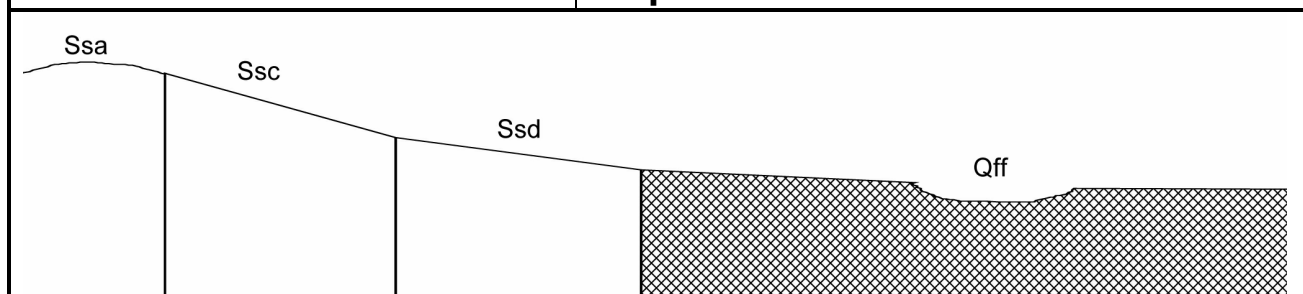


MAP UNIT SYMBOL: Qff

Area: 15 232 ha

MAP UNIT: Quaternary fan, gentle slope**A. GENERAL DESCRIPTION**

The Quaternary fan incorporates gentle and very gentle slopes and drainage depressions. The very gentle slopes have a similar soil type to the gentle slopes. The fans are outwash slopes from the sedimentary hills, although there is some influence from the granitic hills, as the profile has a high percentage of granitic sand. A perched seasonal water table is present. The flood risk is high on the drainage depression, and occasionally on the very gentle slopes, although it is low for the majority of the fan. The soils in the gullies are very similar to the gentle, and very gentle slopes, except they do not have an A2 horizon.

SITE CHARACTERISTICS

Parent Material Age:	Quaternary	Depth to Seas. Watertable:	0.5 m (variable)
Parent Material Lithology:	Sedimentary	Flooding Risk:	Moderately high
Landform Pattern:	Undulating rises	Drainage:	Imperfectly drained
Landform Element:	Fan	Rock Outcrop:	0%
Slope a) common:	3%	Depth to Hard Rock:	>1 m
Slope b) range:	3-6%	Present Land Use:	Grazing
Potential Recharge to Groundwater: Low			
Major Native Vegetation Species: Silver Wattle, Golden Wattle, Narrow-leaved Peppermint, River Red Gum			

LAND DEGRADATION

Land Degradation	Water Erosion	Wind Erosion		Mass Movement	Salting	Acidification
		sheet/rill	gully			
Susceptibility	Low	Moderate	Moderate	Very low	Low	Low
Incidence	Low	Moderate	Low	Nil	Low	Not available

B. SOIL PROFILE**PROFILE DESCRIPTION**

A1	0-90 mm	Dark greyish brown (10YR4/2) clay loam with coarse sand, weak subangular blocky structure, peds 2-5 mm, rough fabric, very weak consistence, many fine subrounded sedimentary gravel fragments, pH 6.0. Clear transition to:
A2	90-230 mm	Pale brown (10YR6/3), bleached (10YR8/1) clay loam with coarse sand, a few fine faint orange mottles, massive structure, sandy fabric, moderately weak consistence, many fine subrounded sedimentary and quartz gravel fragments, pH 6.5. Clear transition to:
B21	230-425 mm	Brownish yellow (10YR6/6) light medium clay with coarse sand, a few fine faint orange, red and grey mottles, peds 10-20 mm, weak subangular blocky structure, rough fabric, moderately weak consistence, fine subrounded quartz gravel fragments are common, pH 6.0. Gradual transition to:

- B22** 425-570 mm Light yellowish brown (10YR6/4) light medium clay with coarse sand, many medium distinct red, orange and yellow mottles, weak subangular blocky structure, peds 10-20 mm, smooth fabric, moderately firm consistence, many fine subrounded sedimentary and granite gravel fragments, pH 6.0. Gradual transition to:
- B23** 570-980 mm+ Light yellowish brown (10YR6/4) light medium clay with coarse sand, prominent coarse red, orange and yellow mottles are abundant, weak subangular blocky structure, peds 20-50 mm, smooth fabric, moderately firm consistence, many fine subrounded sedimentary, granite and quartz gravel fragments, pH 5.5.

CLASSIFICATION

Factual Key:	Dy3.41
Australian Soil Classification:	Bleached-mottled, Mesotrophic, Yellow Chromosol; thin, moderately gravelly, clay loamy/clayey, deep/very deep
Unified Soil Group:	CH

INTERPRETATION OF LABORATORY ANALYSIS*

Horizon	pH (CaCl ₂)	% Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A1	4.4**	23.6	VL	VL	D	D	T	H	L
A2	4.6	24.6	VL	VL	D	D	S	M	L
B21	4.7	18.3	VL	L	D	S	T	VL	L
B22	4.4**	32.0	VL	L	D	S	T	VL	VL
B23	4.2**	35.6	VL	VL	D	S	T	VL	VL

VL: Very Low L: Low M: Moderate H: High VH: Very High D: Deficient S: Satisfactory
T: Potentially Toxic NA: Not Available * see appendix D for analytical results ** Strongly Acidic

SOIL PROFILE CHARACTERISTICS:

Permeability:	Very slow (average 3 mm/day, range 0-8 mm/day)
Available Water Capacity:	Moderate (103 mm H ₂ O)
Linear Shrinkage (B horizon):	Moderate (15%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C ₂ T ₂ S ₅	Depth to watertable
Effluent Disposal (septic tanks)	5	Permeability, number of months/year average daily rainfall > Ksat
Farm Dams	5	Depth to seasonal watertable, dispersibility of subsoil
Building Foundations slab	4	Drainage, depth to seasonal watertable, gravel content.
stumps/footings	4	Drainage, depth to seasonal watertable, gravel content.