

Soil groups

South Australia has a wide range of geomorphic and climatic environments and consequently a diversity of soils

Soil groups delineate fifteen broad categories encompassing the sixty one [Soils](#) that have been identified across southern South Australia. *Soil groups* are based on significant profile features observed and recorded by soil scientists during the course of the State Land and Soil Mapping Program (1986–2001). Three miscellaneous classes (rock, water, and not applicable) are also recorded. Variation in soils can generally be attributed to factors such as parent material, climate, topography, biological influences and time.

Soil variability in southern South Australia

Soil properties can vary across the landscape in a subtle or dramatic fashion. [Mapping at a regional scale](#) is not able to display this level of variability, however proportions of each *Soil group* (e.g. A, B, etc.; see table below) have been estimated for each map unit.

Soil groups and *Soils (soil type)* are described in the reference book: 'The Soils of Southern South Australia' (Hall et al. 2009, see link overleaf*).

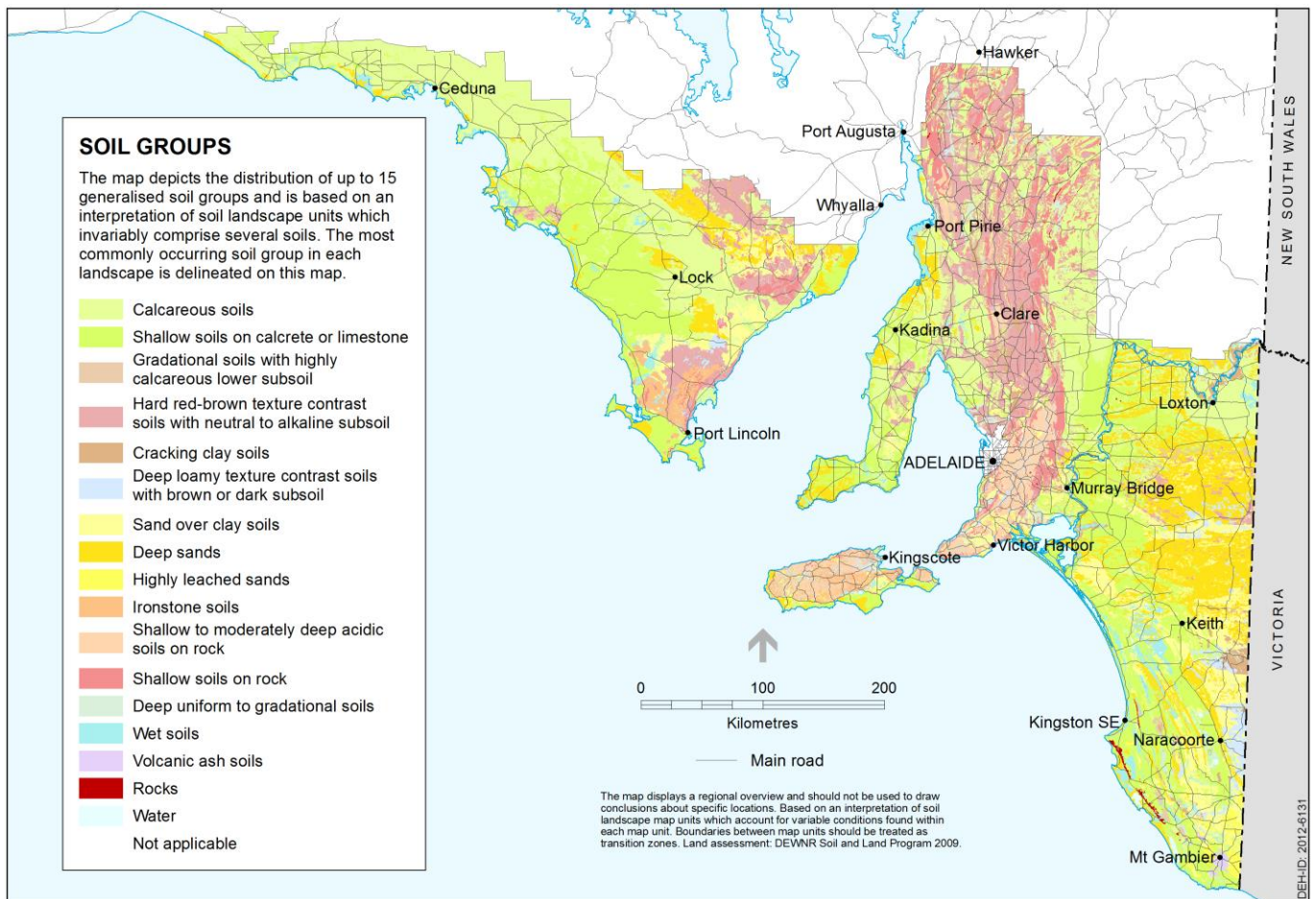


Soil group C: gradational soils with highly calcareous lower subsoil are of considerable agricultural value and include some of the most productive and naturally fertile soils in the state

Area statistics

Soil groups	Area	Cleared land	Class
Calcareous soils	23.23%	23.53%	A
Shallow soils on calcrete or limestone	19.74%	18.09%	B
Gradational soils with highly calcareous lower subsoil	4.47%	5.17%	C
Hard red-brown texture contrast soils with neutral to alkaline subsoil	10.42%	11.44%	D
Cracking clay soils	1.28%	1.50%	E
Deep loamy texture contrast soils with brown or dark subsoil	2.71%	3.45%	F
Sand over clay soils	9.17%	10.97%	G
Deep sands	13.57%	12.01%	H
Highly leached sands	0.81%	1.03%	I
Ironstone soils	1.41%	1.58%	J
Shallow to moderately deep acidic soils on rock	2.29%	2.36%	K
Shallow soils on rock	3.87%	2.31%	L
Deep uniform to gradational soils	1.58%	1.57%	M
Wet soils	2.90%	2.48%	N
Volcanic ash soils	0.10%	0.15%	O
Rock	0.86%	0.44%	R
Water	1.10%	1.24%	W
Not applicable	0.48%	0.69%	X
TOTAL HECTARES	15,765,460	10,439,300	





Displaying data in soil maps

Soil and land attribute maps display a simplified version of underlying data. Mapping classes are based on an interpretation of soil landscape map units which invariably comprise several *Soil groups*.

The most commonly occurring *Soil group* is delineated on the map. (Note that the most common *Soil group* often accounts for less than 50% of a map unit.)

Further information

- View data on [NatureMaps](#) (→ Soils)
- Read the [metadata](#) for this layer
- Read more about [soil attribute mapping](#)
- Contact [Mapland](#)

Download from Enviro Data SA:

- [Statewide map](#) and [spatial dataset](#)
- [Assessing Agricultural Lands](#)
- * Soils of Southern SA book [Part 1](#) and [Part 2](#)



Soil group G: sand over clay, from the northern Murray Plains area



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