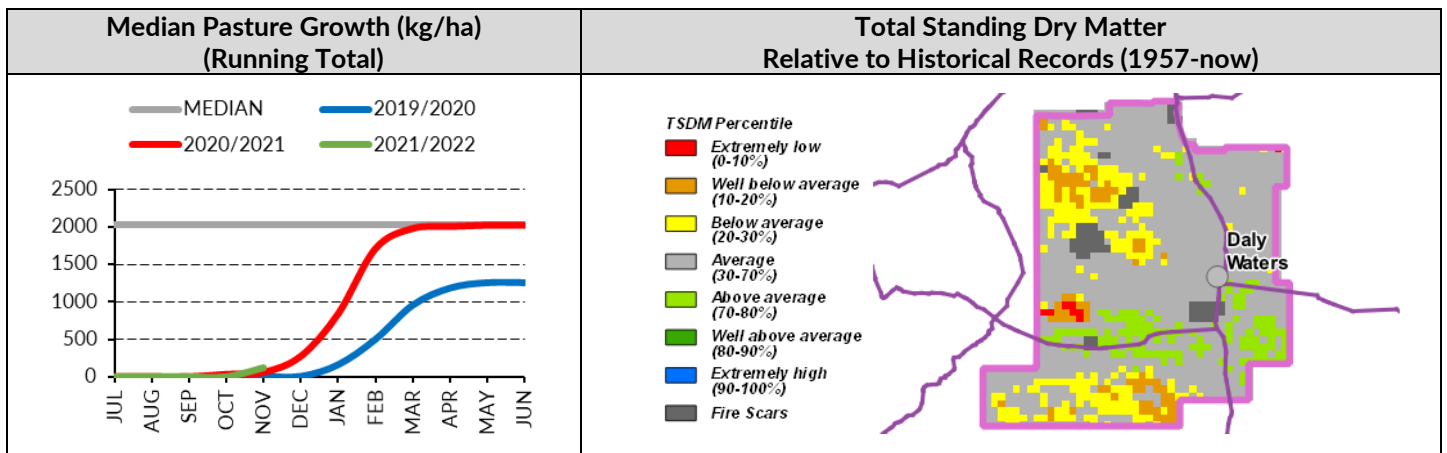
# Sturt Plateau District

- The 2021/22 district pasture growth has been **average** thus far, however this growth varies considerably across the district from **well below average** in the northwest to **extremely high** in the southeast.
- In 2020/21 the district's growth was considered **average**, however it did proceed two consecutive **below average** seasons that had resulted in large areas of **critically low** pasture biomass. These areas have now been reduced to only a few small areas in the south.
- Over the next three months the chances of exceeding the median pasture growth will be mixed but generally **average**, with scattered areas of **below average** across the northwest.
- 13% of the district has burnt since 1 January 2021. 2% has been burnt since 1 July 2021.
- As at 1<sup>st</sup> December 2021, 94% of the district has a high fire risk.

2021/22 Pasture Growth  
(as at 1<sup>st</sup> December 2021)



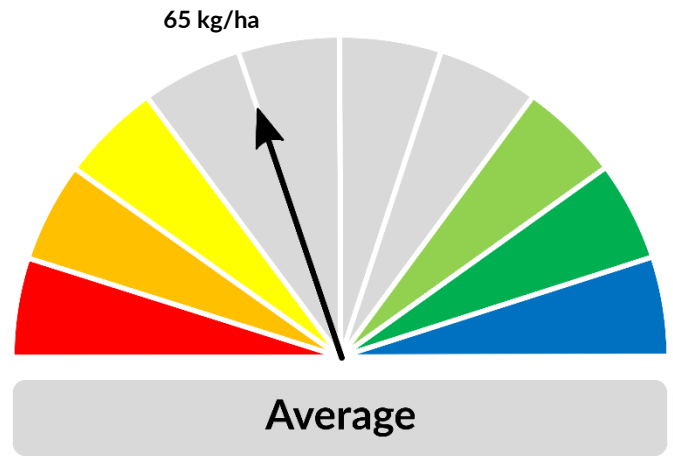
As at 1 December 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	100%	0%	0%	0%
Total Standing Dry Matter	48%	47%	2%	3%



