LCV Lipson Cove Land System

Area: 40.7 km^2

Landscape: Dissected low hills adjacent to the east coast of Lower Eyre Peninsula. Underlying the landscape are gneisses of the Flinders Group. Most soils are formed directly on these rocks. There are minor lower slope and valley floor accumulations of outwash alluvial sediments, with isolated dunes on the coast.

Annual rainfall: 320 – 370 mm average

Main soils:

Red brown earth - **D1** (Hypercalcic, Red Chromosol)
Thin to medium thickness sandy loam over a red well structured clay (may occur as pockets in rock) over basement rock with abundant fine carbonate in fissures.

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.

Minor soils:

Alluvial soil - **M4** (Eutrophic, Red Kandosol)
Medium to thick sandy loam grading to a red sandy clay loam to clay, becoming sandier with depth.

Semaphore - **H1/H3** (Shelly / Arenic Rudosol)
Very thick sand comprising mixed shell and quartz grains.

Russell - **B1b** (Supravescent, Petrocalcic, Lithocalcic Calcarosol)
Medium thickness highly calcareous loamy sand to sandy loam containing increasing amounts of rubble with depth, over sheet calcrete at less than 50 cm

Summary: Gentle to moderate slopes with red sandy loam soils. About a third of the land is non arable due to moderately steep slopes and rock outcrop. Most of the rest is fully arable, although shallow soils (restricted waterholding capacity), occasional rocky outcrops and potential for water erosion affect productivity. On lower slopes there are sporadic areas of salt affected land, and along the coast are occasional fragile dunes.

Soil Landscape Unit summary: 8 Soil Landscape Units (SLUs) mapped in the Lipson Cove Land System:

SLU	% of area	Component	Main soils	Prop#	Notes
AKC	27.2	Moderately steep rocky slopes	Skeletal	D	Shallow soils, rocky outcrops and moderately steep slopes - non arable. Light grazing country.
			Rock outcrop	L	
DHC	24.1	Undulating slopes with up to 10% rocky outcrop	RBE	E	Arable slopes formed on basement rock. Main soils are moderately shallow and moderately fertile. Restricted water holding capacity and potential for water erosion are the main limitations. Skeletal soils have severe water holding constraints and are associated with rocky outcrops. They are semi arable.
			Skeletal	E	
			Rock outcrop	M	
DIC	27.0	Undulating slopes	RBE	V	
			Skeletal	L	
ETD	16.1	Moderately inclined stony slopes	Skeletal	E	Slopes on basement rock which outcrops over more than 10% of the land. Semi arable due to moderate slopes (erosion potential), shallow soil and rock outcrop.
			RBE	E	
			Rock outcrop	M	
KXB	1.1	Very gentle lower slopes	Alluvial	D	Alluvial deposition areas with deep moderately fertile soils (although some are salt affected). Where non saline, cropping potential is high.
KXE	1.7	Creek flats with minor saline seepages	Alluvial	D	
			Saline soil	M	
WFD	1.9	Moderate coastal dunes	Semaphore	D	Coastal dunes with very low fertility and extreme wind erosion potential. Non agricultural - conservation value.
WY-	0.9	Moderate coastal dunes superimposed on frontal slopes	Semaphore	V	
			Russell	E	

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

- 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)

Further information: DEWNR Soil and Land Program