

Poplar box plains



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| Landform | Elevated plains of mixed alluvium associated with the Condamine River. |
| Woody vegetation | Poplar box open woodland. May be associated with Queensland blue gum, river red gum and occasionally yarran, wilga and belah. |
| Expected pasture composition | |
| Preferred | Forest bluegrass, Queensland blue, silky browntop and native oats. |
| Intermediate | Pitted bluegrass, twirly windmill grass, golden beard grass and slender chloris. |
| Non-preferred | White speargrass, feathertop wiregrass, purple wiregrass, five-minute grass, small flinders grass, ray grass, fairy grass, limestone bottlewashers and slender bamboo grass. |
| Common forbs and legumes | Nardoo, ruby saltbush, climbing saltbush and sesbania pea. Non-preferred species include sedges, pigweed and galvanised burr. |
| Suitable sown pastures | Bambatsi, Rhodes grass (Katambora types), creeping bluegrass (Bisset) and Gatton panic. Lucerne, medics (barrel, burr and button), desmanthus, Caatinga stylo and leucaena. |
| Introduced weeds | African lovegrass, tiger pear, tree pear, mother-of-millions and lippia. |
| Soil | Deep to very deep, crusting, black, brown or dark grey cracking clay on alluvial plains of mixed origin (vertisol). |
| Description | Surface: weakly self-mulching; Surface texture: dark grey, brown or black cracking clays; Subsoil texture: grey to dark brownish grey clays with coarse blocky structure. |
| Water availability | High to very high; plant available water capacity (PAWC) 150 – >250 mm. May be limited by depth to sodic subsoil in some areas. |
| Rooting depth | 80 – 180 cm |

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| Fertility | Responds to nitrogen, phosphorus, zinc and sulphur. |
| Salinity | Moderately saline, becoming highly saline with depth. |
| Sodicity | Sodic to strongly sodic. |
| pH | Mildly alkaline at surface progressing to strongly alkaline at depth (pH 8.5 – 9.0). |

Long-term carrying capacity information (A condition)

| Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day | | | | |
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| Median annual rainfall 582 – 748 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 | 2990 - 3650 | 30% | 2.7 - 3.3 |
| | 12 TBA 29 FPC | 1410 - 2120 | 30% | 4.6 – 6.9 |
| Sown | | | 35% | |

Enterprise

Growing and finishing.

Land use and management recommendations

- Most of this land type has been cleared for cultivation.
- Presswheels or rollers are useful to establish crops and sown pastures.
- Sulphur required to maintain sown pasture species.

Land use limitations

- The coarse structure of the soil creates problems with tillage, seedling establishment, water infiltration and wetting up the profile.
- When cultivated, these soils puddle badly following rain and form a hard surface crust or seal, making it difficult to maintain a fine seedbed condition.
- The surface crust results in impaired infiltration, poor germination and seedling emergence of small seeded crops and pastures.
- Occasional erosive flooding.
- Susceptible to wind and water erosion if surface soil is unprotected. 'Sand blasting', of young plants associated with wind erosion.

Conservation features and related management

- Conservation status of remnant vegetation is endangered.
- Habitat for threatened flora species *Homopholis belsonii*.
- Extensively cleared or modified by grazing.
- There are still substantial areas of this ecosystem remaining, although remnants are often degraded by grazing, dieback and associated lack of natural regeneration and weed invasion.

