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# Quality Graze: grazing strategy impact on consistent supply of quality beef in central Australia

## Introduction

Strengths of the central Australian cattle industry include

- high quality pastures
- the ability to produce *Bos taurus* dominant cattle
- accessibility to quality beef markets

Producers in the region are exploring quality beef markets for premium prices but the perception is that Meat Standards Australia (MSA) graded beef can only be produced during exceptional seasons. This poses the questions:

- Can MSA graded beef be achieved regardless of season?
- What management strategies are required?
- Is it profitable to target quality beef markets?

## Methods

In 2012 a long-term (>10 year) grazing trial was set up on the Old Man Plains Research station to investigate (and test) the effect of recent grazing strategy research recommendations on land condition, quality beef productivity and business profitability. The production aim of the project is to consistently produce 2½ year old grass fed steers direct to slaughter and MSA grading regardless of season.

## Results

Growth rates of heifers on the Arid Zone Research Institute (AZRI) (Figure 1) suggest that consistent growth rates are possible in central Australia regardless of season if stocking rate matches pasture growth. Therefore managing land condition and feed quantity through stocking rate management (Figure 2 & Table 1) and with grazing strategies such as spelling (Figure 3) are of major importance. Pasture growth and bio-economical modelling through the Northern Grazing Systems project (NGS) (Figure 2 & 3) suggest the effect of management change on land condition and productivity is slow in an arid environment (>10 years) and highlights the need for long-term grazing trials. OMP provides a unique opportunity to practically test the effect of recent research outcomes on both land conditions and productivity openly (Figure 4).

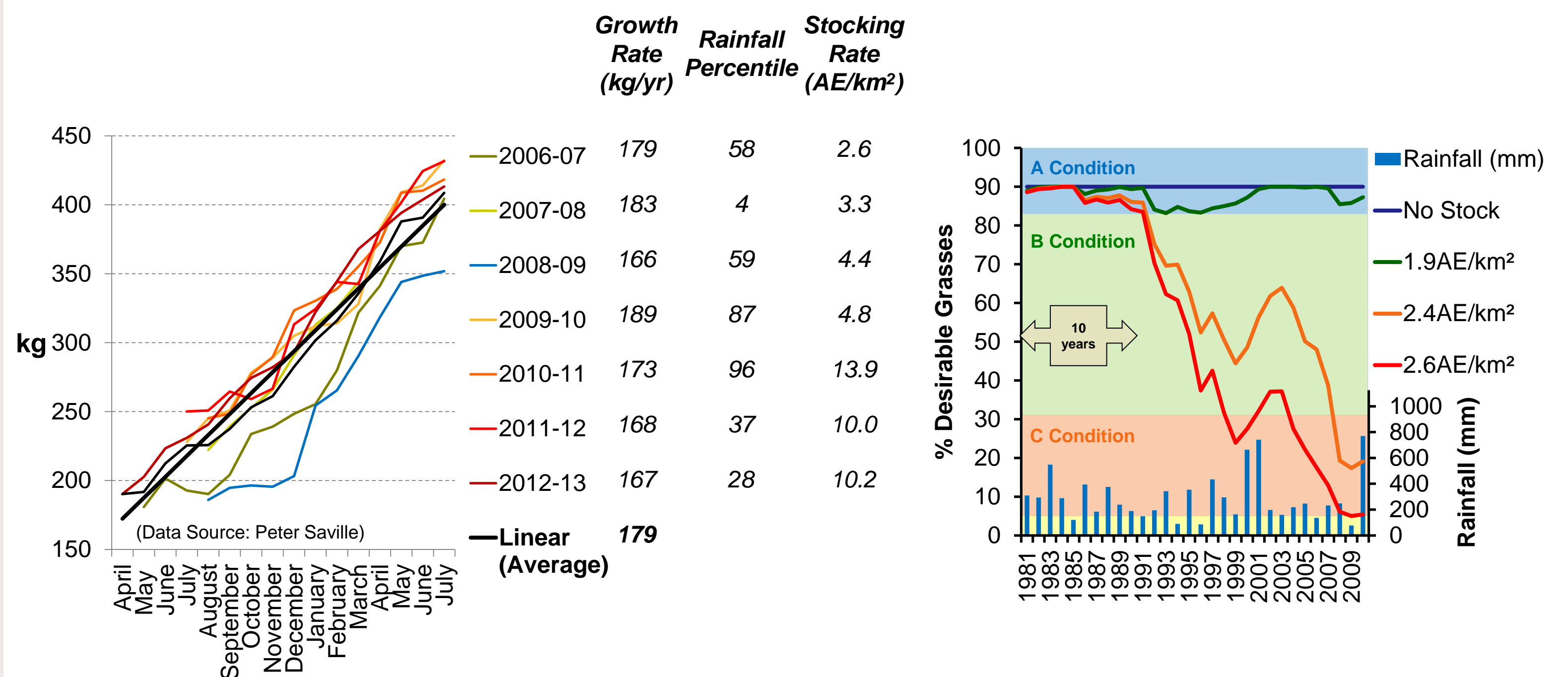
## Conclusions

Management of feed quantity and not quality under an extremely variable and unpredictable environment is the key for consistent production of beef and business profitably in central Australia, and provides the opportunity in accessing premium quality beef markets.