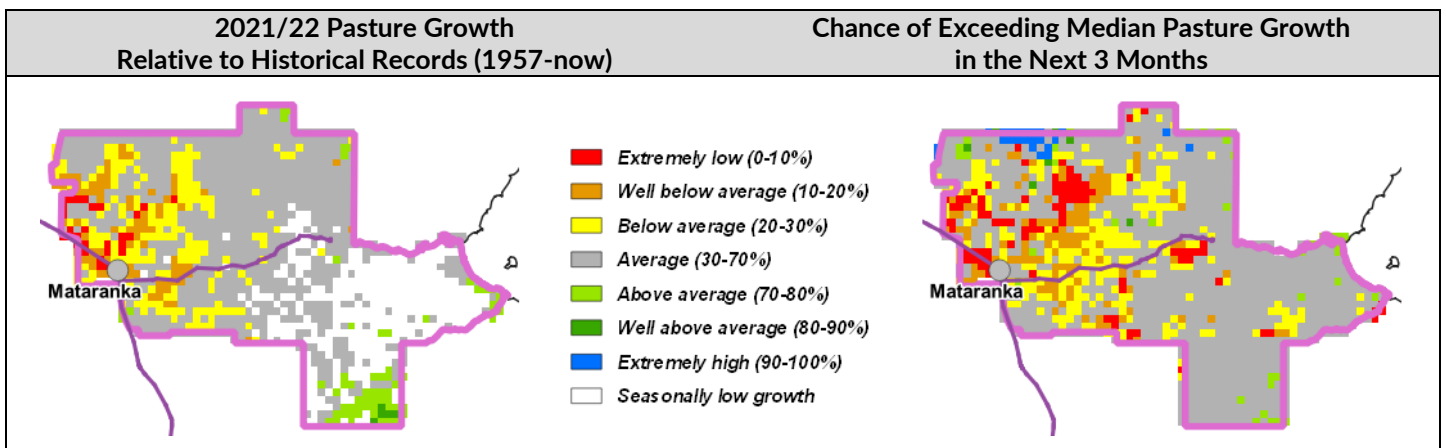
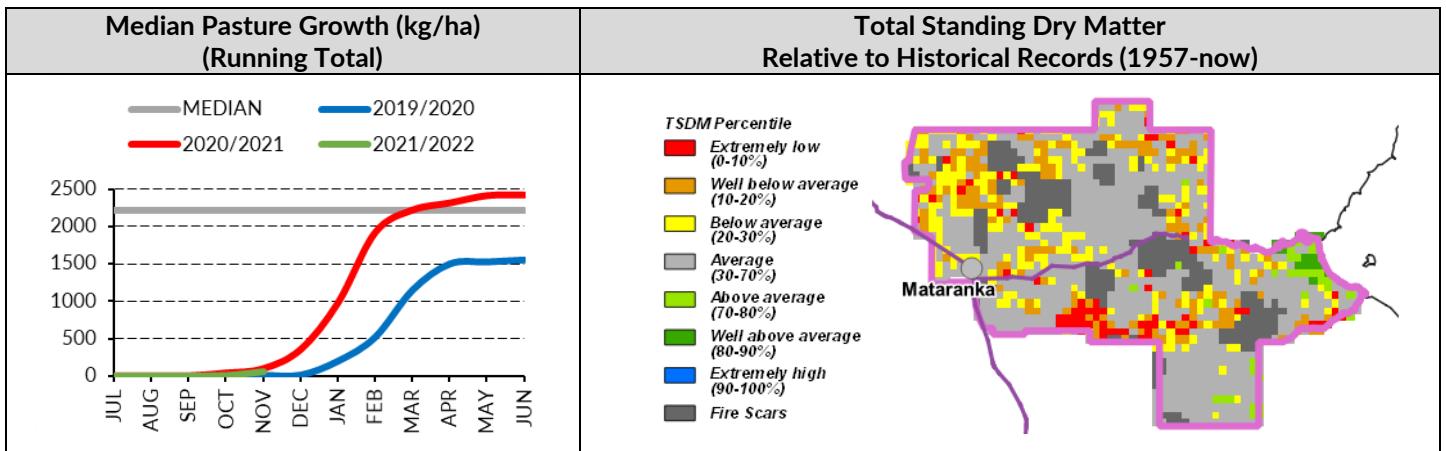
# Roper District

- The 2021/22 district pasture growth is **average** for this time of year. However, growth varies considerably from **extremely low** in the west to **above average** in the southeast.
- Although 2020/21 was considered average, it followed two consecutively **below average** seasons and resulted in areas of **very-low** pasture biomass throughout the district. Only small areas of **low** pasture biomass remain across the district due to fire.
- Over the next three months, the chance of exceeding its median pasture growth across the district will be **average to below average**.
- 40% of the district has burnt since 1 January 2021. 12% has been burnt since 1 July 2021.
- As at 1<sup>st</sup> December 2021, 97% of the district has a high fire risk.

## 2021/22 Pasture Growth (as at 1<sup>st</sup> December 2021)



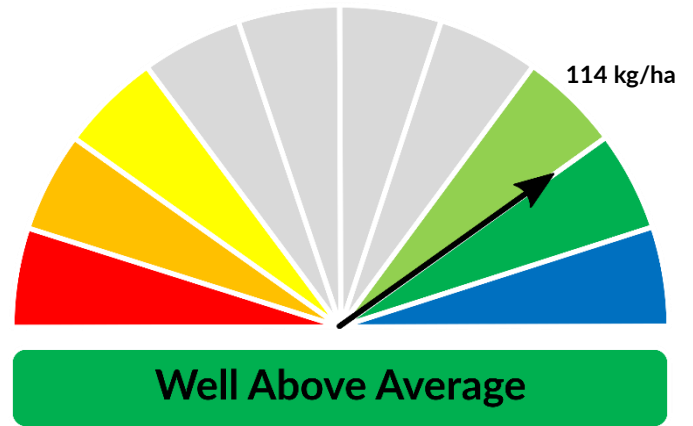
As at 1 December 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	100%	0%	0%	0%
Total Standing Dry Matter	36%	49%	10%	5%



