

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	<i>* Denotes non-native "Expected Pasture Composition" species.</i>
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.
pH	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.
Utilisation	35%
Enterprise	Fattening on native and improved pastures.
Land use and management recommendations	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	11.3.23, 12.3.16, 12.3.17, 12.3.18, 12.3.19, 12.3.1a, 12.3.21, 12.3.3, 12.3.7a, 12.3.7c, 12.3.8.
Land resource area	Fine Textured Alluvial Plains, 1b (Noble, 1996).