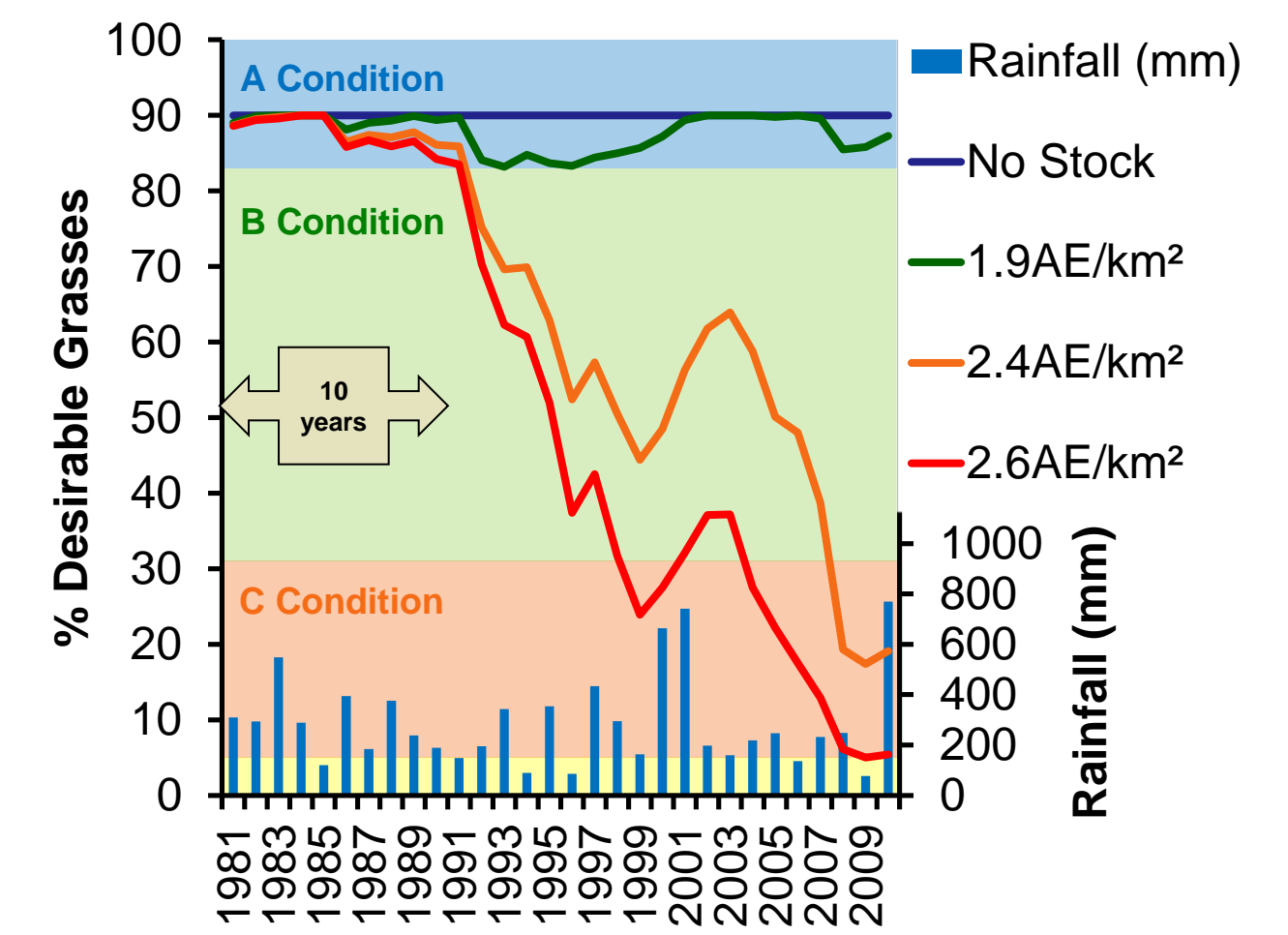
Future project development will include the linking of this trial to on station practical application and business and profitability analysis.

