

PTB Peterby Land System

(Equivalent to EYB5-Pinkawillinie Land Type of Rangelands)

Area: 1.0 km²

Landscape: Dune-swale country underlain by clayey sediments or weathering products (Blanchetown Clay equivalent), which in turn are covered by highly calcareous windblown silty sands of the Woorinen Formation. More recent Molineaux Sands have blown across the landscape and have been reworked into low to moderate parallel sandhills covering 40 - 50% of the land surface. The major part of this land system extends southeastwards into the pastoral country.

Annual rainfall: 275 – 300 mm average

Main soils:

Wiabuna - A5 (Regolithic, Hypercalcic Calcarosol)
Calcareous loam becoming more clayey and calcareous with depth, grading to a very highly calcareous clay (Class I carbonate) over Tertiary clay.

Moornaba - H2 (Calcareous, Arenic, Brown-Orthic / Red-Orthic Tenosol)
Very thick red to brown sand, becoming weakly calcareous and often grading to a red or orange clayey sand with depth, overlying variable carbonate (fine to rubbly, occasionally sheet).

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

Moornaba (shallow) - G1 (Calcic, Red Chromosol / Kandosol)
Thick sand to loamy sand over orange clayey sand to sandy clay.

Summary: The swales are dominated by calcareous sandy loam to sandy soils which have moderate to low fertility and generally elevated levels of subsoil boron and other salts. They have slight to moderate wind erosion potential. The sandhills are infertile and have moderate to moderately high wind erosion potential.

Soil Landscape Unit summary: 1 Soil Landscape Unit (SLU) mapped in Peterby Land System:

SLU	% of area	Component	Main soils	Prop#	Notes
UiI	100	Swales	Wiabuna	E	Moderate to low fertility sandy loams to sands in swales. Infertile sandhills with moderate wind erosion potential.
		Swales	Sandy Wiabuna	C	
		Moderate sandhills	Moornaba	E	
		Sandhill lower slopes	Moornaba (sh)	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](#)

