



Burnett Mary REGIONAL GROUP

Practical Solutions for Natural Resource Management

Planning for the Future

Minimising soil erosion when planning property access, water, fencing and yards

Introduction

All improvements including fencing, yards, tracks, shade, water and buildings need to be carefully planned to facilitate an efficient and cost effective business.

The aim is to minimise the use of costly resources such as capital and labour and at the same time minimise stress on management, workers and livestock.

The following are some basic principles and guidelines to reduce erosion when planning the future development of your property.

Access

Locate tracks in the following situations:

- On ridges and crests
- Across the slope, on the contour or below contour or diversion banks
- Zig-zag tracks on long steep slopes
- Divert from the straight line when following a fence line on slopes

- On long slopes use whoa boys 50 to 100 metres apart or closer as it gets steeper.

If possible, avoid the following situations:

- Steep grades
- Areas of dense timber
- Along waterways in cultivation
- Across slopes in erodible country
- Along fences on long slopes
- Gateways in erodible areas

Provide

- Adequate cross fall drainage
- Whoa boys to intercept runoff and divert it safely to the lower side of the track

Paddock size

Plan for:

- The personal preference for number of cattle handled at any time
- Sufficient paddocks to accommodate herd structure
- Allow for paddocks to be spelled over summer period
- Sufficient watering for stock and to spread stock
- Improving or developing the whole of an operational paddock or the undeveloped section of the paddock will be wasted, and the improved section may be easily overgrazed.



Fencing

Points to consider when locating fences:

- Required paddock sizes
- Separate different land types
- Major ridges
- Watercourses and well defined depressions
- Existing improvements (buildings, yards, watering points)
- Different land uses (cultivation, pasture)
- Preserve surveyed boundaries, markers and bench marks
- Place across the slope on the contour
- Facilitate stock management to and from yards
- Areas requiring special treatment
- Alongside waterways in cultivation

Avoid

- Diagonally across slopes where tracks and cattle pads will divert runoff water
- Gateways in watercourse
- Crossing contour banks, especially at the outlet ends
- Up the centre of drainage lines
- Gateways in corners (prefer 50 – 100 metres away)
- Acute angled corners

Laneways

Points to consider in designing laneways:

- Laneways reduce labour required for stock movement
- Can provide valuable feed as a temporary holding paddock if they are of sufficient size.
- Width variations depending on needs
 - Narrow laneways (20-30 metres) may be easily eroded and overgrazed

- Wide laneways (50-300 metres) may make stock handling difficult

- Avoid obstacles to travel, e.g. rocky outcrops
- Shade is advantageous but restrict the location of trees to one side.
- May be used for vehicle access.

Stockyards and small holding paddocks

- Easy access to water supply is required for drinking, dipping and veterinary needs.
- Select well timbered areas to provide adequate shade.
- Select relatively flat land but with some slope for drainage.
- Locate stockyards centrally with the major holding yard having multi-paddock access or laneway access.
- Orientate stockyards so that prevailing winds will blow dust away from workers and shade will be over the working areas in the afternoon.
- Locate so that yard runoff will not affect other improvements such as homestead, sheds and access. Trees may be used to provide wind breaks and shade on the southern and western sides.
- Avoid obstacles to stock handling such as trees, rocks and gullies.
- Provide all-weather access for transport.
- Well draining soils (loam or sandy loam): avoid boggy clays.
- Adequate security.

Watering facilities

Locate

- Dams or watering points as centrally as possible to spread grazing pressure. It may be necessary to provide more than one watering point in long or irregular shaped paddocks.
- On reasonably level sites away from large flows of runoff water
- Away from highly erodible soil (1 to 2 km)
- Reticulate water from dams higher in the catchment
- Near belts (strip) of trees or shrub for shade
- Near ridges where stock can approach from several directions
- Windmills away from tree wind-breaks or use wind-breaks to form tunnels or channels
- To maximise use of self-mustering systems.

Avoid

- Unfenced dams
- Water points in corners
- Dams below shade clumps to prevent pollution of the water supply

Compiled by, John Day 2014 from DNRM historic soil conservation data.

