## **EUV** Eurovale Land System

**Area:** 348.2 km<sup>2</sup>

**Landscape:** Gently sloping calcareous plain with broad drainage channels transgressing low

angle, calcareous pediment and fan deposits.

**Annual rainfall:** 215 – 295 mm average

**Geology:** Calcreted Pleistocene gravelly alluvium is widespread with younger alluvial deposits in

modern creek lines and floodplains.

**Soils:** Most soils are deep over outwash sediments. Gradational loamy to clay loamy

calcareous soils are most common, with clay loamy texture contrast soils also

significant.

Main soils

A6 Gradational calcareous clay loam

A4 Deep (rubbly) calcareous loam to sandy loam

**D4** Clay loam to loam over pedaric red clay

Minor soils

**A2** Shallow calcareous loam

A3 Deep moderately calcareous clay loam to loam

**A8** Gypseous calcareous loam

**B2** Shallow calcareous sandy loam on calcrete

C3 Gradational clay loam to loam

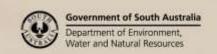
**Summary:** The Eurovale Land System consists of a gently sloping calcareous plain with broad

drainage channels transgressing low angle, calcareous pediment and fan deposits. Clay loam texture contrast soils with friable subsoils occur on the broader drainage lines and flood-out areas, with variable loamy to clay loamy gradational calcareous

soils (some shallow over calcrete) dominate plains and rises.

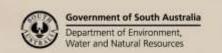
Soil Landscape Unit summary: 27 Soil Landscape Units (SLUs) mapped in the Eurovale Land System:

SLU	% of area	Component	Main soils	Prop#	Notes
EZC	2.0	Rises	A2	٧	Undulating rises formed on limestones and calcareous shale
		Fans	A4A3	С	and siltstones. Slopes are 3-10%, relief is less than 30m.
					Main soils:
					Rises: shallow calcareous loam - A2.
					Fans: deep (rubbly) calcareous loam - A4 and deep
					moderately calcareous loam - A3.
HKp	1.7	Flats	D4	D	Flats formed on deep unconsolidated clayey sediments or
					highly weathered rock. Over 50% of land is scalded. Patches of
					ironstone gravel.
					Main soil: <u>clay loam over pedaric red clay</u> - <b>D4</b> .
IJU	10.3	Flats	A6A4	V	Flats formed on unconsolidated clay sediments (Blanchetown
		Stony flats	B2A4	L	Clay / highly weathered rock). Sediments are calcrete capped
					in places.
					Main soils:
					Flats: gradational calcareous clay loam - A6 and deep
					<u>(rubbly) calcareous sandy loam</u> - <b>A4</b> , with <u>gradational sandy</u>
					<u>clay loam</u> - <b>C3</b> .
					Stony flats: shallow calcareous sandy loam on calcrete - B2
					and <u>deep (rubbly) calcareous sandy loam</u> - <b>A4</b> .





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IVC	0.6	Slopes	A6A4	V	Sloping plains and flats with soils formed on unconsolidated
		Flats	D4	С	clay sediments (Blanchetown Clay or highly weathered rock).
		Stony flats	B2A4	М	IVC Undulating slopes, flats and stony plains. Relief is less than
IVV	12.1	Rises	A6A4	V	30m, slopes are 3-10%.
		Flats	D4	С	IVV Gently undulating slopes, flats and stony rises. Moderately
		Stony flats	B2A4	M	saline and minor scalding (up to 5%). Slopes: 1-3%, relief: < 30m.
					Main soils:
					Slopes and rises: gradational calcareous clay loam - A6 and
					deep (rubbly) calcareous loam - A4, with shallow calcareous
					loam - A2.
					Flats: sandy clay loam over pedaric red clay - D4
					Stony flats and rises: shallow calcareous sandy loam on
IYB	49.8	Disos	Λ <i>ζ</i> Λ <i>Λ</i>	٧	<u>calcrete</u> - <b>B2</b> and <u>deep (rubbly) calcareous sandy loam</u> - <b>A4</b> .  Rises and flats formed on unconsolidated clay sediments
110	47.0	Rises	A6A4 D4	C	· ·
		Flats			(Blanchetown Clay or highly weathered rock).  Main soils:
		Stony flats	B2A4	L	Rises: gradational calcareous clay loam - A6 and deep
					(rubbly) calcareous sandy loam - A4.
					Flats: sandy clay loam over pedaric red clay - <b>D4</b>
					Stony flats: shallow calcareous sandy loam on calcrete - B2
					and deep (rubbly) calcareous sandy loam - A4.
JLE	0.3	Depression	D4	D	Plains formed on fine grained outwash.
JLL	0.5	s	D4		JLE Depressions
JLU	1.1	Flats	D4	V	JLU Plains, 10-50% scalded. Mod. Saline subsoils. 10-20% rises.
JLO	1.1	Rises	A6A4	ľ	JLp Flats, with 10-20% rises. 10-50% of flats scalded. Minor gully
JLp	2.3	Flats	D4	V	erosion.
JLp	2.3	Rises	A6A4	C	Main soils:
		KISES	A0A4	C	Flats and depressions: sandy clay loam over pedaric red clay -
					<b>D4</b> with gradational calcareous clay loam - <b>A6</b> and
					gradational sandy clay loam - C3.
					Rises: gradational calcareous clay loam - A6 and deep
					(rubbly) calcareous sandy loam - A4.
JPA	0.2	Flats	D4	D	Pediments and plains formed on fine grained outwash.
JPE	0.1	Depression	D4	D	JPA Flats.
		S			JPE Drainage depressions.
JPY	1.4	Creek flats	D4	D	JPY Creek flats, 10-50% scalded.
Jpo	3.7	Flats	D4A6	D	JPo Drainage depressions. 10-50% scalded and 10-20% gullied
JPoo	0.3	Creek flats	D4	D	(10-20%).
JPp	1.4	Flats	D4A6	D	JPoo Creek flats. More than 20% gullied, 10-50% scalded.
JPq	0.3	Gentle	D4A6	D	JPp Plains. More than 50% scalded.
1		slopes			JPq Gently sloping fans. More than 50% scalded. Slopes: 1-3%.
JPy	0.5	Creek flats	D4	D	JPy Creek flats. Moderately gullied, severely scalded.
JPyy	2.7	Creek flats	D4	D	JPyy Drainage depressions. More than 20% gullied and more
					than 50% scalded.
					Main soils: sandy clay loam over pedaric red clay - <b>D4</b> and
					gradational calcareous clay loam - A6, with gradational sandy
		_			<u>clay loam</u> - C3.
KFB	0.1	Gently	A6A4	D	Pediments and plains formed on fine grained outwash.
		undulating			KFB Gently sloping plains, 1-3% slopes.
	_	plain		<u> </u>	KFE Depressions.
KFE	0.3	Depression	A6A4	D	<b>KFU</b> Gently undulating plains with 20-30% flats. Plains 10-50%
		S		1,,	scalded, flats more than 50% scalded.
KFU	3.6	Gently	A6A4	V	Main soils:
		undulating			Slopes: gradational calcareous clay loam - A6 and deep
		plain			(rubbly) calcareous sandy loam - A4, with deep moderately
		Flats	D4	С	calcareous sandy clay loam - A3 and gradational sandy clay
					loam - C3.
					Flats: sandy clay loam over pedaric red clay - <b>D4</b> with
					gradational calcareous clay loam - A6 and gradational sandy
	i	i	i	Ì	<u>clay loam</u> - C3.
VV	1.0	Contin	A / A 4	17	
KV B	1.3	Gentle slopes	A6A4	٧	Pediments and plains formed on calcareous outwash sediments derived from basement rock. 10-20% stony rises. Soils





