

Open downs

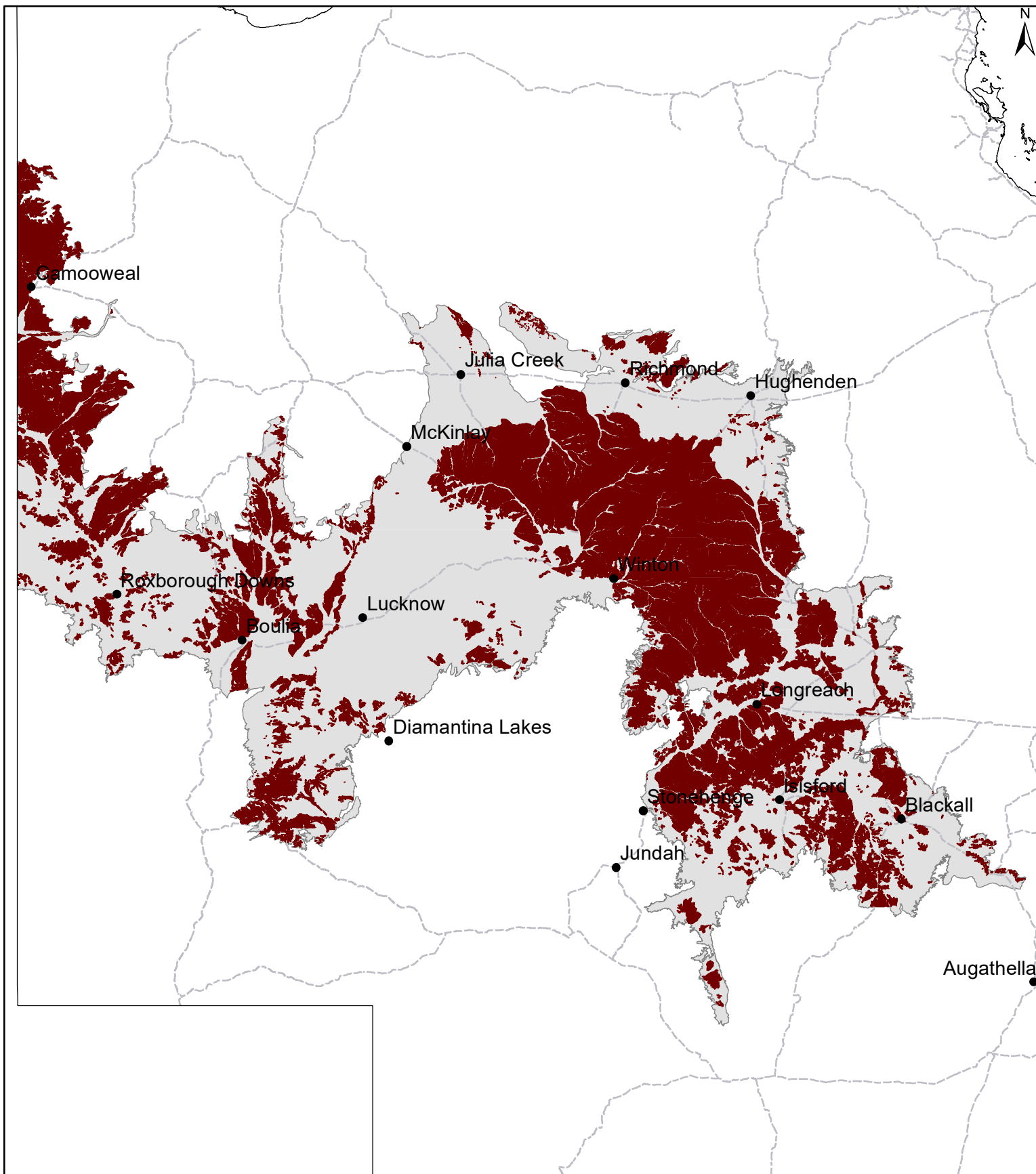


Photo: F3 (Winton) Land System

General description	Undulating open Mitchell grass plains on cracking clay soils with scattered or isolated trees. Minor areas of sparse forbland on scalds. Generally drain into open alluvial plains and adjoin gidgee woodlands, jump ups or soft mulga sand ridges.
Landform	Undulating plains.
Woody vegetation	Whitewood, bauhinia, vine tree, corkwood, emu apple and boonaree on sandstone outcrops and ridges.
Expected pasture composition	* Denotes non-native "Expected Pasture Composition" species.
Preferred	Mitchell grass, Queensland bluegrass, finger panic.
Intermediate	Star grass/native millet, bottlewasher grasses.
Non-preferred	Feathertop, white speargrass (in the south), hairy ribbon grass (in the north).
Annual grasses	Flinders grass, button grass, downs couch.
Common forbs	Native legumes (e.g. glycine, rhynchosia), lamb's tongue, daisy burr, wild carrot, sida, annual verbine, tarvine, cow vine, pigweed. Non-preferred species include black roly poly, goathead burr, copperburrs, roly poly.
Suitable sown pasture	Mitchell grass, Queensland bluegrass. Buffel grass, Bambatsi, purple pigeon grass, and Angleton grass may be useful in scald reclamation.
Introduced weeds	Parthenium, mesquite (hybrid), prickly acacia, Bathurst burr, florestina, spiked malvastrum.
Soil	Deep grey, brown and red, strongly cracking clays with self-mulching surfaces derived from freshwater sandstone sediment. Nearly half of the soils are shallower and occur on scattered outcrop ridges.
Description	Surface: Self-mulching with some crusting; Surface texture: heavy clay; Subsoil texture: heavy clay.

Features	Seasonal scalding occurs. Calcium carbonate nodules and or gypsum occur at depth.				
Water availability	High				
Rooting depth	Deep				
