Box on erosive soils

Landform	Broad low sloping, higher lying relict alluvial plains.
Woody vegetation	Open forest or woodland of poplar box, narrow-leaved ironbark, gum-topped box and occasionally rusty gum. Understorey usually absent, occasionally wilga and wattles.
Expected pasture composition	*Wiregrass – pitted bluegrass pastures.* ** Denotes non-native "Expected Pasture Composition" species.*
Preferred	Black speargrass, forest bluegrass, Queensland bluegrass, scentedtop.
Intermediate	Spider grass, bottlewasher grasses, silky umbrella grass.
Non-preferred	Wiregrasses (e.g. dark), slender chloris.
Legumes	Woolly glycine, rhynchosia, emu foot, creeping tick trefoil.
Annual grasses	Small burr grass.
Suitable sown pastures	Creeping bluegrass, Rhodes grass, shrubby stylo.
Introduced weeds	
Soil	Yellow sandy texture contrast soils.
Description	**Surface:** Hard-setting*; **Surface texture:** sandy loam to loamy sand; **Subsoil texture:** sandy clay to medium clay.
Features	Erosive, saline and sodic soils. Bleached A2 horizon. Some quartz gravel in surface.
Water availability	Low PAWC.
Drainage	Poorly drained.
Rooting depth	Effective rooting depth 20 cm.
Fertility	Low; low nitrogen, very low phosphorus, moderate to high potassium.
Salinity	Moderate to high salinity below 20 cm.

Sodicity	Strongly sodic subsoils.
pH	Alkaline (pH 8.0) to neutral soil reaction trend.

Long-term carrying capacity information (A condition)

Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day				
Median annual rainfall 631 – 676 mm				
Pasture type	Median tree cover (TBA m²/ha) (FPC %)	Median annual pasture growth (DM kg/ha)	Safe annual utilisation pasture growth (%)	LTCC (ha/AE)
Native species	0 TBA/FPC	2860 - 2980	25%	3.9 – 4.1
	10 TBA 24 FPC	1410 - 1420	25%	8.2 – 8.3

Enterprise

Breeding and stores.

Land use and management recommendations

- Suitable for grazing of native and improved pastures.
- Maintenance of effective ground cover (>70%) and conservative stocking practices (spelling pastures, flexible stocking rates) are important to retain organic matter, maintain soil structure, reduce runoff and minimise risk of erosion.
- Retain timber in drainage lines and at changes of slope at base of hills to lower watertable and control salinity.
- Burning is recommended every 4–6 years to control regrowth (box, false sandalwood, currant bush) and to enhance preferred pasture species.

Land use limitations

- Land subject to flooding and periodic waterlogging.
- Low PAWC will restrict dryland crop growth. When cultivated surface sealing develops after rain, affecting crop establishment.
- Narrow moisture range for successful cultivation.
- Low fertility (except for potassium).
- Root development affected by impermeable and saline subsoils.
- High to extreme erosion hazard and prone to scalding.