## References:

- Saville P (Unpublished) *Growth rates of sentinel heifers on the Arid Zone Research Institute*. NT Gov. Alice Springs NT.  
 Walsh D, Kain A and Cowley R (Unpublished) *Best-bet practices for managing lands in the Alice Springs region of the Northern Territory: A technical guide to options for optimising land condition, animal production and profitability*. NT Gov. Darwin NT.



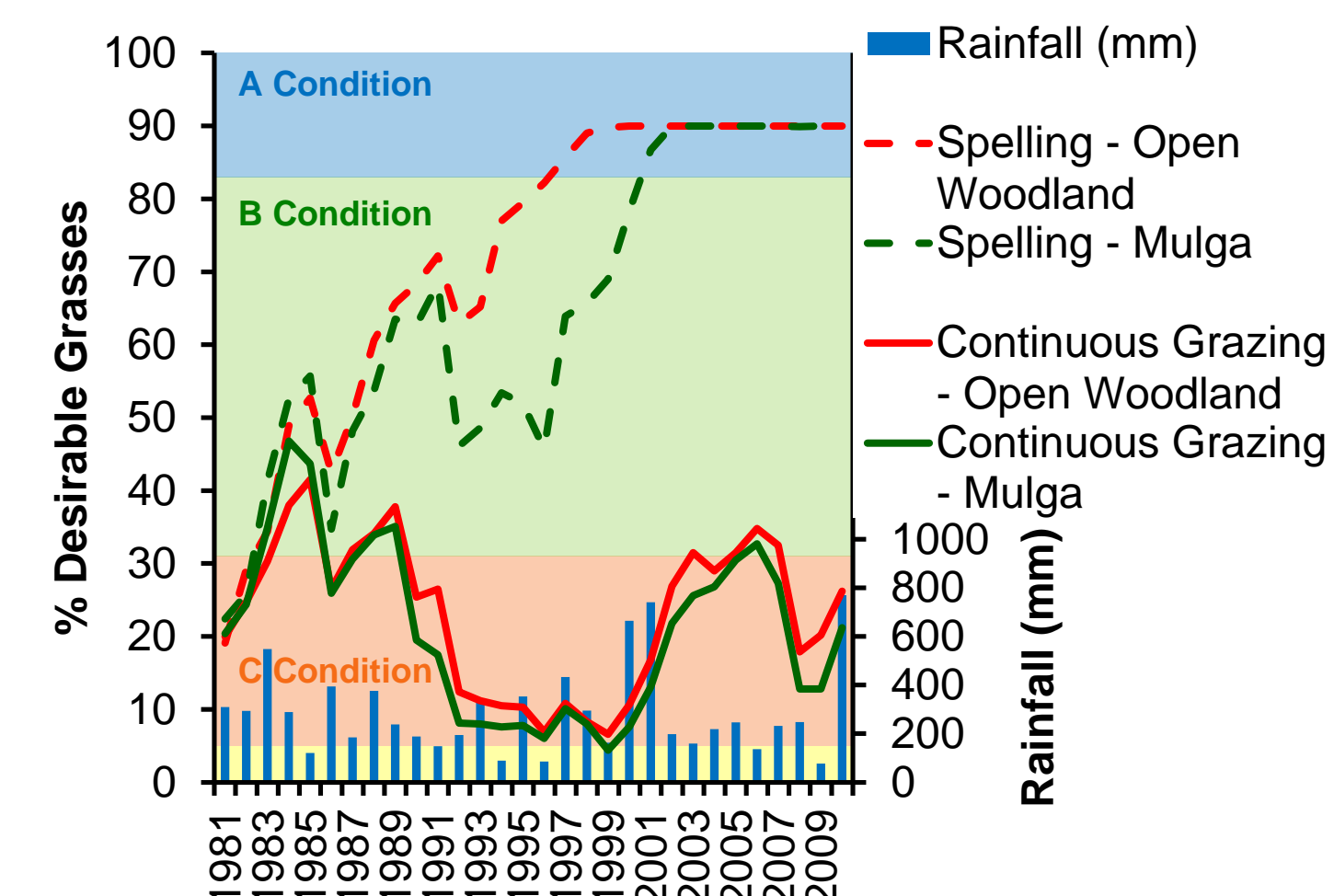
**Figure 1.** Consistent growth rates of grass feed heifers were achieved when stocking rates were adjusted to available forage at AZRI. With the exception of the 2008-09 that was affected by coccidiosis.



