

# Hard mulga



Photo: H1 (Opalton) Land System

<b>General description</b>	Flat to gently undulating plains, grading into dissected hills (slopes to 10%), with mulga and bastard mulga tall shrublands, occurring on shallow red earths and gravelly brown clays. These areas are often associated with (or perched on top of) jump-ups, where rock and large pebbles cover the shallow sandy soils, or with soft mulga.
<b>Landform</b>	Flat to gently undulating plains to dissected hills (slopes to 10%).
<b>Woody vegetation</b>	Mulga and bastard mulga, groved in places, occurring with gidgee, lancewood and western bloodwood. Occasional areas of gidgee spinifex low open woodland and areas devoid of vegetation. Occurrences of mountain yapunyah, turkey bush, hakea, hopbush and cassia.
<b>Expected pasture composition</b>	* Denotes non-native "Expected Pasture Composition" species.
Preferred	Soft spinifex, lovegrasses, cotton panic.
Intermediate	Woollybutt wanderrie grass, mountain wanderrie grass, bottlewasher grasses, pincushion spinifex, five-minute grass.
Non-preferred	Wiregrasses.
Annual grasses	Lovegrasses.
Common forbs	Crumbweed, silky bluebush, pretty polly, foxtails, hibiscus. Non-preferred species include gidgee burr, copperburrs.
<b>Suitable sown pastures</b>	Not suitable for sown pastures.
<b>Introduced weeds</b>	Mother-of-millions, cactus (snake, devil's rope, harrisia and coral).
<b>Soil</b>	Very shallow red earths, gravelly ironstones and desert loams with shallow, stony clays in depressions.
Description	<b>Surface:</b> Variable stone and gravel cover; <b>Surface texture:</b> sandy loam to sandy clay loam; <b>Subsoil texture:</b> sandy loam to sandy clay loam.
Features	Extensive outcropping of parent material and/or extensive cover of rock and rubble. Soils are often scalded and severely eroded.
Water availability	Low

Rooting depth	Shallow
Infiltration	Very low. High proportion of runoff following 5 mm of rain, even under low intensity rainfall. Runoff contributes to neighbouring land types.
Fertility	Low to very low.
Salinity	Non-saline
Sodicity	Non-sodic
pH	Strongly acid.

### Long-term carrying capacity information (A condition)

Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day				
Median annual rainfall 233 – 429 mm				
Pasture type	Median tree cover (TBA m <sup>2</sup> /ha) (FPC %)	Median annual pasture growth (DM kg/ha)	Safe annual utilisation pasture growth (%)	LTCC (ha/AE)
Native species	0 TBA/FPC	270 - 1060	15%	18 - 72
	2 TBA 5 FPC	170 - 630	15%	31 – 115

### Enterprise

Limited breeding and wool production.

### Land use and management recommendations

- Suitable for conservative seasonal grazing of native pastures.
- Maximise ground cover to reduce soil erosion.
- These areas provide good runoff for adjacent country.
- Provides shade and limited top feed.
- Mosaic burning to increase spinifex palatability and availability of green forage.

### Land use limitations

- Dense mulga and cassia thickening, stone and gravel cover, slope and fragile soils limit productivity.
- Severe sheet erosion evident and some scalding.
- Generally need phosphorus supplements for livestock.

### Conservation features and related management

- These areas provide potential habitat for rare and threatened flora species including *Grevillea kennedyana*.
- Maintenance of ground cover will minimise extensive loss of topsoil and degradation of these areas.

