

CAC Cacuppa Land System

Area: 4.4 km²

Landscape: Complex of undulating rocky low hills with extensive outcrop, and jumbled sand dunes. Hiltaba Granites underlie the landscape and outcrop as rounded tors. Siliceous Moornaba Sands have been blown across the granite and have been reworked into moderate to high jumbled dunes and sand spreads. Some windblown calcareous Woorinen deposits underlie the sands in swales.

Annual rainfall: 310 – 315 mm average

Main soils: Lowan - H3 (Basic, Arenic, Bleached-Orthic Tenosol)
Thick bleached sand with a thin organically darkened surface layer, grading to a yellowish sand (often with darker lamellae), continuing below 150 cm.
Skeletal soil - L1 (Lithic, Leptic Tenosol / Rudosol)
Variable gravelly loamy sand to sandy clay loam over basement rock at depths usually less than 50 cm.
Rocky outcrop - RR Rock outcrop

Minor soils: Wiabuna (sandy) - A4 (Regolithic, Lithocalcic / Supracalcic Calcarosol)
Calcareous loamy sand to sandy loam grading to carbonate rubble (Class III B or C).

Summary: The landscape is dominated by deep sandy soils with extensive areas of outcropping rock and associated shallow coarse textured soils. This land has very low productive potential due to a combination of low fertility and /or very shallow soils, wind erosion potential and low rainfall. It is all under native vegetation.

Soil Landscape Unit summary: 2 Soil Landscape Units (SLUs) mapped in the Cacuppa Land System:

SLU	% of area	Component	Main soils	Prop#	Notes
A-g	6.3	Rock tors	Rocky outcrop	E	Shallow soils and rocky outcrop, or infertile wind erosion prone sand - non arable.
			Skeletal	E	
		Sand spreads	Lowan	L	
OzE	93.7	High to moderate jumbled sand dunes	Lowan	E	Mainly sandy soils with moderate to very high wind erosion potential and low fertility. Dunes: Very low fertility and water repellence. Wind erosion potential varies from moderate (low sand dunes), to very high (high sand dunes). Rocky rises: Bare rock or shallow stony soils with very low water holding capacity and low fertility. Swales: Sandy Wiabuna and Lowan, with some Heggaton soils. Low fertility, limited waterholding capacity, and some water repellence (Lowan & Heggaton). Moderate wind erosion potential.
		Rocky rises	Rocky outcrop	C	
		Rocky rises	Skeletal	L	
		Swales	Lowan	C	
		Swales	Sandy Wiabuna	L	

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)

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

