

# MJY Mount Jay Land System

- Area:** 84.0 km<sup>2</sup>
- Landscape:** Steep to very steep hills with scree slopes on siltstones and quartzites near Mt. Jay, north-west of Wilmington.
- Annual rainfall:** 345 – 580 mm average
- Geology:** Interbedded siltstones and quartzites of the Willochra Formation
- Topography:** Steep to very steep hills often with resistant quartzite ridges. Valley floors are very narrow. Hills are rolling with relatively broad crests. Quartzite layers often form resistant ridges on upper slopes.
- Elevation:** Mostly rising to over 750 m asl with the highest point 776 m asl
- Relief:** Very steep hills with relief to 250 m
- Soils:** Shallow stony soils predominate. Shallow red loams over siltstone, shallow sands over quartzite and shallow calcareous loams are typical.
- Main soils:
- L1**      **L1a**    Shallow stony loam (on siltstone)
- L1b**      Shallow stony loamy sand to sandy loam (on quartzite)
- RR**      Rock outcrop
- Minor soils:
- A2**      Shallow calcareous loam (on calc-siltstone)
- C2**      Gradational loam on rock (siltstone)
- D7**      Loam over poorly structured clay on rock
- Summary:** The Mount Jay Land System consists of steep to very steep hills with scree slopes on siltstones and quartzites. Soils are shallow and stony. Land use is restricted to light grazing or conservation.



**Soil Landscape Unit summary:** 6 Soil landscape Units (SLUs) are mapped in the Mount Jay Land System

SLU	% of area	Component	Main soils	Prop#	Notes
AAB	2.5	Rolling rises	L1	D	<p>Rises and hills with shallow rocky calcareous soils formed on calc-siltstones.</p> <p><b>AAB</b> Rolling rises. Relief: less than 30m, slopes_ 10-30%.  <b>AAC</b> Rolling hills. Relief is 90-300m, slopes are 10-30%.  <b>AAE</b> Steep hills with much rock outcrop. Relief is more than 90m, slopes are 30-60%.            Main soils: <u>shallow stony loam - L1a</u> and <u>gradational loam on rock - C2</u>, with <u>loam over poorly structured clay on rock - D7</u> and <u>shallow calcareous loam - A2</u>.</p> <p>Rises with linear rocky quartzite outcrops and shallow rocky soils on interbedded fine-grained rocks.</p> <p><b>ABE</b> Steep hills. Relief is 90-300m, slopes are 30-50%.  <b>ABF</b> Very steep hills. Relief: more than 90m, slopes: &gt; 60%.  <b>ABI</b> Rolling low hills with eroded watercourses. Relief is 30-90m, slopes are 3-10%.            Main soils: <u>shallow stony loamy sand - L1b</u> and <u>rock outcrop - RR</u>, with <u>shallow calcareous loam - A2</u>.</p>
AAC	39.0	Rolling low hills	L1C2	D	
AAE	1.8	Steep hills	L1	D	
ABE	5.1	Steep hills	L1RR	D	
ABF	44.2	Very steep hills	L1RR	D	
ABI	7.4	Rolling low hills	L1RR	D	

# PROPORTION codes assigned to Soil Landscape Unit (SLU) components:

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

### Detailed soil profile descriptions:

- A2** Shallow calcareous loam (Paralithic, Hypercalcic / Supracalcic Calcarosol)  
 Calcareous stony loam grading to soft or rubbly carbonate over weathering dolomite or calc-siltstone within 50 cm.
- C2** Gradational loam on rock (Calcic, Red Dermosol)  
 Stony loam grading to a well structured red clay, calcareous at base forming in weathering siltstone between 50 and 100 cm.
- D7** Loam over poorly structured red clay on rock (Calcic / Hypercalcic, Red Sodosol)  
 Medium thickness sandy loam to clay loam abruptly overlying a coarsely structured, often dispersive red clay, calcareous with depth, grading to highly weathered quartzite or quartzitic shale.
- L1a** Shallow stony loam (Lithic, Leptic Rudosol OR Calcareous, Lithic, Leptic Tenosol)  
 Shallow stony loam to clay loam overlying fine grained basement rock with or without soft carbonate in fissures.
- L1b** Shallow stony loamy sand to sandy loam (Lithic, Leptic Rudosol OR Calcareous, Lithic, Leptic Tenosol)  
 Shallow stony loamy sand to sandy loam overlying quartzite with or without soft carbonate in fissures.
- RR** Rock outcrop

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