Infiltration	High initially on a dry soil profile, slowing to moderate levels after 50 mm of rain as cracks close and to low levels after 75 mm of rain. Increasing runoff following 75 mm of rain. Estimates based on low to moderate intensity storm rain.				
Fertility	Moderately high.				
Salinity	Non-saline				
Sodicity	Non-sodic at surface; subsoils sodic.				
pH	Alkaline throughout profile.				
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 – 473 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	390 - 2650	22%	5 - 34
Enterprise		4 TBA 10 FPC	300 - 1880	22%	7 – 44
	Breeding, fattening and wool production.				
Land use and management recommendations	<ul style="list-style-type: none"> Suitable for grazing of native pastures. Rotational wet season spelling to maintain perennial pasture composition. Maintain adequate ground cover to minimise soil erosion. Strategic burning to manage feathertop with mid dry season clean fires, and woody species (e.g. prickly acacia, gidgee) with late dry season hot fires. 				
	<ul style="list-style-type: none"> Shade and browse trees limited to crests and stony outcrops. Heavier clay soils require 50–75 mm of rain for Mitchell grasses to grow. 				
Land use limitations	<ul style="list-style-type: none"> Maintaining groundcover and tussock structure is important for crack dwelling marsupials and reptiles e.g. dunnarts, planigales and Collett's snake. 				
Conservation features and related management					
Regional Ecosystems	1.9.1, 4.4.1c-g, 4.4.1x4, 4.4.1x7, 4.4.2, 4.9.1, 4.9.1a-b, 4.9.2, 4.9.2b, 4.9.4a, 4.9.4x1, 4.9.4x1a-c, 4.9.8.				
WARLUS land systems	I	II	III	IV	V
	F1	F1, F3, F6, F7, F8	A1, A2, A3	F3	F3, F4
					F2, F3

MGD01 Open downs



Area of land type in region: 34%
Median rainfall (region): 233 – 494 mm
Average rainfall (region): 253 – 533 mm
Area of land type with FPC: 3%
Median FPC: 10%
Median TBA: 4 m²/ha



Queensland
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