Poplar box on alluvial plains

Landform	Back plains, levees and terraces generally not flooded, slopes <1%.
Woody vegetation	Poplar box, belah, bulloak, boonaree, bauhinia, false sandalwood, wilga.
Expected pasture composition	** Denotes non-native "Expected Pasture Composition" species*.
Preferred	Forest bluegrass, desert bluegrass, Queensland bluegrass, buffel grass*.
Intermediate	Mitchell grasses (hoop, curly), pitted bluegrass, tall chloris, curly windmill grass, purple lovegrass, box grass.
Non-preferred	Five-minute grass, wiregrasses (purple, Jericho).
Legumes	Grey rattlepod, glycine pea, native sensitive plant.
Suitable sown pastures	Rhodes grass, buffel grass, creeping bluegrass, Gatton panic, Caatinga stylo, medic (barrel, Toreador). Flooded areas: Bambatsi, Angleton grass.
Introduced weeds	Noogoora burr, Lippia, mother-of-millions.
Soils	Soils are deep texture contrast (sodosol).
Description	***Surface*:** Firm to hard-setting ***Surface texture*:** clay loam, loam or sandy clay loam; ***Subsoil texture*:** medium clay to medium heavy clay.
Water availability	Low
Rooting depth	Shallow due to sodicity and salinity.
Fertility	Low to moderate total nitrogen; low to high phosphorus.
Salinity	Medium in subsoil, becoming very high to extreme in deep subsoil.
Sodicity	Subsoils strongly sodic.
pH	Surface pH slightly acid, subsoils 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 469 – 615 mm				
Pasture type	Median tree cover (TBA m^2/ha) (FPC %)	Median annual pasture growth (DM kg/ha)	Safe annual utilisation pasture growth (%)	LTCC (ha/AE)
Native species	0 TBA/FPC	2370 - 3040	25%	3.8 – 4.9
	10 TBA 25 FPC	1130 - 1660	25%	7.3 – 10
Sown			30%	

Enterprise

Growing and finishing.

Land use and management recommendations

- Suitable for grazing native and sown pastures.
- Fodder crops are grown while developing and renovating land.

Land use limitations

- Shallow effective rooting depth due to relatively impermeable subsoils which are strongly sodic and very saline.
- Low plant water availability.
- High erosion risk as subsoils are highly dispersible.
- Poplar box regrowth problem.
- Management of woody weed control is difficult as control methods usually not cost effective.
- Maybe subject to seasonal flooding on valley floors.
- Dense stands of pigweed may limit pasture growth, productivity and be toxic to stock.

Conservation features and related management

- These alluvial poplar box woodlands provide habitat for rare and threatened flora species (e.g. *Homopholis belsonii*), and fauna (e.g. greater long-eared bat, little pied bat and squatter pigeon).
- This land type can have support a high diversity of fauna including birds (e.g. brown treecreeper, kingfishers, honeyeaters and thornbills); brushtail possums, sugar gliders and many insectivorous bats that use mature trees with hollows; a variety of geckoes, dragons and litter skinks that use logs and fallen woody material; echidnas, and sometimes koalas. Rufous bettongs are present where there are few (or no) foxes and a good groundcover of tussock grasses.
- Poplar box woodlands have been extensively cleared and modified.
- Invasion and regrowth can cause high understorey shrub densities (e.g. currant bush, Ellangowan poison bush).
- Careful management of grazing pressure and maintenance of ground cover is important to minimise risk of sheet and gully erosion, reduce runoff and protect the wildlife habitat.
- Use of fire could assist in controlling woody weeds and enhance productivity and habitat potential of the land type.
- Control of feral animals such as pigs and foxes can help to protect native wildlife in this habitat.

