

## FarmFLOW - Economic and Water Quality Benefits from improved grazing land management

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Grazing is the largest single land use in south-east Queensland and the management of these grazing lands plays a significant role in reducing sediment and nutrient run off and improving the health of waterways.

The Healthy Country FarmFLOW project is working with south-east Queensland graziers to reduce the amount of sediment entering waterways. Qld Primary Industries and Fisheries in collaboration with SEQ Catchments is providing training, extension and incentives and have established a number of on-farm trials to improve knowledge on how to implement the principles of sustainable grazing land management.

### Trials

Current trials include:

- Pasture cropping- using innovative cropping practices to maintain ground cover and native pasture composition
- Fencing to land type- to better utilize pasture and reduce grazing pressure on more productive land types
- Using grazing management to control lantana and improve land condition
- The effect of different fire regimes on land condition

### Land Condition

Improving the condition of grazing land is the main aim to reduce sediment and nutrient runoff. Grazing land condition is assessed by looking at three indicators.

#### Pasture Condition

- density and vigour of Perennial Palatable and Productive (3P) grasses
- % ground cover
- % weed cover

#### Soil Condition

- presence of erosion
- amounts of litter and ground cover

#### Woodland Condition

- balance between woodland and pasture species

Land condition is rated on an ABCD scale (Figure 1), with A being the desired rating, while D is land that is unlikely (or very costly) to return to its previous productive capability.

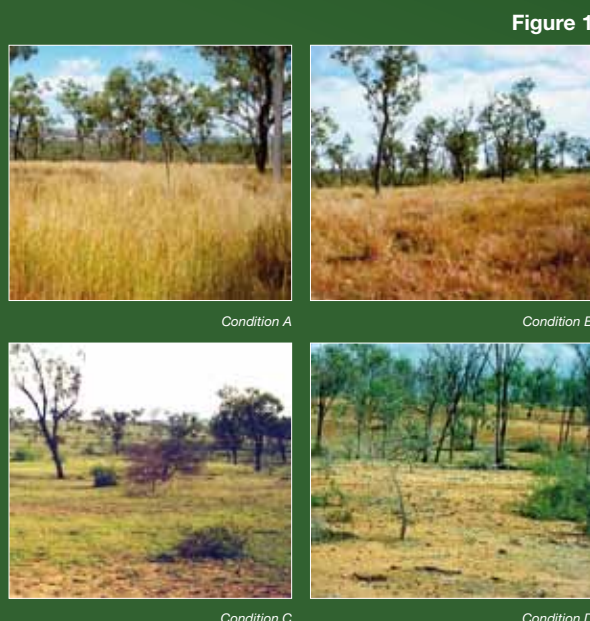


Figure 1

### Benefits of Good Grazing Land Management

Improving land condition greatly increases the amount of useful forage able to be grown. Figure 2 demonstrates the indicative amount of pasture growth expected for each land condition.

This increase in extra forage and therefore stock rate has significant effects on on-farm finances. The table below provides a comparison.

	'A' Condition	'C' Condition
Carrying Capacity (AE*)	2084	937
Gross Margin	\$355,100	\$159,659
Fixed Costs	\$53,691	\$53,691
Net Income	\$301,409	\$105,968

\* AE- Adult Equivalent- e.g. a 450kg steer

Increased ground cover through improved land condition also leads to greatly reduced sediment run-off. Figure 3 shows the increase in water runoff as land condition declines from 'A' to 'C' condition. Increased run off results in increased erosion potential, less water infiltrating the soil and therefore reduced pasture growth.

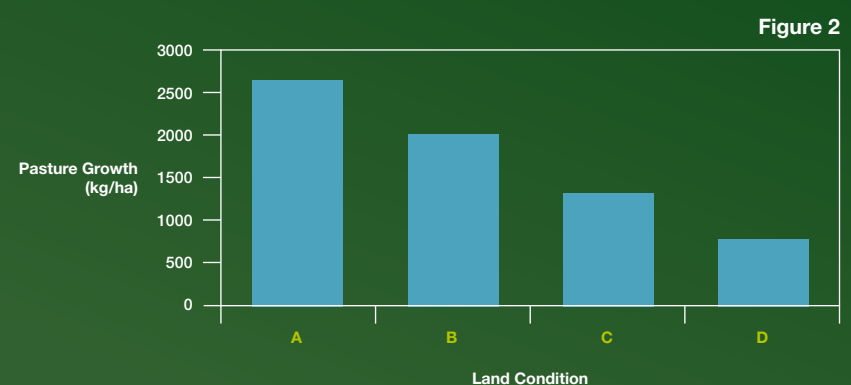


Figure 2



Figure 3

### Overgrazing

Grazing management is the strongest influence on land condition. Overgrazing is the most common management issue in south-east Queensland. Overgrazing:

- leads to a reduction in ground cover due to the loss of desirable pasture species
- reduced abundance of 3P grasses due to being selectively grazed
- reduces ability of pasture to out-compete weeds.