

Blue gum on alluvial plains



Landform	Flat to gently undulating alluvial plains, levees and terraces (0–3% slope) along rivers and creeks. Freshwater wetlands and swamps may be present.
Woody vegetation	Remnant Queensland blue gum woodland with occasional Moreton Bay ash, broad-leaved apple, swamp box and narrow-leaved ironbark.
Expected pasture composition	<i>* Denotes non-native “Expected Pasture Composition” species.</i>
Preferred	Forest bluegrass, Queensland bluegrass, black speargrass, scentedtop, kangaroo grass, tambookie grass, Rhodes grass*, creeping bluegrass*, kikuyu*, paspalum*.
Intermediate	Pitted bluegrass, umbrella grass, couch grass*, mat grass*, spring grass, liverseed grass, native panic.
Non-preferred	Wiregrasses, slender chloris. native rat’s tail grass, blady grass, slender bamboo, swamp foxtail grass.
Legumes	Rhynchosia, creeping tick trefoil, glycine pea, woolly glycine.
Annual grasses	Small burr grass.
Suitable sown pastures	Rhodes grass, creeping bluegrass, Angleton grass, pangola, kikuyu, Narok setaria, bambatsi panic, brachiaria, lucerne, leucaena, desmanthus, siratro, glycine, white clover, maku lotus.
Introduced weeds	Lantana, camphor laurel, chinese celtis, groundsel, castor oil plant, annual ragweed, blue heliotrope, lippia, giant rat’s tail grass, Parramatta grass, fireweed, Cats claw creeper.
Soil	Dominantly deep, dark grey to dark brown cracking clays on alluvial flats (vertosols - black earths) or free draining loamy soils associated with watercourses (rudosols - alluvial loams, dermosols - 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 high (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	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	Slightly acid (6.0) to slightly alkaline (8.0) at surface; loamy soils neutral (7.0) to slightly alkaline (8.0) subsoils, cracking clay subsoils - slightly alkaline (8.0) to strongly alkaline (9.5) at depth.

Long-term carrying capacity information (A condition)

Enterprise Land use and management recommendations

Land use limitations

Conservation features and related management

Regional Ecosystems

Land resource area

Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day				
Median annual rainfall 744 – 1392 mm				
Pasture type	Median tree cover (TBA m ² /ha) (FPC %)	Median annual pasture growth (DM kg/ha)	Safe annual utilisation pasture growth (%)	Long term carrying capacity (ha/AE)
Native species	17 TBA 41 FPC		35%	
Sown pastures	17 TBA 41 FPC		35%	

