

# Gilgaied stony country



## General description

Flat to gently undulating plains, low hills and scarp slopes supporting open seasonal forbland (often saltbush or copperburr) on desert loam soils with dense iron-stone or gidgee stone cover. Barley Mitchell and other perennial grasses confined to depressions, gilgais and drainage lines. Developing sand dunes often present as circular patches of very shallow sand deposits.

## Landform

Flat to gently undulating plains, low hills and scarp slopes.

## Woody vegetation

Mimosa bush, Georgina gidgee in drainage lines or run-on areas.

## Expected pasture composition

\* Denotes non-native "Expected Pasture Composition" species.

### Preferred

Barley Mitchell grass in gilgais, buffel grass\* (naturalised) on shallow sand deposits.

### Intermediate

Lovegrasses, five-minute grass, knottybutt grass, katoora, bottlewasher grasses.

### Non-preferred

Feathertop wiregrass.

### Annual grasses

Kerosene grass (non-preferred).

### Common forbs

Desert rice-flower (pimelea), swamp pimelea, pigweed, pink mulla-mulla, silky copperburr, sida, bladder saltbush, copperburrs, gidgee burrs, red spinach, soda bush, potato bush, tarvine, parakeelya.

## Suitable sown pasture

Not suitable for sown pastures.

## Introduced weeds

None

## Soil

Predominately deep desert loams with dense ironstone / silcrete / lateritic gravel cover. Very weak gilgais may form. Surface crusting clays overlying soft powdered clays. Minor red, non-cracking clays present.

### Description

**Surface:** Abundant silcrete cover, **Surface texture:** fine sandy loam to clay loam and soft powdery clay, **Subsoil texture:** medium clay

### Features

Mantled pediments, fresh rock and deeply weathered rock and clay plains.

Water availability  
 Rooting depth  
 Infiltration  
 Fertility  
 Salinity  
 Sodicity  
 pH

Low to very low increasing to moderate within gilgais.  
 Shallow, limited by strong sodicity increasing to moderate within gilgais.  
 Moderate initially on a dry soil profile, slowing to low levels after 10 mm of rain as topsoil is saturated. High run-off following 10 mm of rain. Estimates based on low to moderate intensity storm rain. Run-off contributes to total water availability in gilgais and run-on areas which comprise about 5–10% of the land type.  
 Low, increasing to moderate within gilgais and run-on areas.  
 Crusted soils high in salinity throughout whilst non-crusted soils low salinity at the surface increasing to high at depth.  
 Strongly sodic throughout.  
 Slightly acid sandy to clay loam overlying neutral to alkaline medium clay soil.

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

| Based on fully watered area for 1AE = 450 kg animal consuming 8kg DM/day |   |  |   |                 |
|--|---|--|---|-----------------|
| Median annual rainfall 151 – 233 mm                                      |   |  |   |                 |
| Pasture type   | Median tree cover<br>(TBA m <sup>2</sup> /ha<br>(FPC %) | Median annual pasture growth<br>(DM kg/ha) | Safe annual utilisation pasture growth<br>(%) | LTCC<br>(ha/AE) |
| Native species   | 0 TBA/FPC   | 100 - 370                                  | 15%   | 53 - 195        |
|  | 2 TBA<br>5 FPC  | 30 - 180                                   | 15%   | 108 – 649       |

**Enterprise**

Breeding and seasonal growing out of weaners.

**Land use and management recommendations**

- Suitable for seasonal grazing of native pastures.
- Rotational wet season spelling to maintain perennial pasture composition.
- Avoid disturbing stone cover to minimise erosion risk.

**Land use limitations**

- Low productivity overall; limited to barley Mitchell grass and annual pastures in gilgais and drainage lines.
- Pasture availability is strongly seasonal, limited perennial carryover.
- Areas of highly dispersive clays susceptible to sheet and gully erosion and scalding if stone cover is disturbed.
- Responds quickly to rainfall, tending towards forbs in winter and grasses in summer.

**Conservation features and related management**

- Some localised sheet erosion.
- Some Georgina gidgee dieback in areas.
- Habitat for threatened fauna including kowari.

