

SUMMARY

A land capability study was undertaken in the Rural City of Marong. Thirty-six map units were identified according to geological type and slope using aerial photo interpretation, geological mapping and field inspection. Base maps of the map units were produced at two scales; 1:25 000 in the outskirts of Bendigo and 1:50 000 in the predominantly rural areas.

For each map unit a number of land and soil profile characteristics were collected and used to determine the capability of the map unit to sustain particular uses.

Capability ratings of 1 to 5 were given for the following land uses:

- a) Agriculture
- b) Building foundations
- c) On site effluent disposal
- d) Earthen dams
- e) Secondary roads

Refer to Table 1.1 for results.

A rating of one represents essentially no constraints to the proposed land use, whilst a rating of 5 indicates the area has a very low capability to sustain the land use in terms of either/or both productive capacity to land degradation resulting from this land use. Maps were produced of land capability ratings for all land uses except earthen dams. Additional maps included susceptibility to erosion and recharge values of each map unit.

This land capability information can be used by planners to assist in the preparation of planning strategies and to encourage the most appropriate land uses and management practices so that land degradation in the short term and long term is minimised, but productivity is sustained.

Table 1.1 - Summary of land capability ratings

Note: the reader is referred to the map unit table on the specific land capability map or the map unit description in Section 4 of this report to ascertain the reason(s) for ratings of 3, 4 or 5.

MAP UNIT		LAND CAPABILITY RATING				
Symbol	Description	Agriculture	Effluent Disposal	Farm Dams	Building Foundations i) slab; ii) stumps	Secondary Roads
Qag	Quaternary alluvium, drainage depression	C ₃ T ₁ S ₅	5	5	5;5	5
Qap	Quaternary alluvium, plain	C ₃ T ₂ S ₃	2	4	2;2	3
Qal	Quaternary alluvium, terrace					
Qa2	(Loddon R. upper)	C ₃ T ₁ S ₃	3	5	2;2	4
Qa3	Quaternary alluvium, terrace					
	(Loddon R. lower)	C ₃ T ₁ S ₃	5	4	5;5	5
Qa4	Quaternary alluvium, terrace					
	(Bullock Creek)	C ₃ T ₁ S ₄	5	5	5;5	5
	Quaternary alluvium, terrace					
	(Bendigo Creek)	C ₃ T ₁ S ₄	3	5	3;3	3
Qa5	Quaternary alluvium, flat	C ₃ T ₂ S ₄	3	4	3;3	4
Qba	Quaternary basalt, crest	C ₃ T ₂ S ₅	5	5	4;4	4
Qbc	Quaternary basalt, moderate slope	C ₃ T ₄ S ₅	5	5	4;4	4
Qbd	Quaternary basalt, gentle crest, rocky	C ₃ T ₁ S ₅	5	5	5;5	5
Qbe	Quaternary basalt, gentle slope	C ₃ T ₃ S ₄	4	5	4;4	4
Qbf	Quaternary basalt, very gentle slope	C ₃ T ₂ S ₃	2	5	2;2	3
Qbg	Quaternary basalt, drainage depression	C ₃ T ₂ S ₅	5	5	5;5	5
Qbr	Quaternary basalt, very gentle slope, rocky	C ₃ T ₁ S ₅	5	5	5;5	5
Tfel	Tertiary fan, gentle slope, 1	C ₃ T ₃ S ₄	5	5	3;3	5
Tffl	Tertiary fan, very gentle slope, 1	C ₃ T ₂ S ₅	5	5	3;3	3
Tfc2	Tertiary fan, moderate slope, 2	C ₃ T ₄ S ₅	3	4	4;4	4
Tfe2	Tertiary fan, very gentle slope, 2	C ₃ T ₃ S ₅	2	4	3;2	3
Tsdl	Tertiary sediments, gentle crest, 1	C ₃ T ₁ S ₃	5	3	3;3	3
Tsfl	Tertiary sediments, very gentle slope, 1	C ₃ T ₂ S ₃	5	3	3;3	3
Tsg1	Tertiary sediments, drainage depression, 1	C ₃ T ₁ S ₃	5	3	3;3	3
Tsf2	Tertiary sediments, very gentle slope, 2	C ₃ T ₂ S ₄	4	5	3;3	4
Dga	Devonian granodiorite, crest	C ₃ T ₁ S ₅	5	5	4;4	4
Dgb	Devonian granodiorite, steep slope	C ₃ T ₅ S ₄	5	5	5;4	5
Dgc	Devonian granodiorite, moderate slope	C ₃ T ₄ S ₄	4	5	4;3	4
Dgd	Devonian granodiorite, gentle crest	C ₃ T ₁ S ₄	5	5	2;3	3
Dge	Devonian granodiorite, gentle slope	C ₃ T ₃ S ₄	5	4	3;3	4
Dgf	Devonian granodiorite, very gentle slope	C ₃ T ₂ S ₄	5	4	3;3	3
Dgg	Devonian granodiorite, drainage depression	C ₃ T ₁ S ₅	5	5	5;5	5
Osa	Ordovician sediments, crest/ridge	C ₃ T ₁ S ₅	5	5	4;4	4
Osb	Ordovician sediments, steep slope	C ₃ T ₅ S ₅	5	5	5;4	5
Osc	Ordovician sediments, moderate slope	C ₃ T ₄ S ₅	4	5	4;3	5
Osd	Ordovician sediments, gentle crest	C ₃ T ₁ S ₄	4	5	3;3	4
Ose	Ordovician sediments, gentle slope	C ₃ T ₃ S ₄	4	5	2;3	5
Osf	Ordovician sediments, very gentle slope	C ₃ T ₂ S ₄	4	5	3;3	3
Osg	Ordovician sediments, drainage depression	C ₁ T ₁ S ₄	5	4	5;5	5

C: Climate
T: Topography
S: Soil