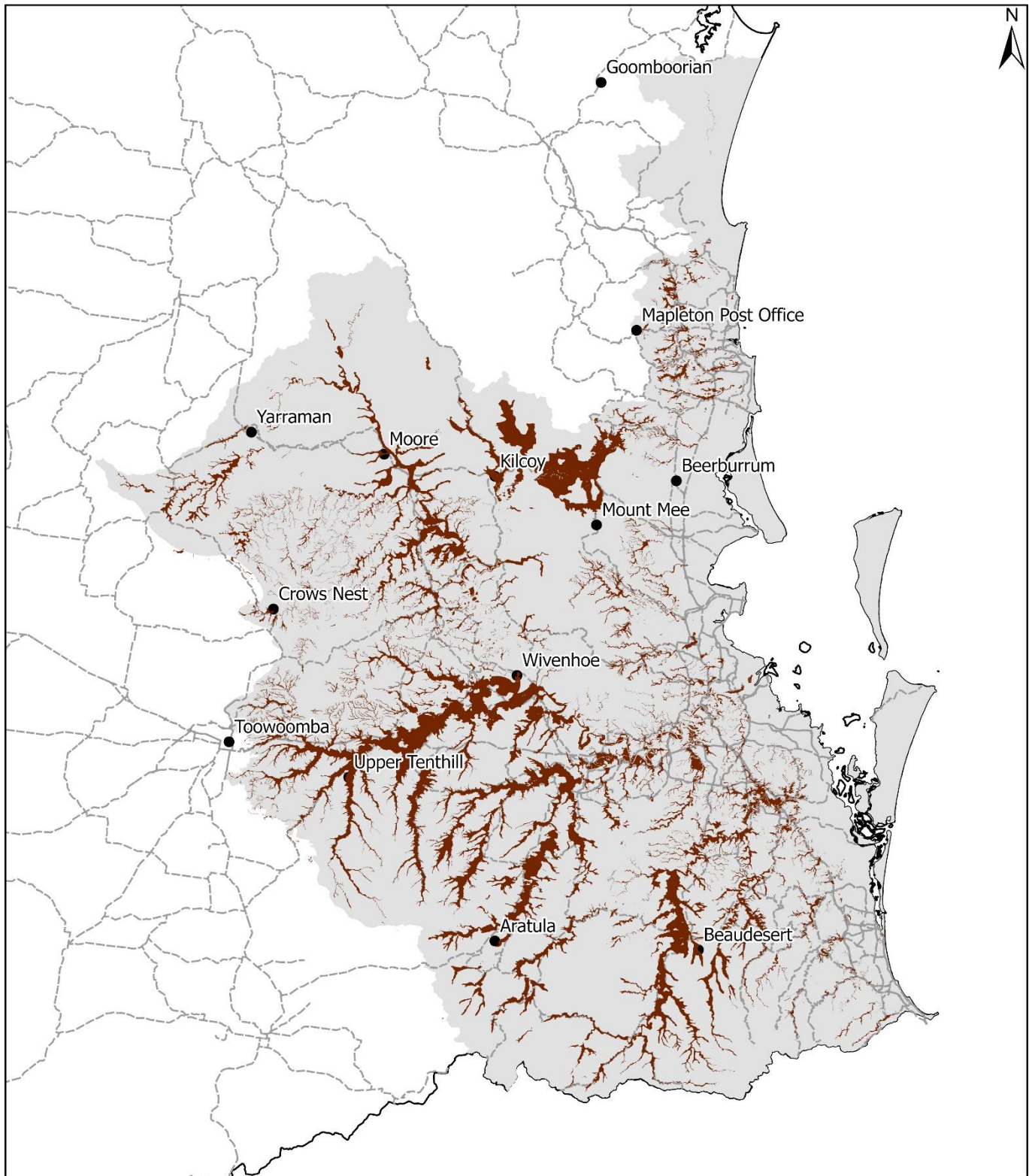
Predominantly cropping and fattening on native and improved pastures.

- 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 soil conservation & drainage plans incorporating waterways, drains, diversion banks and crop layout design are 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 high levels of effective surface cover (>90%) at all times in areas used for grazing.
- Routinely spell pastures to allow seeding, improve vigour and maintain dominance of desirable species.
- Control invasive weeds.
- To maintain ecological health of native pastures, it is recommended that planned burns are carried out every 3-6 years, when there is sufficient soil moisture & careful grazing management following the burn to prevent overgrazing of early phase growth.
- Slow drainage, particularly black earths with high clay content, may cause water logging and restrict growth of some crops.
- Alluvial loams & red-brown earths may become cloddy after cultivation and may become hard-setting if compacted by continual cropping.
- Soil structural problems and plough pans may develop if cropped continuously.
- Local frosts and flooding may occur on alluvial plains.
- Erosive flooding may be a high risk in some locations. Stream banks are susceptible to erosion.
- Overland flow may cause rill and sheet erosion on unprotected surfaces. Surface runoff may be high, particularly following irrigation.
- While Queensland blue gum is common, original communities have been extensively cleared and fragmented, with limited natural regeneration in many areas. Subsequently, many of these Regional Ecosystems are classified as Endangered, with intact remnants having high conservation values requiring protection & restoration.
- Freshwater wetlands, which are important for biodiversity and floodplain ecosystem function, are associated with this land type & should be managed to protect & preserve these values.
- Blue gum woodlands are important habitat for the endangered Koala, and a range of reptiles, birds, and marsupials.
- 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 connect with other areas of remnant vegetation. Regrowth has hardwood potential.

12.3.11, 12.3.11a, 12.3.11b, 12.3.16, 12.3.1a, 12.3.2, 12.3.21, 12.3.3, 12.3.7, 12.3.7a, 12.3.7b, 12.3.9.

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

SEQ01 Blue gum on alluvial plains



Area of land type in region: 16%
Median rainfall (region): 752–1672 mm
Average rainfall (region): 763–1766 mm
Area of land type with FPC: 32%
Median FPC: 49%
Median TBA: 21 m²/ha