Conservation features and related management

- Generally the good grass cover provides shelter and food for ground dwelling animals such as spectacled hare-wallabies and rufous bettongs.
- Large poplar box trees often have hollows that are home to arboreal marsupials and provide nest sites for a wide range of birds such as owlet nightjars, owls and parrots.
- Patch burning of these woodlands in the late winter months is preferable. Where grazed paddock areas need to be burnt to prevent excessive grazing pressure on new growth, with some burning prior to summer rains.
- Mature trees can easily be burnt through at the base and therefore frequent burning can lead to loss of these important habitat trees.
- Trees are important in the cycling of nutrients from deeper in the soil profile.
- Due to the potential erosion hazard of these duplex soils good ground cover should be retained on slopes and drainage lines.
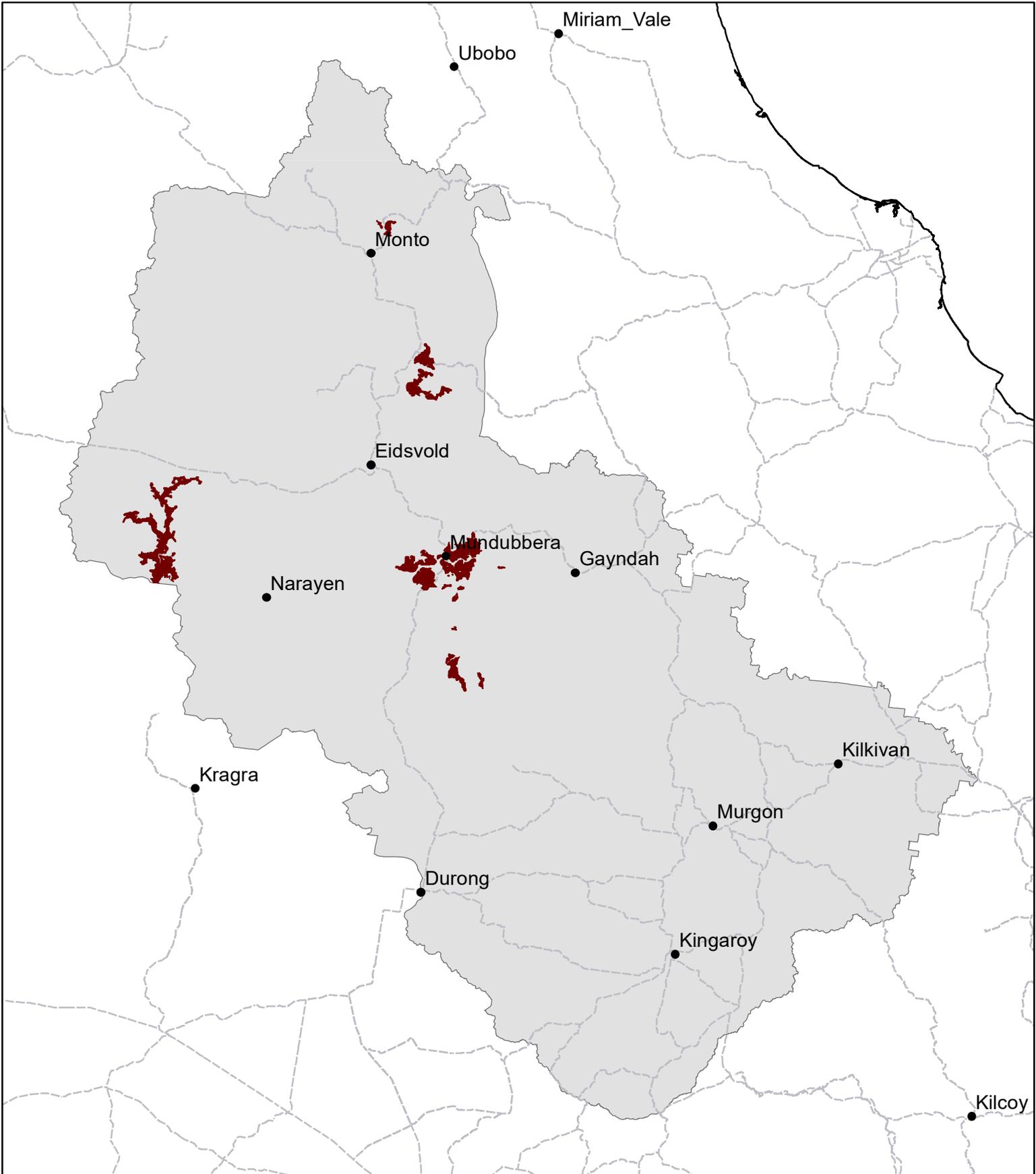
Regional Ecosystems

11.5.13, 11.9.7, 11.11.9.

Land resource area

Terraces.

Land types of Queensland Inland Burnett Region
Version 4.0

- IB06 -

Queensland Government

IB06 Box on erosive soils

Area of land type in region: 1%
Median rainfall (region): 529 – 1018 mm
Average rainfall (region): 560 – 1070 mm
Area of land type with FPC: 29%
Median FPC: 24%
Median TBA: 10 m2/ha

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