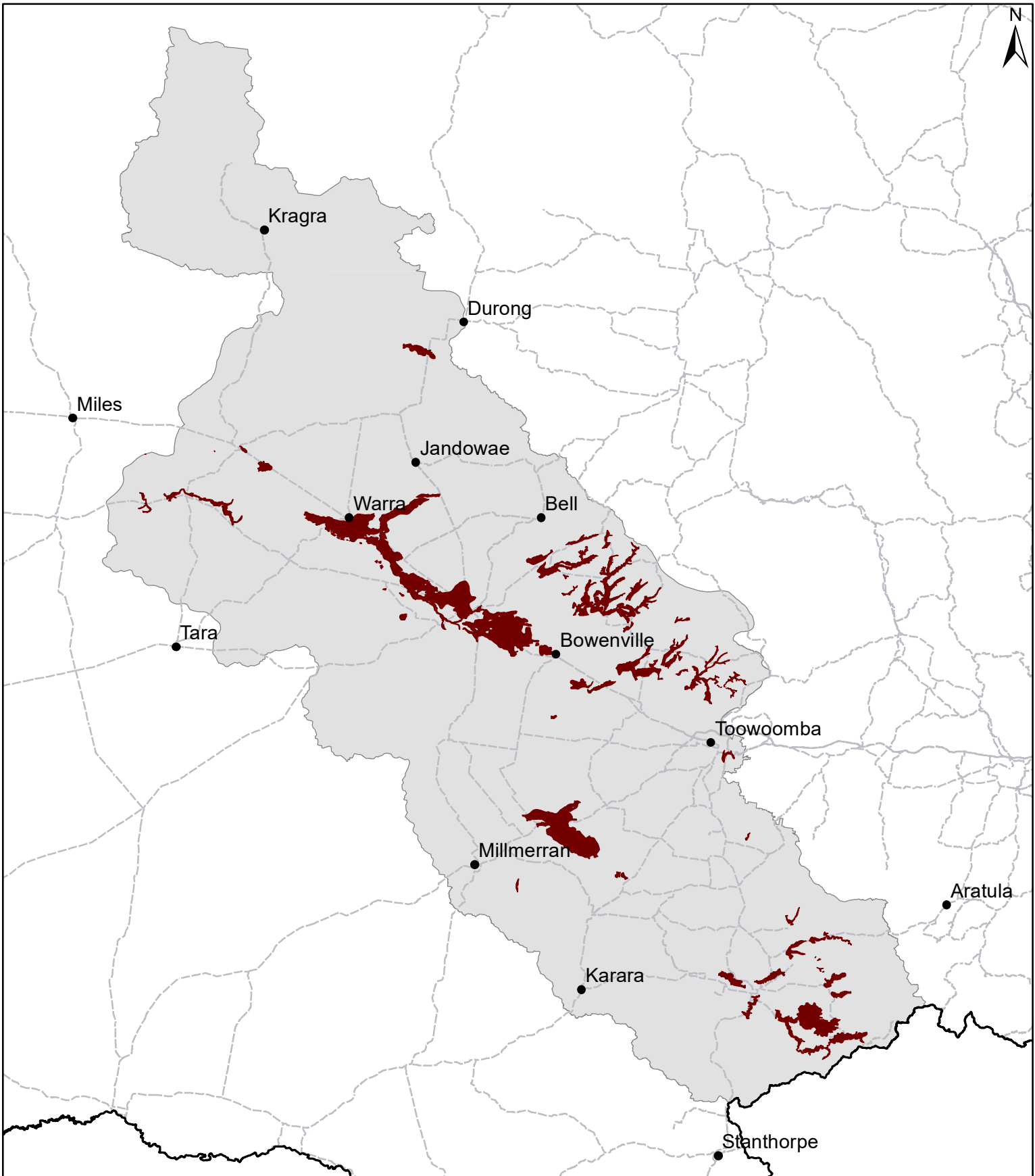
Regional Ecosystems

11.3.17, 11.3.2, 11.3.26, 11.3.4

Land units; Agricultural management unit; Soil associations

Central Darling Downs Land Management Manual: 2b (*Cecilvale*); Understanding and Managing the Soils in the Murilla, Tara and Chinchilla Shires: 1c (*Cecilvale*); Land Inventory and Technical Guide Eastern Downs Area: (*Cecilvale*).

DD13 Poplar box plains



Area of land type in region: 4%
Median rainfall (region): 580 – 909 mm
Average rainfall (region): 585 – 927 mm
Area of land type with FPC: 11%
Median FPC: 29%
Median TBA: 12 m²/ha



Queensland
Government