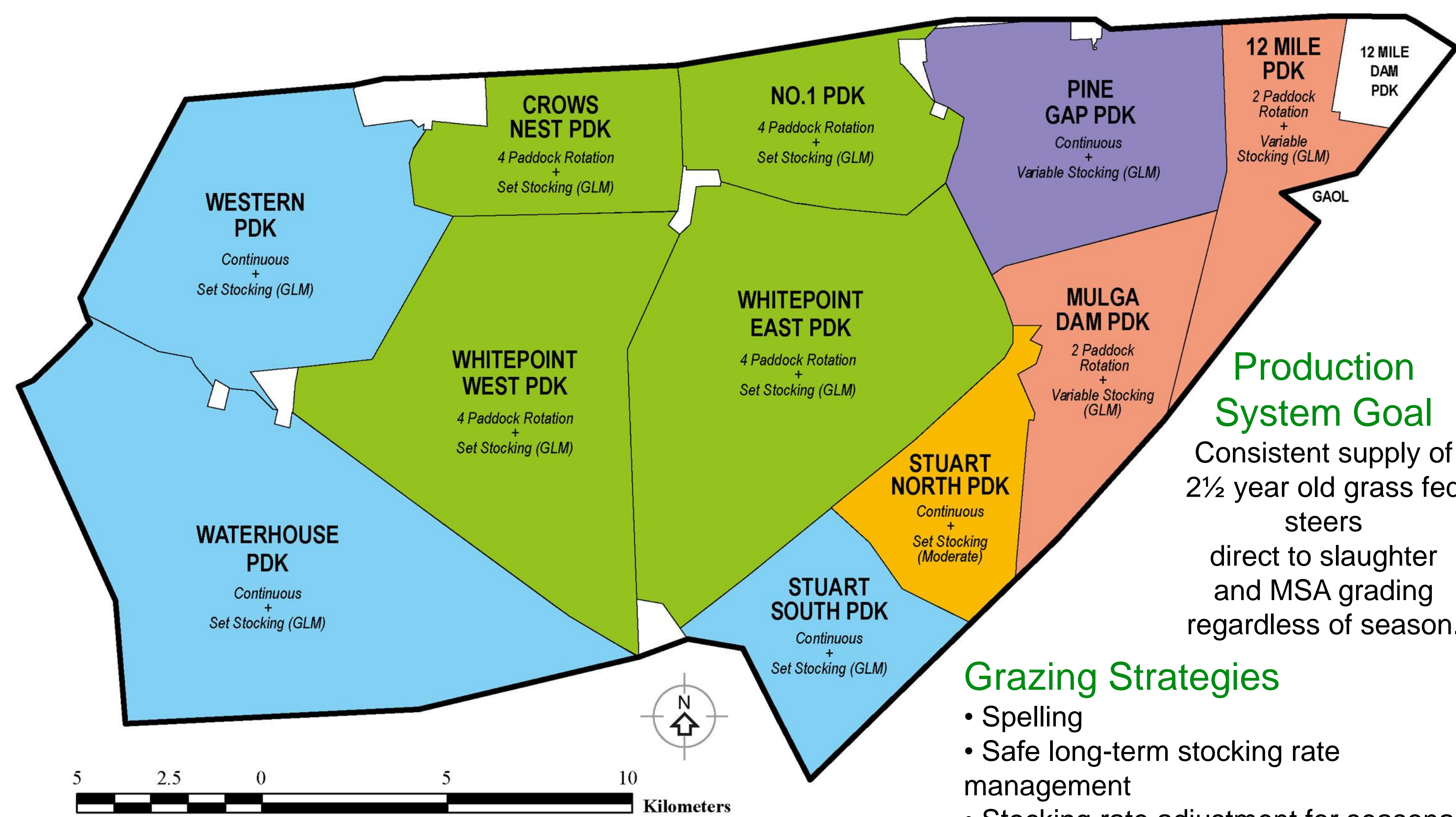
**Figure 2.** Effect of stocking rate on open woodland land condition - modelled data from the NGS project.

**Table 1.** Stock number adjustment criteria for the flexibility stocking rate strategy (LTCC = long term carrying capacity). NGS recommended grazing strategy for optimising production and land condition in central Australia.

	If the present stocking rate is ABOVE the LTCC	If the present stocking rate is BELOW the LTCC	Stocking Rate Capped At
If feed supply is higher this year, stock numbers can increase by up to:	+10%	+20%	+30% of LTCC
If feed supply is lower this year, stock numbers to decrease by up to:	-25%	-30%	-50% of LTCC



**Figure 3.** Land condition recovery with spelling takes time - demonstrating the importance of long-term grazing trials.



**Figure 4.** Grazing strategies tested on the Old Man Plains Research Station