

# KEG Keynes Gap Land System

Very rocky slopes east of Eden Valley

**Area:** 12.5 km<sup>2</sup>

**Annual rainfall:** 495 – 590 mm average

**Geology:** The rocks underlying the system are coarse grained granitic types on the west, and metasandstones of the Kanmantoo Group on the east.

**Topography:** The landscape is dominated by spectacular rocky outcrop, particularly on the western side on the granites. The rocky reefs are aligned approximately north - south. The relief in these areas is due more to the outcrop than the general lie of the land. On the eastern side, the landscape is a north - south ridge. The outcrop is less pronounced, but nevertheless extensive. The land is strongly dissected by east flowing water courses which have cut through the western outcrop and the eastern ridge creating steep slopes.

**Elevation:** 270 - 440 m

**Relief:** 10 - 80 m

**Soils:** Most soils are shallow, coarse textured and stony. Deep sandy soils occur on locally derived outwash sediments.

Main soil

**L1** Shallow stony loamy sand over rock

Minor soil

**M1** Gradational loamy sand over alluvium

**Main features:** The Keynes Gap Land System is characterized by extensive and in places spectacular rocky outcrops which, together with the shallow soils and often steep slopes, render practically all of the land suitable only for rough grazing. Exceptions are a small creek flat in the north, and some semi arable slopes in the west.

**Soil Landscape Unit summary:** 7 Soil Landscape Units (SLUs) mapped in the Keynes Gap Land System:

SLU	% of area	Main features #
Ags Agt Agu Agx	5.3 5.8 15.3 5.4	Very rocky land formed on granitic rocks. <b>Ags</b> Lower slopes of 5-10% with about 50% rocky outcrop. <b>Agt</b> Slopes of 4-12% with 20-50% rock outcrop. <b>Agu</b> Dissected rises to 30 m high with slopes of 15-30% and about 50% outcrop. <b>Agx</b> Very steep rocky crags with more than 80% outcrop. Main soil: <u>shallow stony loamy sand - L1 (D)</u> . This land is exceptionally rocky. <b>Ags</b> has up to 50% arable slopes between the outcrops, but these are very limited overall. Elsewhere, the land is capable of rough grazing only, and substantial areas are non traversable.
Aiu Aiv	49.0 17.2	Very rocky dissected ridge formed on Kanmantoo metasandstones. <b>Aiu</b> Low hills to 70 m high with slopes of 10-30%. There is about 50% rock outcrop. <b>Aiv</b> Dissection slopes up to 80 m high with slopes of 25-50% and more than 50% rocky outcrop. Main soil: <u>shallow stony loamy sand - L1 (D)</u> . Most of the land is suitable for rough grazing only due to the moderately steep slopes, extensive rock and shallow soils. Aiv in particular



		suffers from lack of accessibility.
LCE	2.0	Creek flats formed on variable locally derived sandy or gritty through to sandy clay alluvium. Water courses are stable. Main soil: <u>gradational loamy sand - M1</u> (D). This one small creek flat contains most of the soils with potential for development. Soils are deep but with moderately low fertility, and are susceptible to compaction and erosion.

# PROPORTION codes assigned to soils within Soil Landscape Units (SLU):

- (D) Dominant in extent (>90% of SLU)
- (V) Very extensive in extent (60–90% of SLU)
- (E) Extensive in extent (30–60% of SLU)
- (C) Common in extent (20–30% of SLU)
- (L) Limited in extent (10–20% of SLU)
- (M) Minor in extent (<10% of SLU)

### Detailed soil profile descriptions:

- L1** Shallow stony loamy sand (Lithic, Leptic Rudosol)  
Thin to thick reddish brown massive loamy sand to sandy loam with abundant rock fragments, overlying hard metamorphosed sandstone or granite.
- M1** Gradational loamy sand (Eutrophic, Red / Brown Kandosol)  
Thick brown loamy sand to sandy loam grading to a red or brown massive light sandy clay loam to sandy clay loam, continuing below 100 cm.

**Further information:** [DEWNR Soil and Land Program](#)

