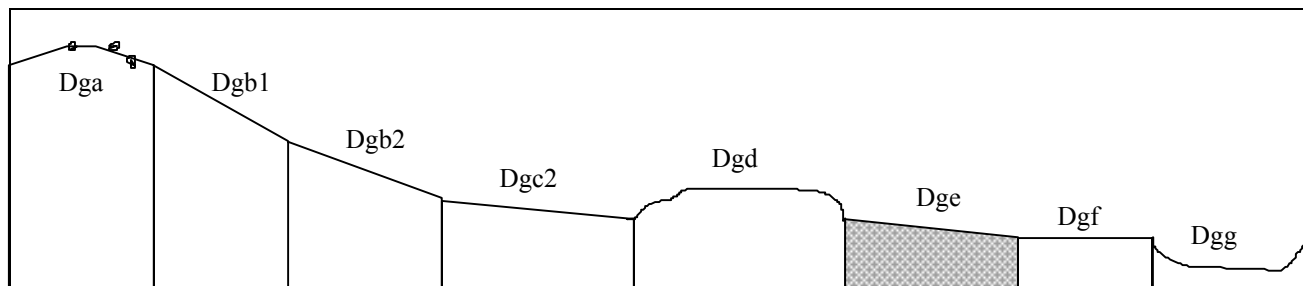


Land Unit: Devonian granodiorite, gentle slopes	Land Unit symbol: Dge
	% of study area: 0.8



General Description:

This unit occurs to the north and south-east of Buxton. During the wetter months of the year a perched watertable develops above the B horizon - the result of a permeable topsoil overlying an impermeable subsoil. These waterlogged conditions restrict the movement of vehicles and heavy stock, and render the absorption beds of effluent disposal systems useless. The low fertility and acidic nature of the topsoils restricts agricultural productivity.

Site characteristics:

Site No. 96

Parent material		Depth to seasonal watertable:	< 2 m
Age:	Devonian	Potential recharge to groundwater:	Low
Lithology:	Granodiorite	Flooding risk:	Nil
Landform		Drainage:	Imperfectly drained
Pattern:	Undulating rises	Depth to hardrock:	1.8 m
Element:	Slope	Rock outcrop:	0%
Slope		Annual rainfall:	1090 mm
Common:	6%		
Range:	3 - 10%		
Native vegetation:	Narrow-leaf Peppermint, Candlebark Gum, Blackwood		
Present land use:	Cleared; native and improved pastures for the grazing of sheep and cattle		

Land degradation:

Degradation process	Water erosion		Wind erosion	Salting	Acidification
	Sheet/rill	Gully			
Susceptibility	Moderate	Moderate	High	Low	High
Incidence	Low	Nil	Nil	Nil	Moderate

Soil profile characteristics:

Permeability	(measured - average, range):	450 (300 - 900) mm/day
	(estimated):	-
Available water capacity:	190 mm H ₂ O	
Linear Shrinkage (B horizon):	15%	

Soil profile description:**Land Unit symbol:** Dge

- A1 0 - 8 cm Dark greyish brown (10YR4/2) coarse sandy loam, weak subangular blocky structure, peds 3 mm, rough fabric, moderately weak consistence - dry, moderate organic matter, pH 5.0. Abrupt transition to:
- A2d 8 - 32 cm Pale brown (10YR6/3) sandy loam, conspicuously bleached (10YR8/2 - dry), apedal massive (structure), sandy fabric, moderately weak consistence - slightly moist, pH 5.3. Clear transition to:
- B21t 32 - 93 cm Pale brown (10YR6/3) medium clay, many coarse distinct yellow brown mottles, moderate subangular blocky structure, peds 15 mm, smooth fabric, moderately firm consistence - slightly moist, pH 5.1. Gradual transition to:
- B22 93 - 135 cm Brownish yellow (10YR6/6) sandy clay loam, apedal massive (structure), many coarse prominent grey mottles, sandy fabric, moderately weak consistence - slightly moist, pH 5.2.

Soil classification:

Factual Key (Northcote, 1979):

Dy 3.41 - 2/1/032

Australian Soil Classification (Isbell, 1992):

Bleached - Mottled, Mesotrophic, Grey, Kurosol; medium, gravelly loamy/clayey, deep

Unified Soil Group:

MH

Interpretation of soil analyses: (see Appendix 2 for analytical results)

Horizon	pH	Gravel %	E.C. (salts)	Nutrient status	P	K	Al	Organic matter	Dispersibility
A1	5.0 **	12	VL	VL	S	D	T	M	L
A2d	5.3 **	15	VL	VL	D	D	T	VL	L
B21t	5.1 **	14	VL	VL	D	D	T	VL	L
B22	5.2 **	15	VL	VL	D	D	T	VL	L

VL: Very Low

L: Low

M: Moderate

H: High

VH: Very High

D: Deficient

S: Satisfactory

T: Toxic

NA: Not Available

** Acidic

Land capability ratings and limitations for specific land uses:

Land use	Rating	Major limiting factor(s)
Agriculture	C ₃ T ₃ S ₅	Perched watertable at < 0.5 metre during winter-spring period
Building foundations - slab	5	A perched watertable occurs seasonally above the clay subsoil (< 0.5 metre depth)
- stumps/footings	5	
Effluent disposal (septic tanks)	5	A perched watertable develops at < 0.5 metre depth during the wetter months of the year
Farm dams	4	Low suitability of subsoil, shallow soils, high permeability, high dispersibility of subsoil
Residential - rural	5	Very low capability for effluent disposal, secondary roads and a low capability for farm dams
- urban	5	Very low capability for secondary roads
Scenic value	3 & 4	Very low capability for secondary roads
Secondary roads	5	A seasonal perched watertable develops at < 0.5 metre during the wetter months, imperfect drainage