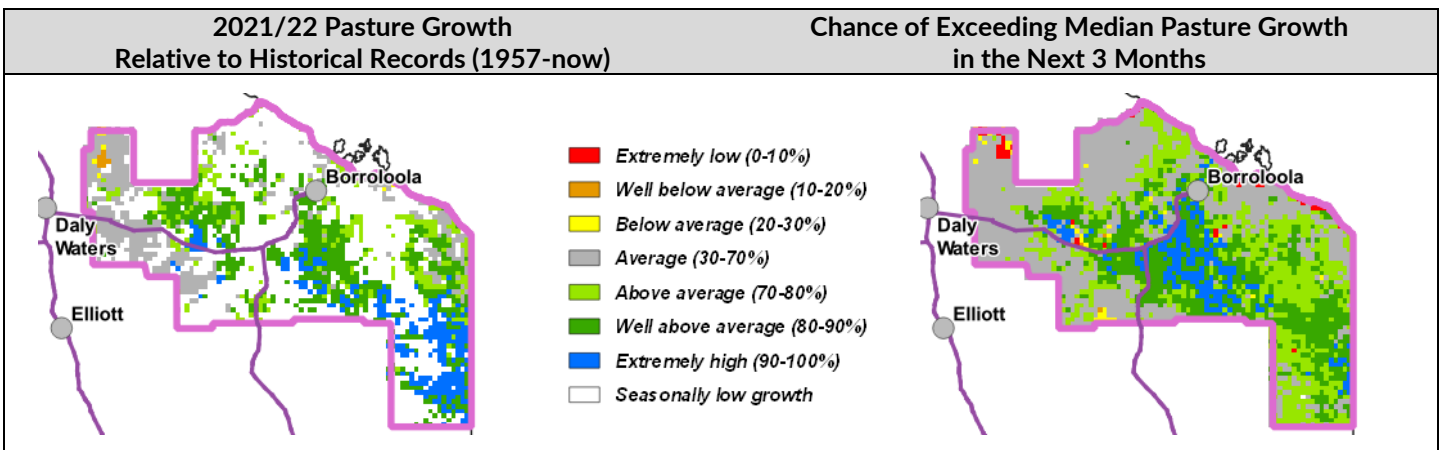
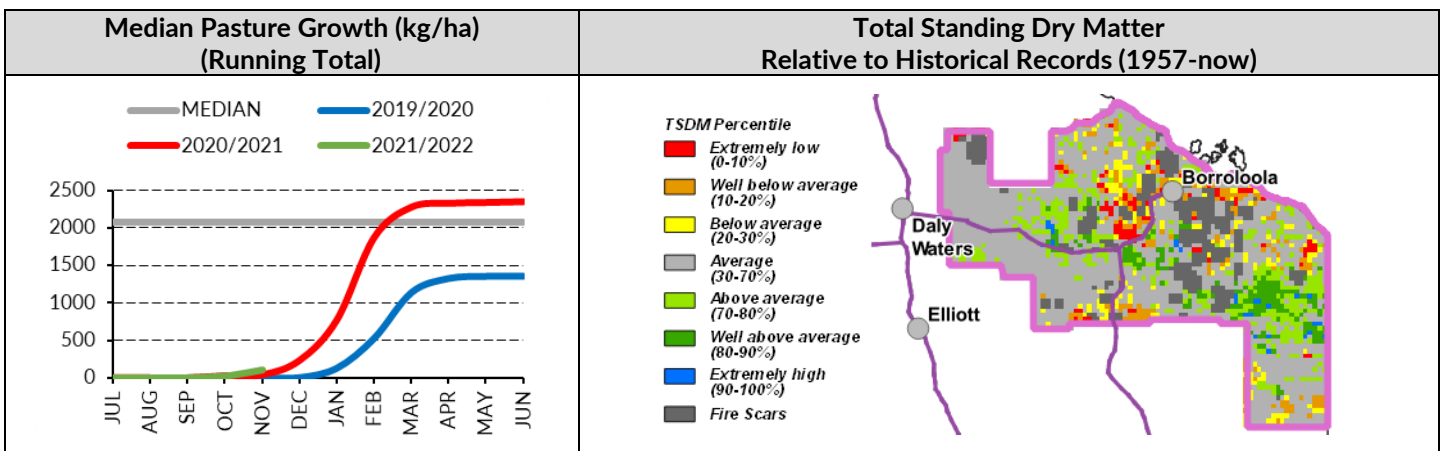
# Gulf District

- The 2021/22 district pasture growth has been **well above average** so far due to an early start, although levels are still low.
- Although 2020/21 was average, the two consecutive **below average** seasons prior had resulted in large areas of the district showing **very-low** levels of pasture biomass. Currently the only low levels of biomass are the result of fire.
- Over the next three months, much of the district has an **above average** chance of exceeding median pasture growth.
- 24% of the district has burnt since 1 January 2021. 5% has been burnt since 1 July 2021.
- As at 1<sup>st</sup> December 2021, 97% of the district has a high fire risk.

2021/22 Pasture Growth  
(as at 1<sup>st</sup> December 2021)



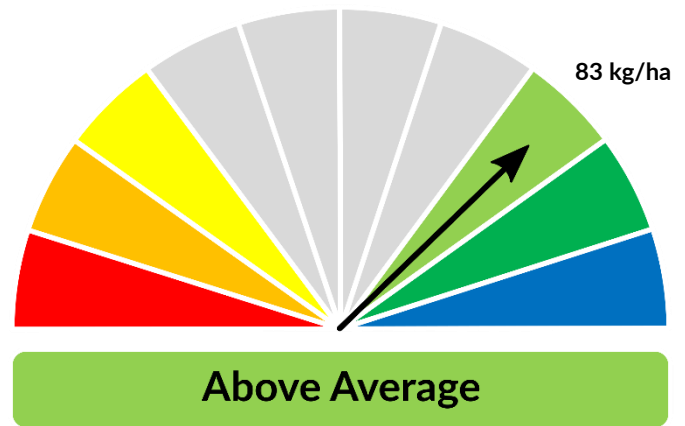
As at 1 December 2021				
(% of district)	<1,000kg/ha	1,000 - 2,000kg/ha	2,000 - 3,000kg/ha	>3,000kg/ha
2021/22 Pasture Growth	100%	0%	0%	0%
Total Standing Dry Matter	32%	41%	17%	10%