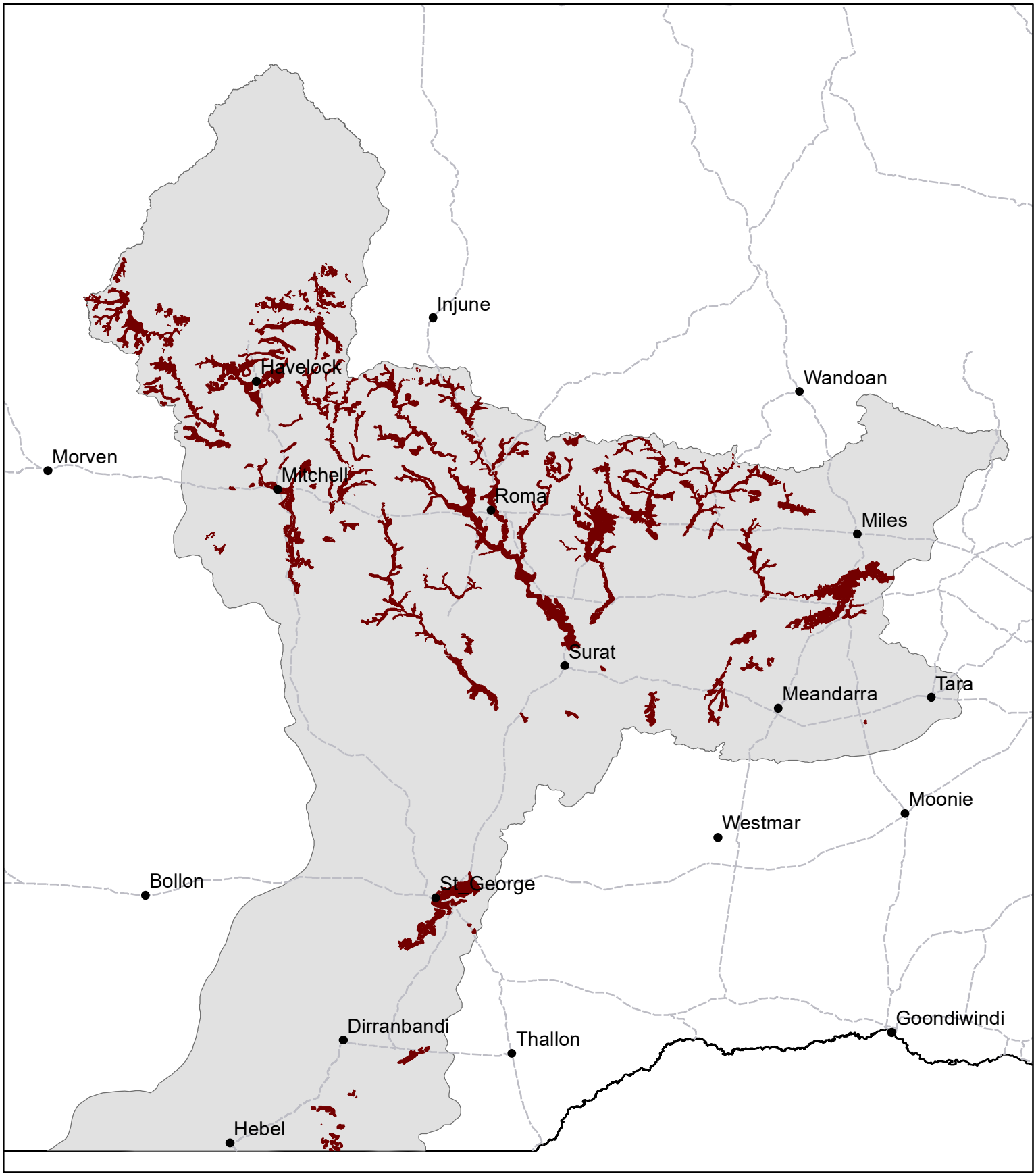
Regional Ecosystems

6.3.18, 11.3.2, 11.3.5, 11.3.18, 11.3.20, 11.3.26, 11.4.10, 11.4.12.

Land units; Map units; Land resource areas; Soil associations

Land Units (Galloway *et al* 1974) 62, 64, 68; Map Units (DPI 1984) 23, 24; LRA, Soil Associations (DPI 1996) Clay Alluvial Plains, Bogandilla 1b, 1c; LRA (DPI 1987) 4 – Coogoon, 5 - Tartulla (minor).

MB11 Poplar box on alluvial plains



Area of land type in region: 5%
Median rainfall (region): 400 – 615 mm
Average rainfall (region): 438 – 630 mm
Area of land type with FPC: 34%
Median FPC: 25%
Median TBA: 10 m2/ha

Queensland Government