

# PPN Peter Pan Land System

- Area:** 8.2 km<sup>2</sup>
- Landscape:** Very gently undulating plains and rises formed on Tertiary clays (Blanchetown Clay equivalent), capped by highly calcareous windblown silty sands (Woorinen Formation).
- Annual rainfall:** 275 - 300 mm average
- Main soils:**
- Wiabuna (rubbly) - A4a (Regolithic, Lithocalcic / Supracalcic Calcarosol)  
Calcareous sandy loam to sandy clay loam grading to carbonate rubble.
  - Wiabuna - A6a (Regolithic, Hypercalcic Calcarosol)  
Calcareous sandy loam to sandy clay loam becoming more clayey and calcareous with depth, grading to a very highly calcareous clay (Class I carbonate) over Tertiary clay.
  - Kimba - D3 (Hypercalcic, Red Sodosol)  
Medium thickness hard loamy sand to loam overlying a strongly subangular blocky red clay, highly calcareous (Class I carbonate) from about 30 cm, grading to Blanchetown Clay equivalent.
- Minor soils:**
- Moornaba - H2 (Calcareous, Arenic, Yellow-Orthic Tenosol)  
Very thick red to brown sand, becoming weakly calcareous and often grading to an orange clayey sand with depth, overlying variable carbonate (fine to rubbly, occasionally sheet).
  - Magnesia - A6b/A4b (Epihypersodic, Supracalcic/Hypercalcic, Regolithic Calcarosol)  
Highly calcareous sandy loam to clay loam, becoming more clayey and often rubbly with depth. Saline throughout.
- Summary:** Although most of the soils are relatively deep and fertile, rainfall is too low and unreliable for cropping. The gentle slopes have some potential for water erosion, and the lighter soils are prone to wind erosion. The underlying clayey sediments restrict leaching, so accumulation of boron at toxic concentrations at relatively shallow depth is common. Lack of leaching capacity has similarly caused the concentration of salts in some soils to the point where scattered magnesia patches have formed.

**Soil Landscape Unit summary:** 2 Soil Landscape Units (SLUs) mapped in the Peter Pan Land System:

SLU	% of area	Component	Main soils	Prop#	Notes
HEB	68.9	Very gentle slopes	Kimba	E	Mixture of sandy loam over clay soils and calcareous sandy loams - moderately deep and relatively fertile. Minor wind erosion potential, minor to moderate water erosion potential. Boron toxicity common. Magnesia patches affect < 2% of land.
			Wiabuna	E	
			Magnesia	M	
		Sand spreads	Moornaba	M	
SQA	31.1	Gently undulating flats	Wiabuna (rubbly)	V	Calcareous sandy loams have marginal fertility, restricted waterholding capacity and slight to moderate wind erosion potential. Sand spreads are low in fertility, and have moderate wind erosion potential. Magnesia patches affect < 2% of land.
			Magnesia	M	
		Sand spreads	Moornaba	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](#)