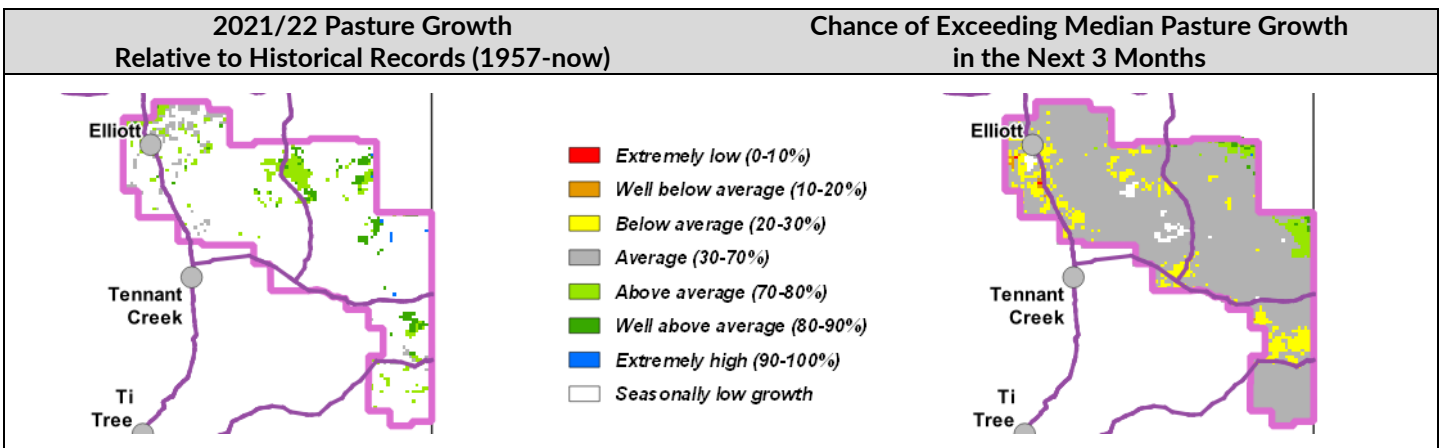
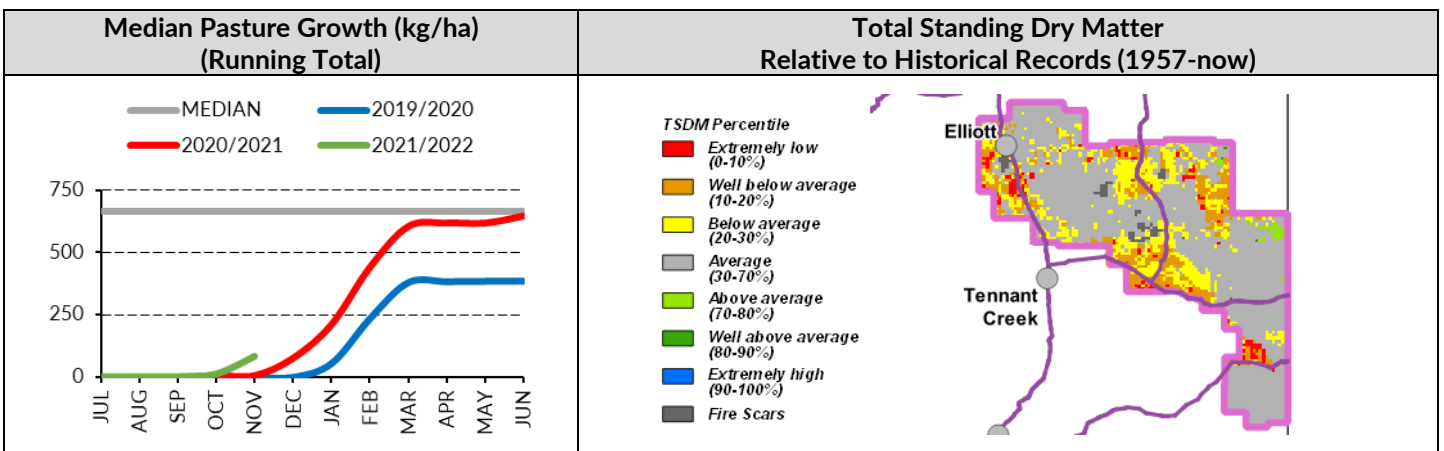
# Barkly District

- The 2021/22 pasture growth is considered **above average** for this time of year, due to an early start, but levels are still low.
- 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 continuing to experience **very low** levels 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.
- As at 1<sup>st</sup> December 2021, the district has a moderate fire risk.

2021/22 Pasture Growth (as at 1<sup>st</sup> December 2021)



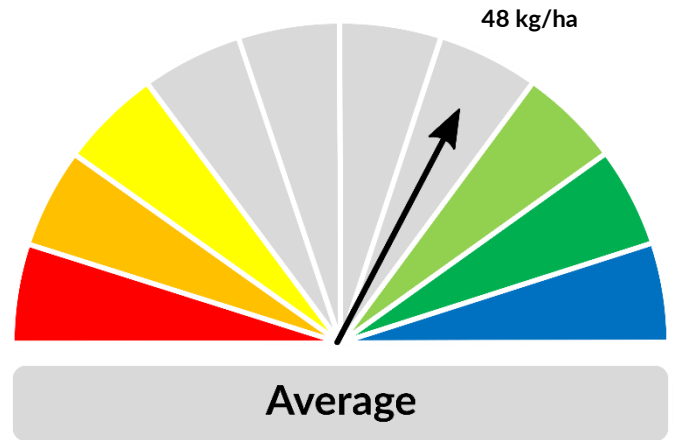
As at 1 December 2021				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	94%	6%	0%	0%
Total Standing Dry Matter	34%	35%	21%	10%



