

GENERAL

Occurs between Goulburn city and Sooley Dam. The landscape has formed on a complex geological landscape including teschenite intrusions, metamorphosed mudstones and limestone outcrops.

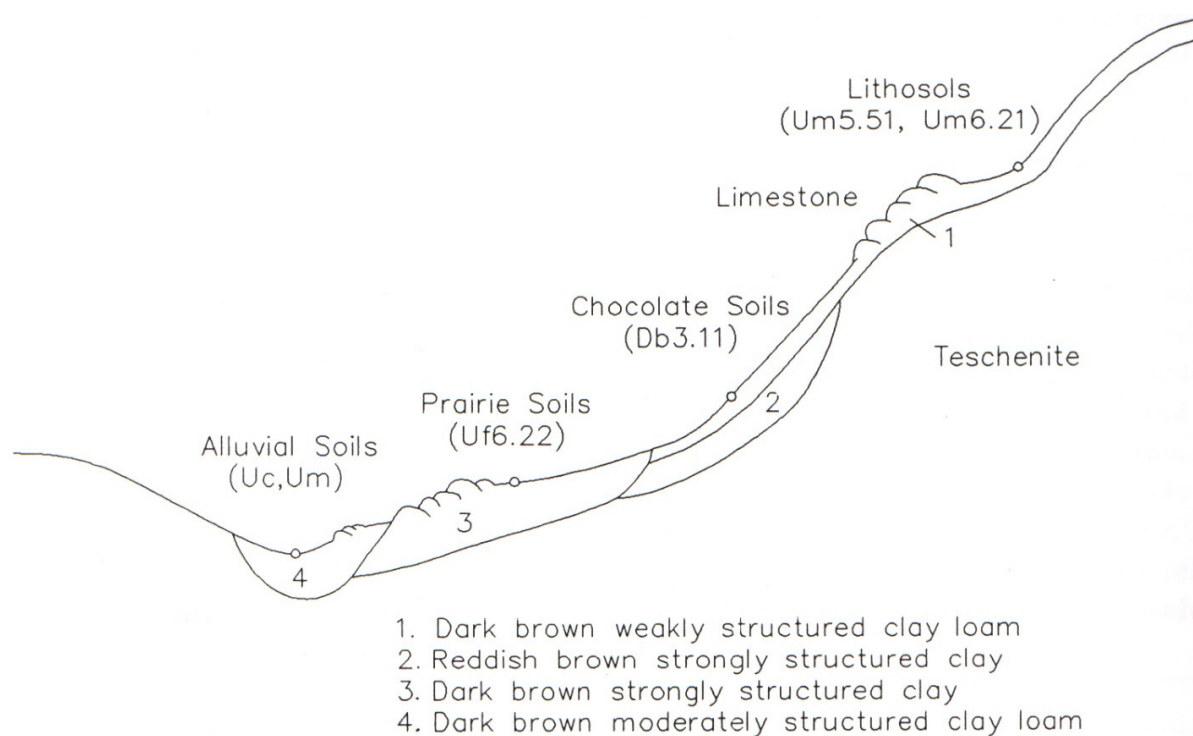
Complex soil distribution. Lithosols (Um5.51, Um6.21) have formed on crests and upper sideslopes, and prairie soils (Db4.22, Uf6.22) have formed in the valleys. Nearer to the Sooley Dam, Terra Rossa soils (Dr4.13) have formed on the extensive limestone outcrop.

Minor areas of rock outcrop occur. More information on this landscape can be found in Scown, Murphy and Johnston (1988).

ASSOCIATED SOIL LANDSCAPES: Small pockets of Goulburn and Monastery Hill.

CLIMATIC ZONE: 3D

Annual average rainfall for Goulburn city is around 640 mm. Summers are hot, and winters are very mild to cold.

PS-so SOOLEY SOIL LANDSCAPE**GEOLOGY**

This soil landscape has formed on two teschenite intrusions which have penetrated Upper Silurian sediments. The Upper Silurian sediments include an extensive outcrop of limestone.

Soils have formed *in situ* and from alluvial-colluvial material derived from the parent rock.

LANDFORM

Undulating to rolling low hills. Relief less than 40m; slope gradients 5 – 15%. Permanent erosional stream channels, closely to very widely spaced, which form a non-directional or convergent integrated tributary pattern. Elevations are between 670 – 700 m.

NATIVE VEGETATION

Savannah woodland of yellow box and Blakelys red gum.

EXISTING LAND USE

Lying on the outskirts of Goulburn, this landscape is undergoing land use change from predominantly rural activities (grazing and the growing of fodder crops) to urban use and some hobby farm development. The Sooley Dam now floods a considerable portion of the landscape.

SOIL EROSION

Prior to the current urban developments, this area was not significantly eroded. Disturbance of the soil surface for urban development will create a significant short-term erosion problem. This is of particular significance because of the close proximity of the Wollondilly River.



PS-so SOOLEY SOIL LANDSCAPE		
	Prairie Soils	Terra Rossa Soils
Dominance	Common	Minor
Landform element	Valleys	Crests, sideslopes
Surface condition	Friable	Friable
Drainage	Impeded	Moderate to rapid
Soil permeability	Moderate	Moderate
Watertable depth	100 cm	Not present
Available water-holding capacity	High	Moderate
Depth to bedrock	>200 cm	100 cm
Flood hazard	Likely	Not present
pH (topsoil)	6.5	7.0
Fertility (chemical)	High	Moderate
Known nutrient deficiencies	N, P, K, S	N, P, S and possibly Bo
Soil salinity	Not evident	Not evident
Erodibility (topsoil)	Moderate	Moderate
Erodibility (subsoil)	Low	Low
Erosion hazard	Low	Low
Structural degradation hazard	Low	Low
Land capability classification	I, II, IV	IV, VI
USCS (subsoil)	CL, CH	MH
Shrink-swell potential	Low to moderate	Low
Mass movement hazard	Not evident	Not evident