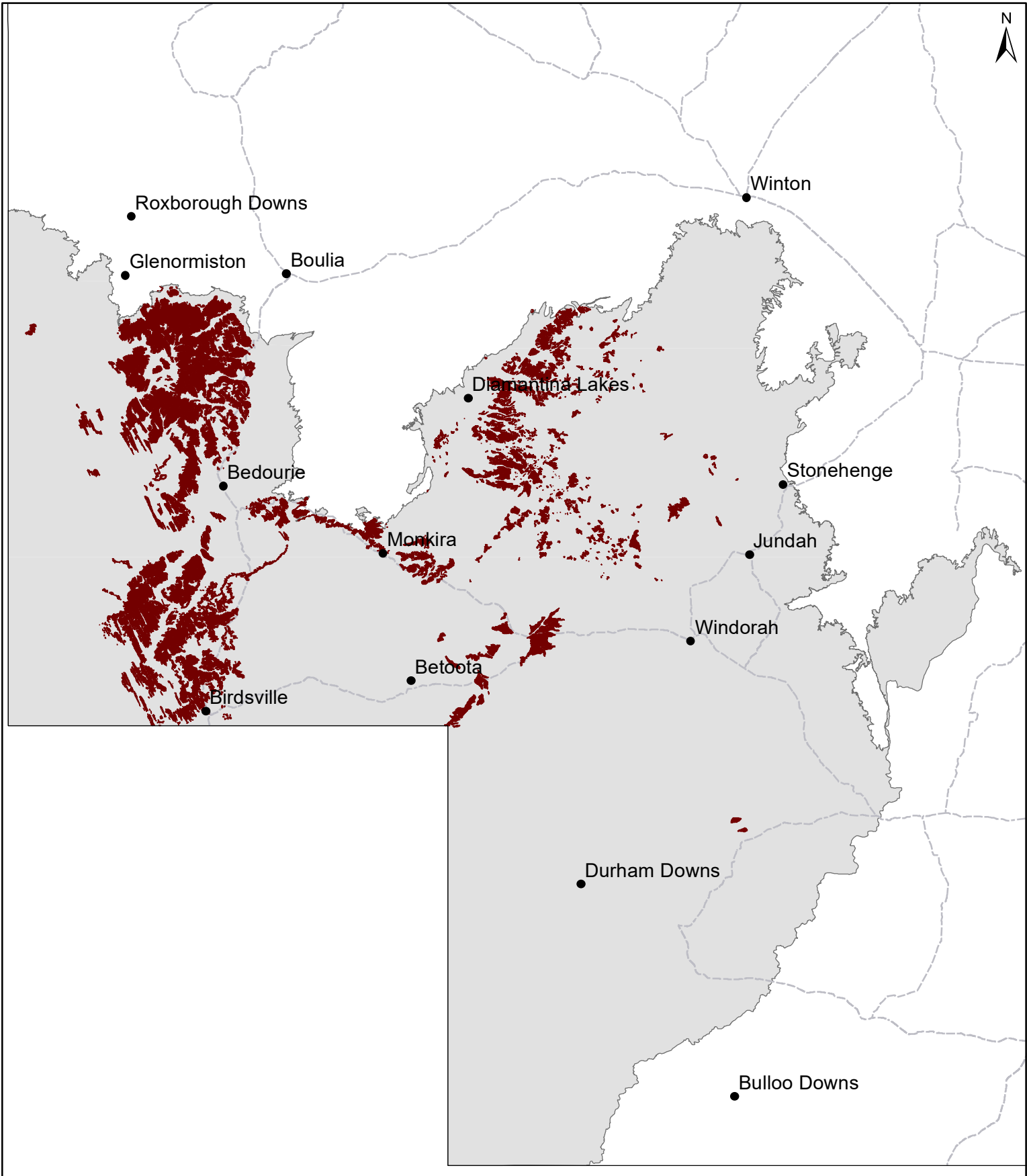
**Regional Ecosystems**

5.7.10x1, 5.7.8x1, 5.9.1x1, 5.9.4x2, 5.9.5, 5.9.5x1, 5.9.5x2.

**WARLUS Part Land systems**

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Area of land type in region: 6%  
Median rainfall (region): 151 – 390 mm  
Average rainfall (region): 187 – 429 mm  
Area of land type with FPC: 4%  
Median FPC: 5%  
Median TBA: 2 m<sup>2</sup>/ha



**Queensland  
Government**