Blue gum on alluvial plains



Landform

Flat to gently undulating alluvial plains, levees and terraces (0–3% slope) along rivers and creeks.

Woody vegetation

Predominantly cleared. Remnant Queensland blue gum woodland with occasional Moreton Bay ash.

Expected pasture composition

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

Preferred

Forest bluegrass, Queensland bluegrass, black speargrass, scentedtop, Rhodes grass*, creeping bluegrass*.

Intermediate

Umbrella grass, tambookie grass, couch grass*, spring grass, slender bamboo grass, liverseed grass.

Non-preferred

Wiregrasses, slender chloris.

Legumes

Rhynchosia, creeping tick trefoil, glycine pea, woolly glycine.

Annual grasses

Small burr grass.

Suitable sown pastures

Rhodes grass, creeping bluegrass, Angleton grass, pangola, lucerne, leucaena, siratro, clovers and medics.

Introduced weeds

Lantana, camphor laurel, castor oil plant.

Soil

Dominantly deep, dark grey to dark brown cracking clays on alluvial flats (black earths) or free draining loamy soils associated with watercourses (prairie soils). Occasional gilgai development.

Description

Surface: Cracking and self-mulching or surface crust; **Surface texture:** sandy clay loam to light or heavy clay; **Subsoil texture:** clay loam to medium or heavy clays

Features

Lime is commonly present in cracking clays subsoils.

Water availability

Medium (loams) to high (cracking clays); PAWC 100–200 mm in root zone.

Rooting depth

Effective rooting depth >1.2 m for loams and >1.5 m for cracking clays.

Fertility

Low to medium (loams) to high (cracking clays) nitrogen; high to very high phosphorus; high to very high potassium; medium zinc and copper.



Salinity

Very low to low at surface; very low subsoils.

Sodicity

Non-sodic; cracking clays occasionally sodic at depths >60 cm.

pΗ

Medium acid (6.0) to moderately alkaline (8.0) at surface; loamy soils neutral (7.0) to moderately alkaline (8.0), and moderate alkaline (8.0) to strongly alkaline (9.5) in cracking clay subsoils.

Long-term carrying capacity information (A condition)

Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day				
Median annual rainfall 744 – 1372 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	3950 - 4510	35%	1.9 – 2.1
	17 TBA 41 FPC	1380 - 2510	35%	6.0 – 3.3

Enterprise

Fattening on native and improved pastures.

Land use and management recommendations

- Predominantly cropping.
- Extensively developed for agriculture, including wide range of dryland and irrigated crops and pastures. Soils are suitable for most grain, fodder and small crops.
- Coordinated drainage strategy of subsurface drains, diversion banks and crop layout design is required in intensively developed areas.
- Adopt practices such as minimum tillage, stubble mulching, include green cover crops in crop rotations, and retain crop residues to maintain soil structure and reduce erosion.
- Maintain adequate surface cover at all times in areas used for grazing.
- Spell pastures when flowering and seeding.
- Control woody weeds.

Land use limitations

- Slow drainage, particularly black earths with high clay content, may cause water logging and restrict growth of some crops.
- Alluvial loams become cloddy after cultivation and may become hard-setting if compacted by continual cropping.
- Local frosts and flooding may occur. Erosive flooding may be a high risk in some locations
- Surface runoff may be high, particularly following irrigation.
- Overland flow may cause rill and sheet erosion on unprotected surfaces.
- Stream banks are susceptible to erosion.
- Soil structural problems and plough pans may develop if cropped continuously.

Conservation features and related management

- Many of the freshwater wetlands in the Moreton are associated with this land type.
- While blue gum is common, few extensive, intact remnants remain.
- Large hollows, often found in large, old blue gums, are important nesting sites and habitat for birds and marsupials.
- Blue gum regenerates readily in the absence of grazing and regular fire.
- Regrowth can be encouraged to allow remnants to expand and establish connection with other areas of remnant vegetation.
- · Regrowth has hardwood potential.

Regional Ecosystems

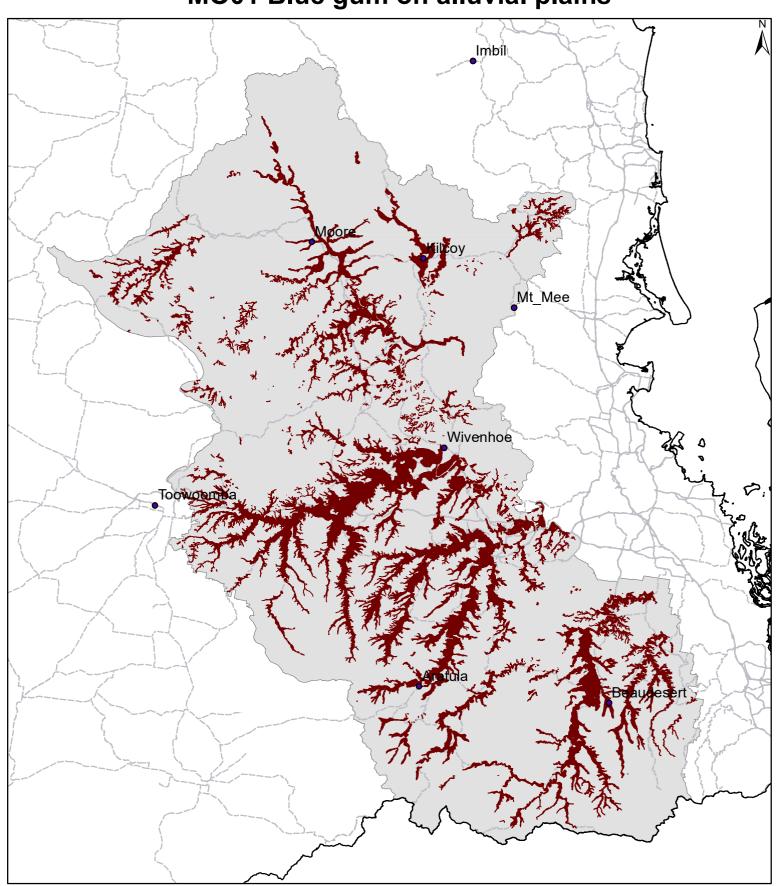
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Land resource area

Fine Textured Alluvial Plains, 1b (Noble, 1996).



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Area of land type in region: 12%

Median rainfall (region): 632 – 1372 mm Average rainfall (region): 637 – 1536 mm

Area of land type with FPC: 2%

Median FPC: 41% Median TBA: 17 m2/ha