		Stony rises	B2A4	L	are moderately saline.
KVp	0.7	Flats	A6A4	D	KVB Gently sloping plains with stony rises. Slopes are 1-3%. KVp Flats. More than 50% scalded. Main soils: Slopes and flats: gradational calcareous clay loam - A6 and deep (rubbly) calcareous sandy loam - A4, with gradational sandy clay loam - C3. Stony rises: shallow calcareous sandy loam on calcrete - B2 and deep (rubbly) calcareous sandy loam - A4.
KgB	1.9	Gentle slopes	A4A6	D	Gentle slopes and ridges. <b>KgB</b> Gently undulating pediment slopes of 1-3%.
KgD	<0.1	Low ridges	A4A6	D	KgD Low ridges with slopes of 3-10%.  Main soils: deep (rubbly) calcareous loam - A4 and gradational calcareous clay loam - A6, with gradational sandy clay loam - C3 and shallow calcareous sandy loam on calcrete - B2.
ZM-	0.7	Lunettes	A8	D	Low jumbled gypsum hummocks, 10-50%. Soils are highly saline. Main soil: gypseous calcareous loam - <b>A8</b> .
ZR-	0.6	Lagoon	A3	D	Dry lagoon or lake bed, saline with samphire.  Main soil: deep moderately calcareous clay loam - A3.

# 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)

## Detailed soil profile descriptions:

- A2 <u>Shallow calcareous loam (Paralithic, Hypercalcic / Lithocalcic Calcarosol)</u>
  Calcareous stony loam grading to soft or rubbly carbonate over weathering dolomite or calcsiltstone within 50 cm.
- A3 <u>Deep moderately calcareous clay loam to loam (Regolithic, Calcic Calcarosol)</u>
  Calcareous loam to clay loam grading to a loamy to clayey subsoil without a significant carbonate accumulation in the subsoil, grading to medium to fine grained alluvium.
- A4 <u>Deep (rubbly) calcareous loam to sandy loam (Regolithic, Hypercalcic / Lithocalcic Calcarosol)</u>
  Calcareous loam to sandy loam grading to a very highly calcareous sandy clay loam to light clay with variable rubble, continuing below 120 cm.
- A6 <u>Gradational calcareous clay loam (Pedal, Hypercalcic / Supracalcic Calcarosol)</u>
  Calcareous clay loam grading to a well structured very highly calcareous (sometimes rubbly) clay, over a red clayey substrate within 120 cm.
- A8 Gypseous calcareous loam (Gypsic Calcarosol)

  Calcareous loam grading to a highly calcareous clay loam to light clay over highly gypseous light clay at between 50 and 100 cm.
- Shallow calcareous sandy loam on calcrete (Petrocalcic, Calcic / Lithocalcic Calcarosol)
  Stony calcareous sandy loam, often with a very highly calcareous more clayey subsoil, over sheet calcrete within 50 cm. This grades to rubbly carbonate over weathering basement rock within 150 cm.
- C3 <u>Gradational sandy clay loam (Calcic / Hypercalcic Red Dermosol)</u>
  Loam to clay loam grading to a friable red clay with abundant soft Class I carbonate within 50 cm, overlying alluvium within 100 cm.
- Clay loam to loam over red friable clay (Calcic, Pedaric, Red Sodosol)
  Thin to medium thickness clay loam to loam over a finely structured friable red clay, calcareous from about 50 cm, grading to fine or medium grained alluvium.

Further information: <u>DEWNR Soil and Land Program</u>

