## TRL Tarlina Land System

**Area:** 245.6 km<sup>2</sup>

Landscape: Gently undulating rises underlain by basement rocks covered by Tertiary sediments. The

basement rocks protrude through the Tertiary cover in the south east. These areas are marked by rocky outcrops (less than 10% of the area), but elsewhere soils are formed in the

Tertiary material, or alluvium derived from it.

**Annual rainfall:** 325 - 400 mm average

Main soils: Red brown earth (clayey) - D2 (Hypercalcic, Red Chromosol / Dermosol)

Medium thickness friable clay loam with a paler coloured A2 layer, over a well structured red clay, highly calcareous from about 30 cm grading to clayey alluvium or Tertiary material.

<u>Butler</u> - **F2** (<u>Hypercalcic</u>, <u>Brown Sodosol</u>)

Thin to medium thickness hard loamy sand to sandy loam over a brown mottled clay with strong columnar structure, highly calcareous from about 20 cm, grading to alluvial or

Tertiary clays.

Red brown earth (sandy) - D3 (Calcic / Eutrophic, Red Sodosol)

Medium to thick hard sandy loam with a massive sandy clay loam A2 layer, over a weakly

prismatic red clay grading to alluvial sediments or deeply weathered granite.

Wiabuna (rubbly) - **A5** (Regolithic, Lithocalcic / Supracalcic Calcarosol)

Calcareous sandy loam to sandy clay loam grading to carbonate rubble in a sandy clay loam

matrix, over heavy clay at depth.

Minor soils: Saline soil - N2a (Salic / Hypersalic Hydrosol)

Miscellaneous wet saline soil influenced by rising saline groundwater tables.

Marginally saline soil - **N2b** (Sodic, Calcic, Red Dermosol)

Thick sandy loam over a sodic red clay, calcareous with depth, moderately saline

throughout.

<u>Skeletal soil</u> - **L1** (<u>Lithic / Petroferric, Leptic Tenosol / Rudosol</u>)

Variable gravelly loamy sand to sandy clay loam over basement rock or massive ironstone at

depths usually less than 50 cm.

Red brown earth - **D1** (Hypercalcic, Red Chromosol)

Thin to medium thickness sandy loam over a red well structured clay forming in weathering

basement rock with abundant fine carbonate in fissures.

<u>Calcareous loam</u> - **A3** (<u>Hypercalcic / Lithocalcic Calcarosol</u>)

Calcareous loam grading to a highly calcareous clay loam over Class III A, B or C carbonate

merging with alluvial sediments.

<u>Alluvial soil</u> - **M4** <u>(Eutrophic, Red Kandosol)</u>

Medium to thick sandy loam grading to a red sandy clay loam to clay, becoming sandier

with depth.

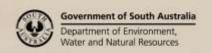
<u>Semaphore</u> - **H1/H3** (Shelly Rudosol)

Very thick sand comprising mixed shell and quartz grains.

**Summary:** Gently sloping land with mainly deep fertile clay loamy soils. Sub dominant soils are poorly

structured sandy loam over clay types with waterlogging, root growth and erosion potential limitations. Saline seepages are widespread although scattered, and affect approximately 5% of the landscape overall. There are some broader saline flats affecting an additional 4%

of the land. Minor areas of rocky outcrop are semi arable.





## Soil Landscape Unit summary: 11 Soil Landscape Units (SLUs) mapped in the Tarlina Land System

% of area	Component	Main soils	Prop#	Features
< 0.1	Low rocky rises	Skeletal / RBE	D	Rises where basement rock protrudes. There is 10-20%
4.3	Gentle rocky	Skeletal / RBE	D	rock outcrop, between which are shallow to
	slopes			moderately deep sandy loam soils (sometimes with
2.3	Moderate rocky	Skeletal / RBE	D	red clayey subsoils). Low water holding capacity, rocky
	slopes			outcrop and water erosion potential restrict cropping.
19.0	Gently undulating	RBE clayey		Gentle slopes with slight water erosion potential and
	slopes with up to 2% saline seepage	Butler	С	sporadic saline seepage. Main soils are deep and
		RBE sandy	L	fertile, but sub dominant soils have structural problems:  RBE clayey: Deep, fertile potentially productive clay loamy soil
		Wiabuna	L	
HHL 66.4	Gently undulating slopes with 2-10%	RBE clayey		
		Butler	С	
	saline seepage	RBE sandy	L	Butler: Sandy loam over poorly structured clay -
		Wiabuna	L	moderately fertile but subject to
				waterlogging and poor root growth
				(dispersive subsoil).
				RBE sandy: Deep moderately fertile sandy loam with
				adequate water holding capacity
				<u>Wiabuna</u> : Calcareous sandy loam, moderately shallow
2.2	Crook flots with we	Cala laam / DDF	_	and moderately fertile.
3.3			ט	Deep fertile soils with high production potential.
		Clayey		
0.0		Alluvial	D	Soils are deep and fertile, but high water tables cause
0.9		Alluviai		waterlogging and salinity - semi arable.
0.1		Semanhore	D	Extreme wind erosion potential - non agricultural land
0.1		Semaphore		Extreme wind crosion potential. Horragineattara land
0.7		Saline soil	D	Non arable, but some potential for establishment of
				salt tolerant pasture and fodder species.
				sant total and published and rodden species.
0.1	•	Julii C Juli		
	<ul><li>&lt;0.1</li><li>4.3</li><li>2.3</li><li>19.0</li></ul>	<ul> <li>Component</li> <li>Low rocky rises</li> <li>Gentle rocky slopes</li> <li>Moderate rocky slopes</li> <li>Gently undulating slopes with up to 2% saline seepage</li> <li>Gently undulating slopes with 2-10% saline seepage</li> <li>Gently undulating slopes with 2-10% saline seepage</li> <li>Marginally saline flats</li> <li>Moderate coastal dunes</li> <li>Saline flats</li> <li>Highly saline flats</li> </ul>	areaComponentMain soils<0.1	Component   Main soils   Prop#

<sup>#</sup> PROPORTION codes assigned to soils within Soil Landscape Units (SLU):

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:** <u>DEWNR Soil and Land Program</u>