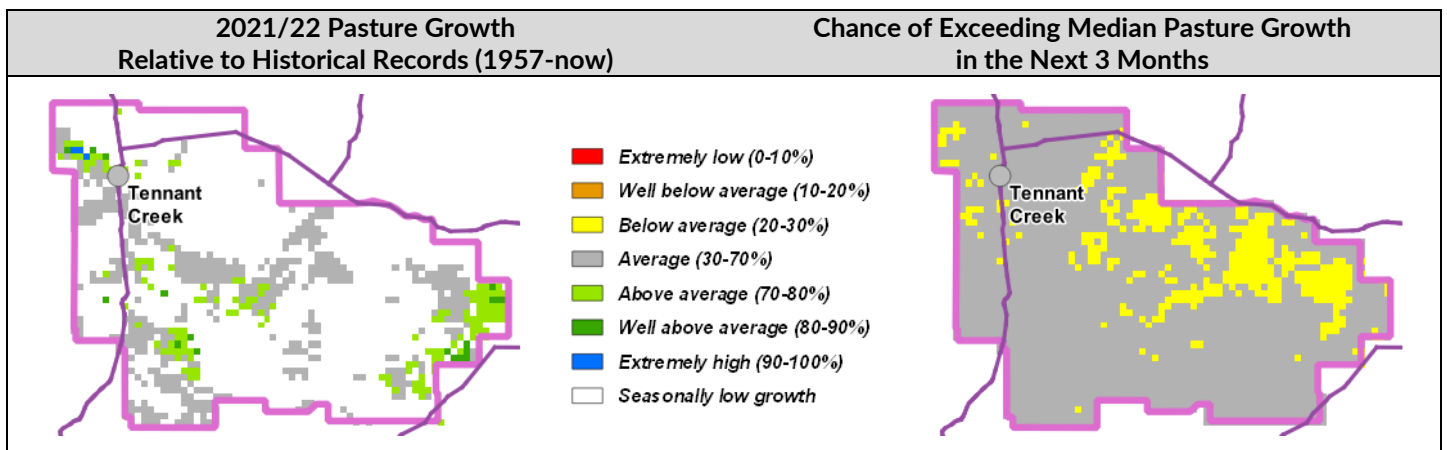
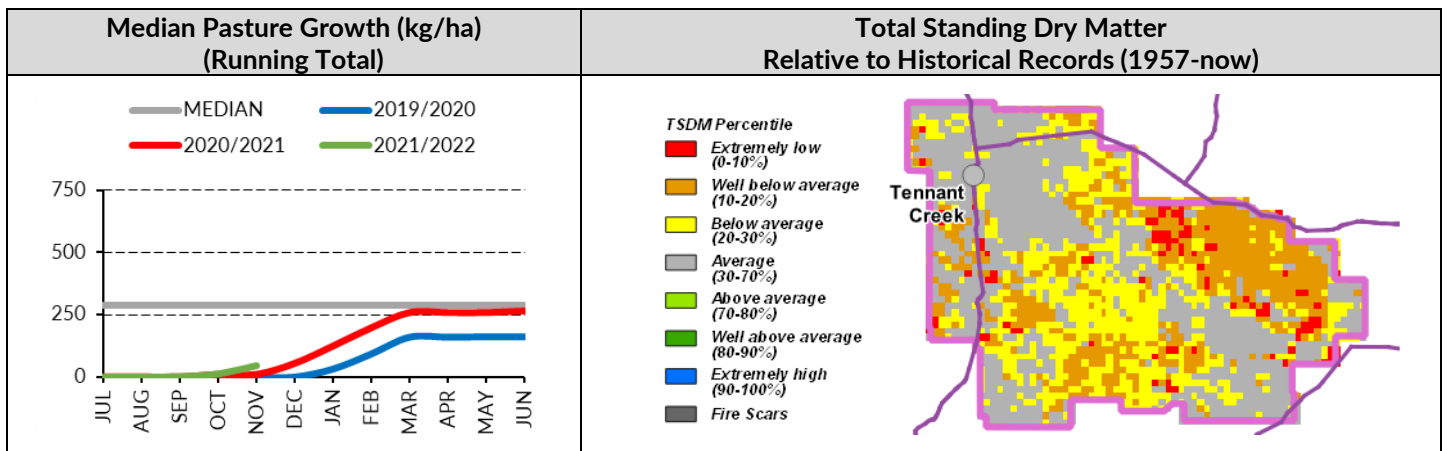
# Tennant Creek District

- The 2021/22 pasture growth for the district has been **average** thus far, from patchy isolated storms.
- Although, the 2020/21 season was considered average, the previous two consecutive **below average** seasons, had resulted very large areas of the district having **very-low** levels of pasture biomass. As a result **very-low** levels (<200 kg/ha) of pasture biomass still persist across large areas of the district.
- Over the next three months, the majority of the district has an **average to below average** chance of exceeding median pasture growth.
- As at 1<sup>st</sup> December 2021, the district has a moderate fire risk.

2021/22 Pasture Growth (as at 1<sup>st</sup> December 2021)



As at 1 December 2021				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	98%	2%	0%	0%
Total Standing Dry Matter	37%	16%	20%	27%

