Coolibah floodplains



Landform

Alluvial plains.

Woody vegetation

Coolibah woodland with an understorey of scattered clumps of brigalow and bauhinia.

Expected pasture composition

* Denotes non-native "Expected Pasture Composition" species.

Preferred

Queensland bluegrass, forest bluegrass, silky browntop, bull and curly Mitchell grass, couch grass.

Intermediate

Native millet, shot grass, Warrego grass, spring grass, curly windmill grass, golden beard grass, tall chloris.

Non-preferred

Umbrella cane grass, weeping lovegrass, fairy grass.

Annual grasses

Button grass, Flinders grass, pepper grass.

Suitable sown pastures

Bambatsi panic, Angleton grass, buffel grass, purple pigeon grass, Caatinga stylo, butterfly pea, Desmanthus. Leucaena where not frequently or severely flooded.

Introduced weeds

Parthenium, parkinsonian, rubbervine, mimosa.

Soil

Black cracking clay (vertosol).

Description

Surface: Firm to crusting; **Surface texture:** light clay to medium clay; **Subsoil texture:** medium to heavy clay.

Water availability

Moderate to high.

Rooting depth

60 cm

Fertility

Moderate total nitrogen; moderate phosphorus.

Salinity

Moderate (below 60 cm).

Sodicity

Sodic (below 0.6 m); however this is variable.

pН

Strongly alkaline.



Long-term carrying capacity information (A condition)

Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day				
Median annual rainfall 521 – 755 mm				
Pasture type	Median tree cover	Median annual pasture growth	Safe annual utilisation pasture growth	LTCC
	(TBA m²/ha) (FPC %)	(DM kg/ha)	(%)	(ha/AE)
Native species	0 TBA/FPC	2910 - 4670	30%	2.1 - 3.3
	11 TBA 27 FPC	1210 - 2820	30%	3.5 – 8.0

Enterprise

Land use and management recommendations

Growing and finishing.

- Suitable for pasture improvement.
- Suitable for cropping in areas not subject to severe flooding.
- · Retain trees on bed and banks of streams.
- Soil disturbance encourages germination of woody species.
- When mixed with other less fertile land types in a paddock, alluvial areas are at risk of overgrazing.
- Land condition should be monitored carefully and management adjusted if necessary to reduce grazing pressure in these areas.

Land use limitations

- Flooding and waterlogging.
- Salinity and surface cracking.
- Restricted access in wet conditions.
- Weed invasion (parthenium).
- Erosive flooding in some areas.
- Establishment problems with improved pastures due to crusting / cracking or coarse self-mulching surface.

Conservation features and related management

- Older trees with hollows are important habitat for arboreal marsupials and provide nest sites for cockatoos and parrots. The branches provide roosting sites for waterbirds such as cormorants, ibis, spoonbills and egrets.
- Coolibah is one of the most important koala food trees.
- Other animals such as freshwater turtles, frogs, pygmy geese, whistling ducks and seasonal wetland plants such as water chestnuts and water lilies are common in this land type.
- Localised stands of lignum provide good habitat and shelter for breeding ducks, and larger burrowing frogs.
- Coolibah protects creeks and riverbanks from erosion.
- Coolibah regeneration is stimulated by flooding.
- Seedlings can be damaged by overgrazing, resulting in some areas where only mature trees can be seen.
- Overgrazing and soil disturbance can lead to parthenium and parkinsonia infestations. Retention of large tussock grasses, such as kangaroo grass, bluegrasses, coolibah grass and forest Mitchell grass, can provide a good body of pasture over dry seasons that will help control weed infestations.
- Fencing this riparian land type can make for better control of grazing pressures.

Regional Ecosystems

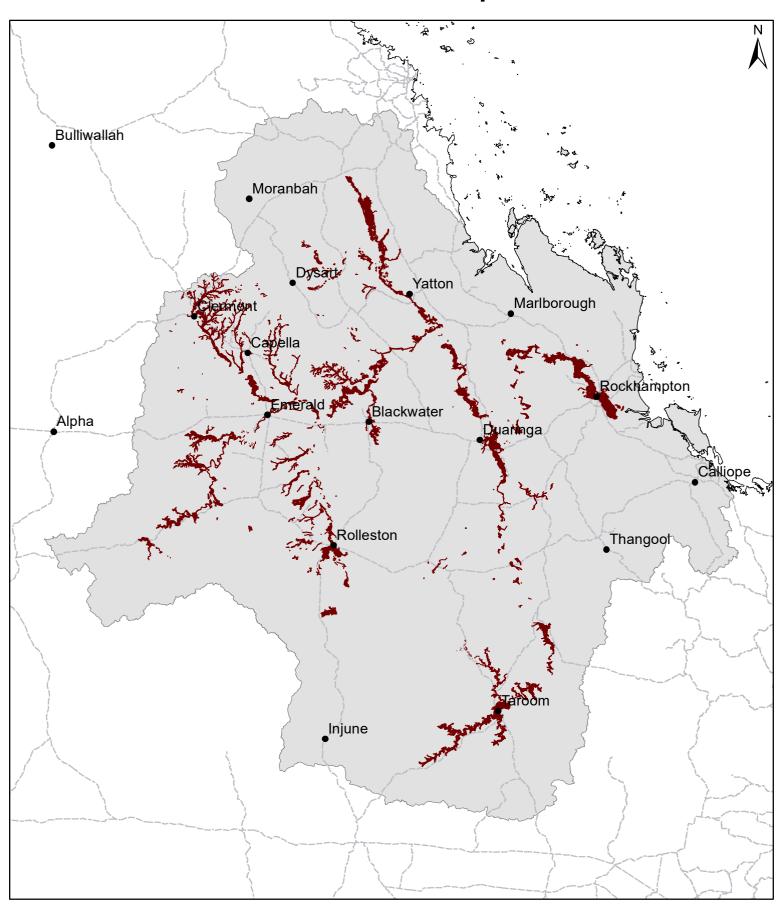
Land units; Agricultural management unit; Soil associations

11.3.3, 11.3.3a, 11.3.3c.

Land units (Gunn *et al* 1967; Story *et al* 1967) Funnel 4, Comet 1, 4 & 5; AMU (DPI 1993) Moramana; Soil associations (Shields *et al* 1993; Burgess 2003) Lindsay, Bluchers, Issac, Moramana, Jeffray.



FT11 Coolibah floodplains



Area of land type in region: 2%

Median rainfall (region): 494 – 830 mm Average rainfall (region): 560 – 869 mm

Area of land type with FPC: 42%

Median FPC: 27% Median TBA: 11 m2/ha