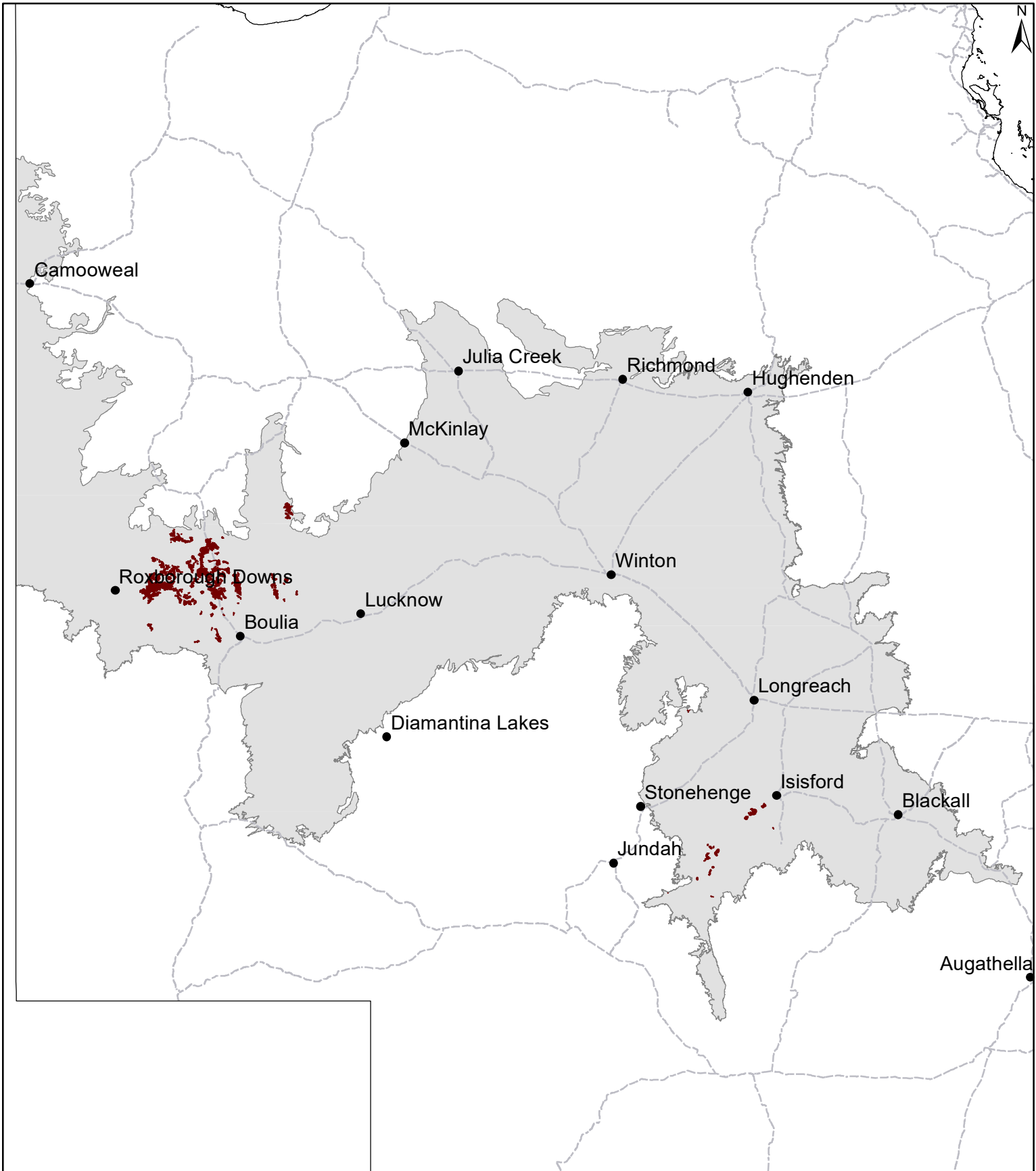
### Regional Ecosystems

4.5.2, 4.5.3x70.

### WARLUS land systems

I	II	III	IV	V	VI
H1 to H5	H1 to H5	H1, H2, H3, H4	H1	H1	H1

# MGD09 Hard mulga



Area of land type in region: 1%  
Median rainfall (region): 233 – 494 mm  
Average rainfall (region): 253 – 533 mm  
Area of land type with FPC: 41%  
Median FPC: 5%  
Median TBA: 2 m<sup>2</sup>/ha



**Queensland  
Government**