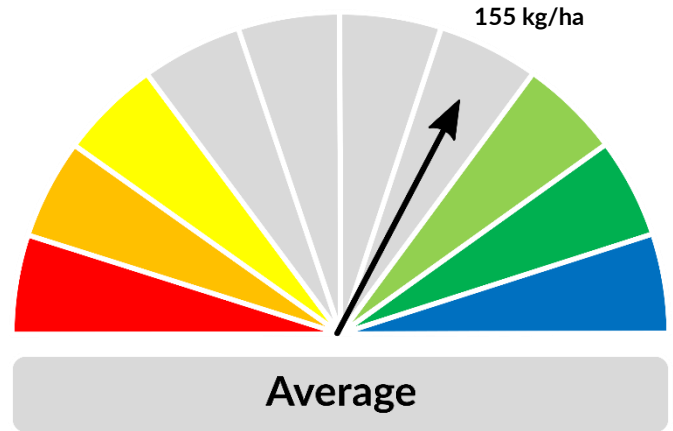




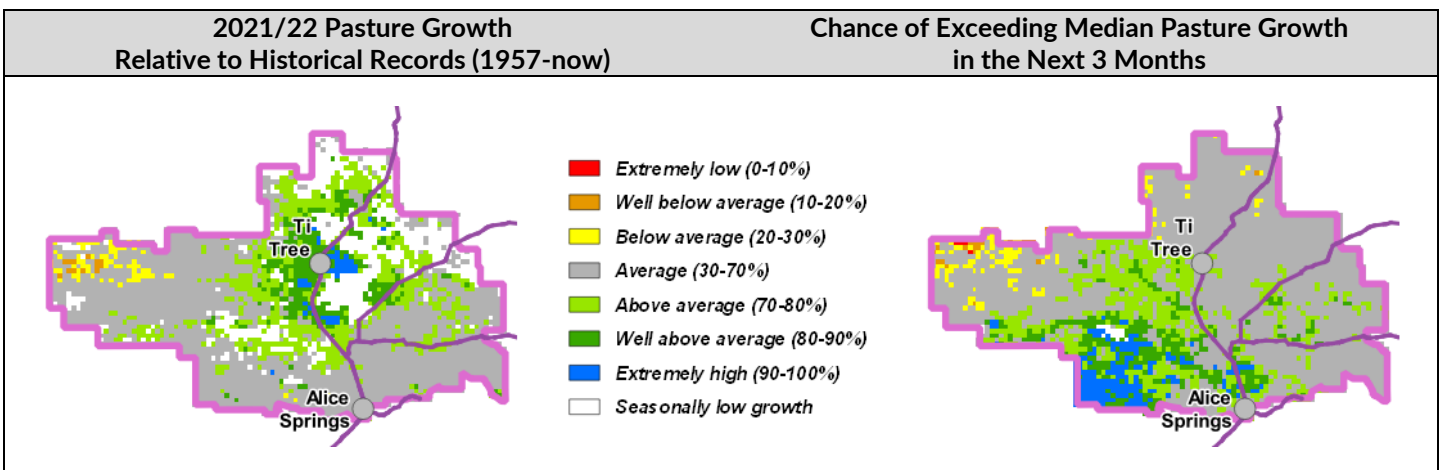
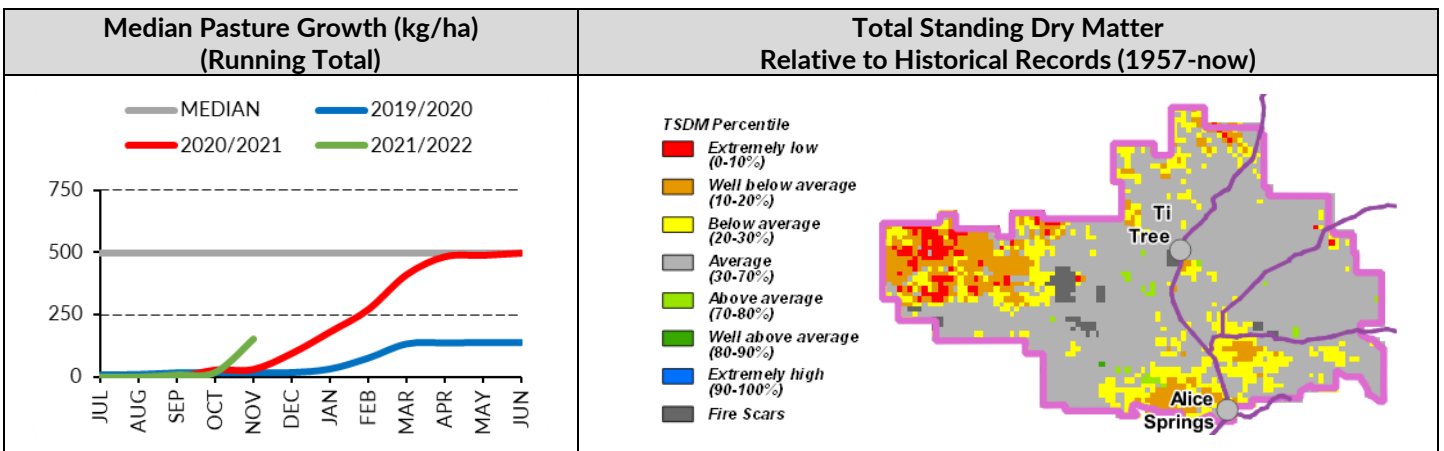
# Northern Alice Springs District

- The 2021/22 pasture growth for the district as a whole is considered **average** thus far, although large areas throughout the central and northern parts are experiencing **above average** to **well above average** growth.
- Although 2020/21 was average, the previous two years were **below average** with **very low** to **critically low** levels of pasture biomass across most of the district. **Very low** levels (<200 kg/ha) are now restricted to just the western parts of the district.
- 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 parts.
- As at 1<sup>st</sup> December 2021, the district has a moderate fire risk.

2021/22 Pasture Growth (as at 1<sup>st</sup> December 2021)



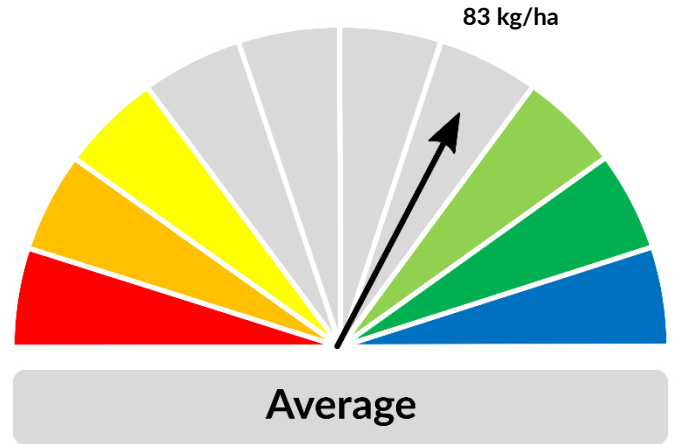
As at 1 December 2021				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	83%	15%	2%	0%
Total Standing Dry Matter	8%	30%	33%	29%



