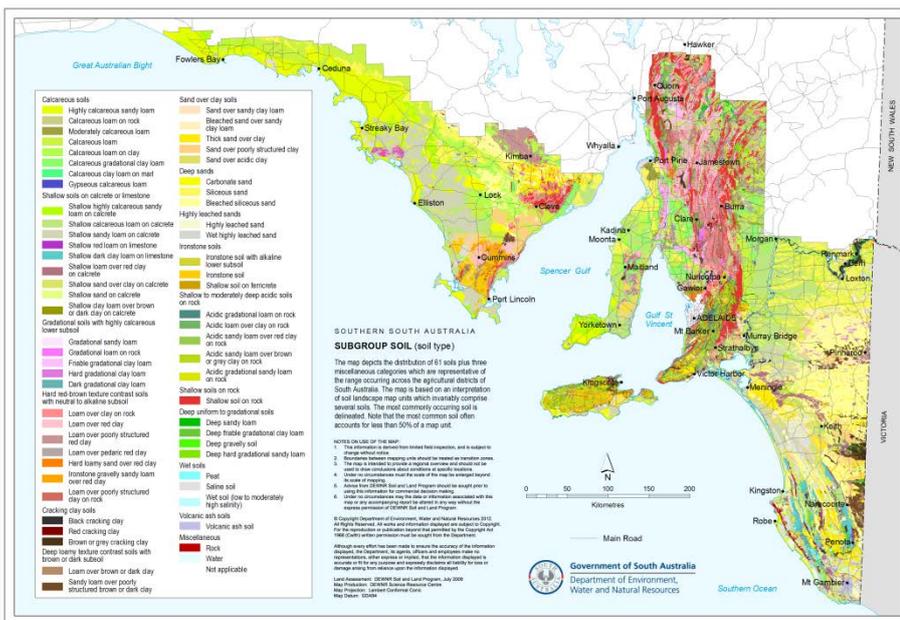
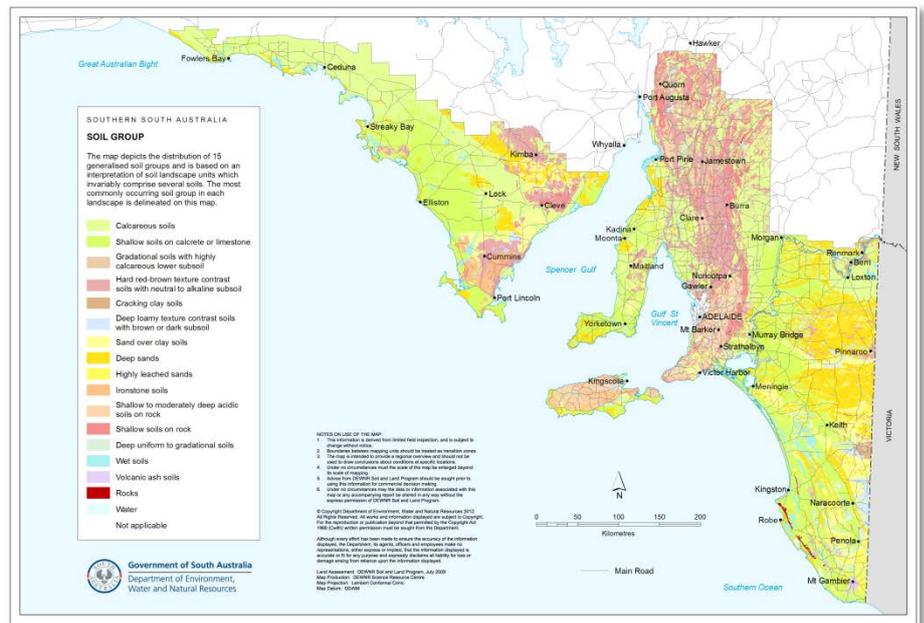


# Soil Groups and Subgroup Soils

A range of land and soil attributes have been mapped across South Australia's agricultural zone (Southern SA) by the DEWNR Soil & Land Program. This includes the conceptual soil type attributes of 'Soil Group' and 'subgroup soil'. Fifteen broad Soil Groups and 61 subgroup soil classes capture the variation found within soil profiles across SA, and highlight features of importance for land use and management decision making in our part of the world.

*"Our soil resources are precious. They not only underpin the sustainability and productivity of our agricultural lands, but have a major influence on the quality of our ground and surface water resources and on the health and diversity of our natural environments".*



Group and subgroup soil classes are described in detail in the reference book: *The Soils of Southern South Australia* (Hall et al. 2009)\*.

Regional maps and other information on soil types, as well as other land and soil attributes, are available on the DVD\* *Regional Land Resource Information for Southern SA* and on CD\* (in GIS format). [\*Refer to our 'Information Products' fact sheet.]

