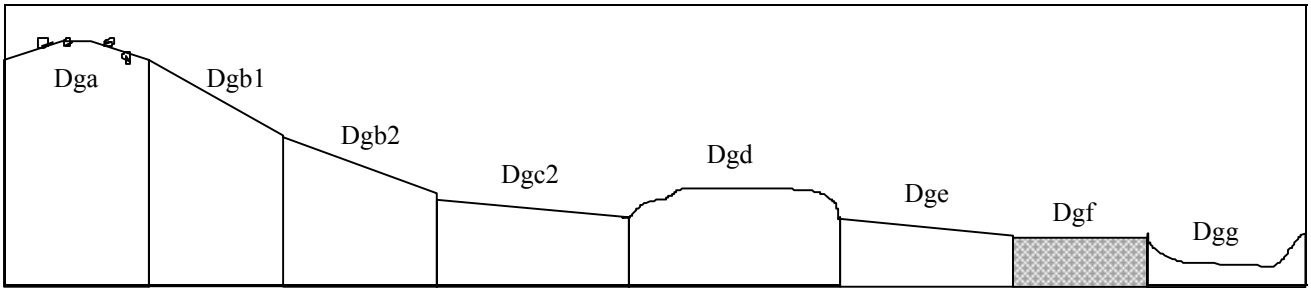
Land Unit: Devonian granodiorite, very gentle slopes	**Land Unit symbol:** Dgf
	% of study area: 0.7



General Description:

These very gentle slopes on granodiorite, just north of Buxton, have received considerable wash-material from the granitic soils further upslope, thereby explaining the unusually deep (≥ 50 cm) sandy topsoil. Problems associated with trafficability and effluent disposal, low fertility and acidification are similar to land unit Dge, however this land unit receives considerable surface and subsurface water flow from Dge and beyond.

Site characteristics: **Site No.** 98

Parent material		Depth to seasonal watertable:	> 2 m
Age:	Devonian		
Lithology:	Granodiorite	Potential recharge to groundwater:	Low
Landform		Flooding risk:	Nil
Pattern:	Undulating rises	Drainage:	Imperfectly drained
Element:	Lower slopes	Depth to hardrock:	> 2 m
Slope		Rock outcrop:	0%
Common:	2%	Annual rainfall:	1090 mm
Range:	1 - 3%		
Native vegetation:	Cleared		
Present land use:	Cleared; native and improved pastures for sheep and cattle		

Land degradation:

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

Soil profile characteristics:

Permeability	(measured - average, range):	350 (230 - 490) mm/day
	(estimated):	-
Available water capacity:		270 mm H_2O
Linear Shrinkage (B horizon):		15% (est.)

Soil profile description:

Land Unit symbol: Dgf

A1 0 - 11 cm Dark brown (7.5YR4/2) coarse sandy loam, moderate subangular structure, peds 3 mm, rough fabric, moderately firm consistence - dry, moderate organic matter, pH 5.2. Abrupt transition to:

A2e 11 - 40 cm Light yellowish brown (10YR6/4) light sandy clay loam, conspicuously bleached (10YR8/3 - dry), apedal massive (structure), sandy fabric, moderately firm consistence - dry, pH 5.3. Clear transition to:

B21t 40 - 94 cm Strong brown (7.5YR5/8) sandy clay, medium distinct red-brown mottles are common, weak subangular blocky structure, peds 35 mm, rough fabric, moderately firm consistence - slightly moist, very few quartz gravel fragments, pH 5.3. Gradual transition to:

B22 94 - 130^{+}cm Light brownish grey (2.5YR6/2) sandy clay, many very coarse distinct red-brown mottles, moderate subangular blocky structure, peds 35 mm, moderately firm consistence - slightly moist, pH 5.4

Soil classification:

Factual Key (Northcote, 1979):	Dy 3.41 - 2/2/040
Australian Soil Classification (Isbell, 1992):	Bleached - Mottled, Mesotrophic, Brown, Kurosol; medium, slightly gravelly, loamy/clayey, deep
Unified Soil Group:	ML

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	5.2 **	7	VL	VL	D	S	T	M	H
A2e	5.3 **	6	VL	VL	D	D	T	VL	H
B21t	5.3 **	7	VL	VL	D	D	T	VL	L
B22	5.4 **	6	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	$C_3T_2S_5$	Perched water table at < 0.5 metre during winter-spring period
Building foundations - slab - stumps/footings	 5 5	A perched water table occurs seasonally above the clay subsoil (< 0.5 metre depth)
Effluent disposal (septic tanks)	5	A perched water table develops at < 0.5 metre depth during the wetter months of the year.
Farm dams	5	Very low suitability of subsoils, high permeability, high dispersibility of subsoil
Residential - rural - urban	5 5	Very low capability for effluent disposal and secondary roads and a low capability for farm dams Very low capability for secondary roads
Scenic value	3	-
Secondary roads	5	A seasonal, perched water table develops at < 0.5 metre during the wetter months, imperfect drainage, low suitability of subsoil