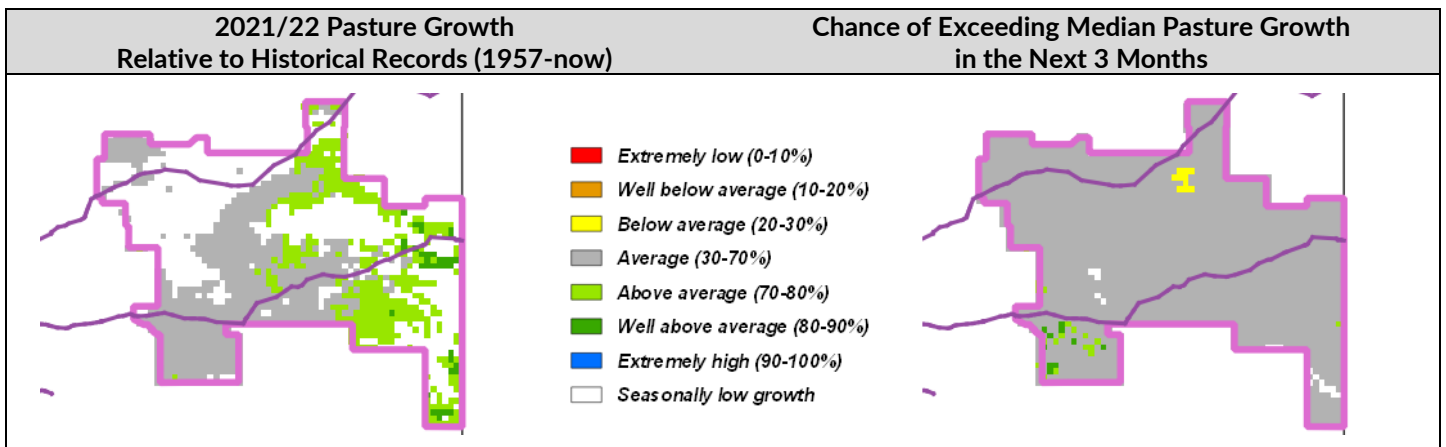
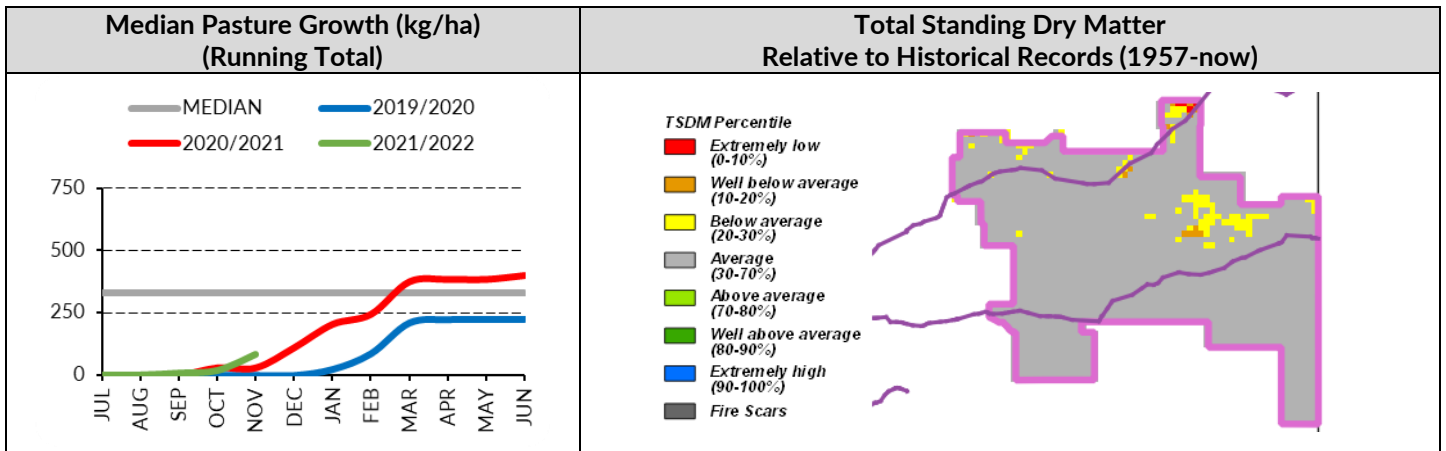
# Plenty District

- The 2021/22 pasture growth for the district has been **average** to date. However, some areas have experienced **above average** pasture growth for this time of year.
- Small areas of **very low** pasture biomass (<200 kg/ha) are showing in the eastern and western parts of the district.
- Over the next three months, the chance of exceeding median pasture growth is **average** across the majority of the district.
- As at 1<sup>st</sup> December 2021, the district has a moderate fire risk.