For more information go to [www.environment.sa.gov.au](http://www.environment.sa.gov.au), or contact [Craig.Liddicoat@sa.gov.au](mailto:Craig.Liddicoat@sa.gov.au) or [Jan.Rowland@sa.gov.au](mailto:Jan.Rowland@sa.gov.au)

The example maps shown above are broad overviews of much more detailed mapping and data that is available.



# Soil statistics (for Southern SA)

In the following table, each subgroup soil is listed below its respective Soil Group name (highlighted in orange).

Soil	% Area	Soil	% Area
<b>Calcareous soils (23.4%)</b>		<b>Sand over clay soils (8.9%)</b>	
Highly calcareous sandy loam (A1)	5.2	Sand over sandy clay loam (G1)	0.8
Calcareous loam on rock (A2)	2.1	Bleached sand over sandy clay loam (G2)	1.7
Moderately calcareous loam (A3)	1.0	Thick sand over clay (G3)	3.7
Calcareous loam (A4)	8.7	Sand over poorly structured clay (G4)	2.6
Calcareous loam on clay (A5)	2.5	Sand over acidic clay (G5)	0.2
Calcareous gradational clay loam (A6)	3.6	<b>Deep sands (14.0%)</b>	
Calcareous clay loam on marl (A7)	0.2	Carbonate sand (H1)	2.1
Gypseous calcareous loam (A8)	0.2	Siliceous sand (H2)	5.5
<b>Shallow soils on calcrete or limestone (19.7%)</b>		Bleached siliceous sand (H3)	6.5
Shallow highly calcareous sandy loam on calcrete (B1)	2.6	<b>Highly leached sands (0.8%)</b>	
Shallow calcareous loam on calcrete (B2)	8.0	Highly leached sand (I1)	0.4
Shallow sandy loam on calcrete (B3)	5.1	Wet highly leached sand (I2)	0.4
Shallow red loam on limestone (B4)	0.3	<b>Ironstone soils (1.4%)</b>	
Shallow dark clay loam on limestone (B5)	0.7	Ironstone soil with alkaline lower subsoil (J1)	0.2
Shallow loam over red clay on calcrete (B6)	0.9	Ironstone soil (J2)	1.1
Shallow sand over clay on calcrete (B7)	1.6	Shallow soil on ferricrete (J3)	0.1
Shallow sand on calcrete (B8)	0.5	<b>Shallow to moderately deep acidic soils on rock (2.3%)</b>	
Shallow clay loam over brown or dark clay on calcrete (B9)	0.03	Acidic gradational loam on rock (K1)	0.2
<b>Gradational soils with highly calcareous lower subsoil (4.4%)</b>		Acidic loam over clay on rock (K2)	0.5
Gradational sandy loam (C1)	1.4	Acidic sandy loam over red clay on rock (K3)	0.5
Gradational loam on rock (C2)	0.9	Acidic sandy loam over brown or grey clay on rock (K4)	0.9
Friable gradational clay loam (C3)	1.4	Acidic gradational sandy loam on rock (K5)	0.2
Hard gradational clay loam (C4)	0.4	<b>Shallow soils on rock (3.9%)</b>	
Dark gradational clay loam (C5)	0.2	Shallow soil on rock (L1)	3.9
<b>Hard red-brown texture contrast soils with alkaline subsoil (10.4%)</b>		<b>Deep uniform to gradational soils (1.5%)</b>	
Loam over clay on rock (D1)	2.1	Deep sandy loam (M1)	0.3
Loam over red clay (D2)	2.6	Deep friable gradational clay loam (M2)	0.6
Loam over poorly structured red clay (D3)	3.2	Deep gravelly soil (M3)	0.1
Loam over pedaric red clay (D4)	1.5	Deep hard gradational sandy loam (M4)	0.4
Hard loamy sand over red clay (D5)	0.3	<b>Wet soils (2.7%)</b>	
Ironstone gravelly sandy loam over red clay (D6)	0.2	Peat (N1)	0.1
Loam over poorly structured clay on rock (D7)	0.6	Saline soil (high to extreme salinity) (N2)	2.1
<b>Cracking clay soils (1.3%)</b>		Wet soil (N3)	0.5
Black cracking clay (E1)	0.3	<b>Volcanic ash soils (0.1%)</b>	
Red cracking clay (E2)	0.3	Volcanic ash soil (O1)	0.1
Brown or grey cracking clay (E3)	0.7	<b>Miscellaneous</b>	
<b>Deep loamy texture contrast soils with brown or dark subsoil (2.7%)</b>		Exposed rock (rockland)	0.9
Loam over brown or dark clay (F1)	1.0	Water bodies	1.1
Sandy loam over poorly structured brown or dark clay (F2)	1.7		
<b>Not applicable (includes urban, reservoirs, lakes, quarries, evaporation pans)</b>			0.5%
<b>Total area (Southern South Australia)</b>			15,748,100 ha (=100%)

Data is from Hall et al. 2009, The Soils of Southern South Australia