2021/22 Pasture Growth (as at 1<sup>st</sup> December 2021)



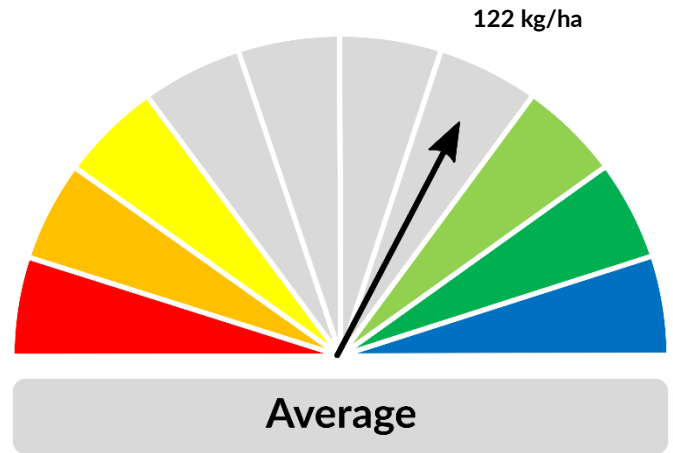
As at 1 December 2021				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	95%	5%	0%	0%
Total Standing Dry Matter	15%	29%	33%	23%



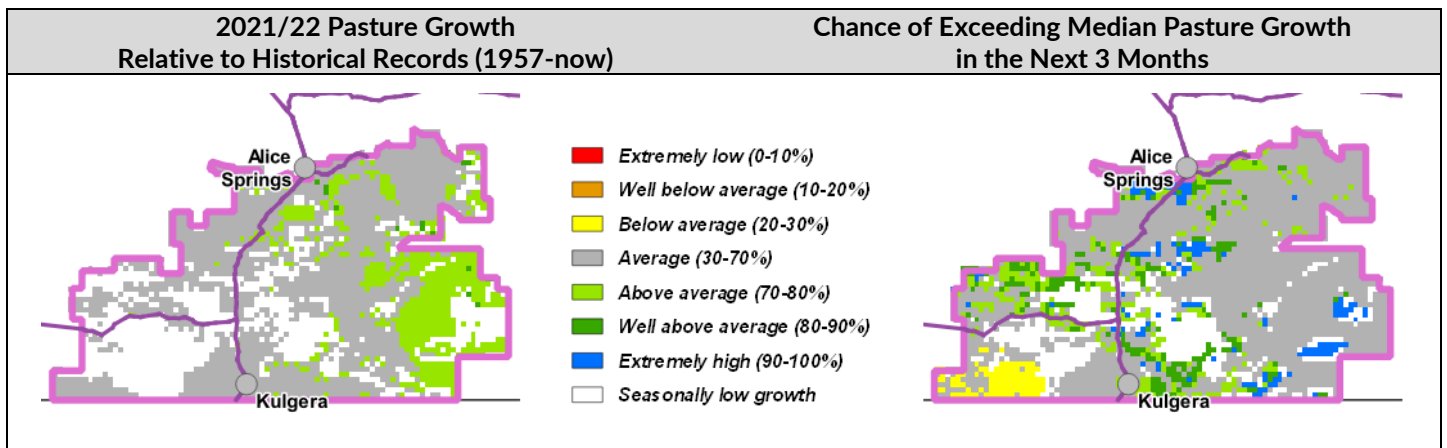
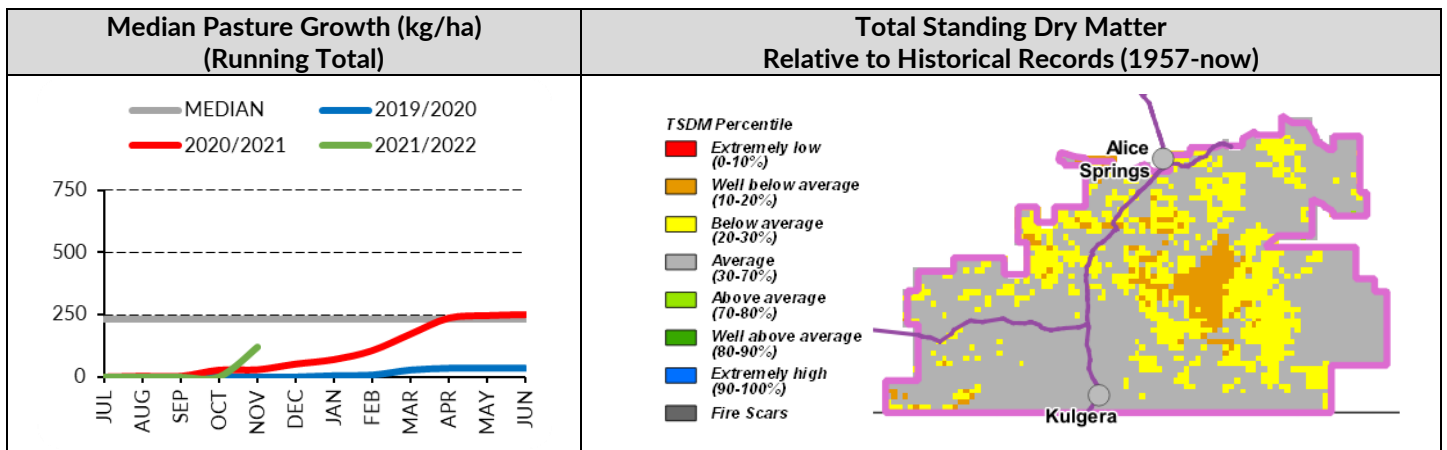
# Southern Alice Springs District

- The 2021/22 pasture growth for the district is **average** for this time of the year. However, the eastern half of the district is experiencing **above average** growth.
- Although 2020/21 was **average**, the two prior **below average** seasons have contributed to large areas of the district still experiencing **critically low** levels of pasture biomass (<100 kg/ha).
- Over the next three months the majority of the district has an **average** to **above average** chance of exceeding median pasture growth with the exception of the southwest which has an **average** to **below average** chance.
- As at 1<sup>st</sup> December 2021, the district has a moderate fire risk.

2021/22 Pasture Growth  
(as at 1<sup>st</sup> December 2021)



As at 1 December 2021				
(% of district)	<250kg/ha	250 - 500kg/ha	500 - 1,000kg/ha	>1,000kg/ha
2021/22 Pasture Growth	96%	4%	0%	0%
Total Standing Dry Matter	14%	33%	36%	17%



## 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

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