

## SUMMARY

A land capability study provides a planning tool to assist the Shire in the development of a detailed planning scheme that will facilitate the planning of future land use through a systematic and rational examination of management requirements, and consequences of a range of alternative land uses. Revision of the planning scheme, based on sound land resource information, is required to direct development away from areas not well suited to certain uses, and to maintain a balance between competing land uses and the better quality agricultural land, in the interests of the whole community.

The land capability study identified 48 map units throughout the Shire, based primarily on geology type and slope range. Three complex map units were also identified covering the Mount William Range. These complex areas were identified according to the soil type, drainage and the incidence of erosion.

The majority of the Shire consists of basaltic and volcanic lava flows. Within these geologies, there are a number of eruption points with steep to moderate sideslopes. On the basalt geology, there are steep to moderate slopes downcut to the creek terraces. The steep and moderately steep sloping land has a poor to very poor capability for both agriculture and residential development, due mainly to the slope. The cones also have a poor capability for both uses due mainly to the percentage of rock outcrop and the depth to hardrock. The majority of the volcanic and basaltic plains, however, generally have a higher capability for agriculture as a land use than residential development, due mainly to a favourable climate, a very gentle to moderate slope range and productive soils.

The red granitic areas in the south east of the Shire are generally quite steep, rarely having slopes less than 10%. As a consequence the majority of this area has a limited capability of supporting both intensive agriculture and residential development as a land use. The fact that the area is mainly forested is an indication of this. Similarly, the yellow granitic areas found in the north of the Shire have a poor capability for supporting both intensive agriculture and residential development as a land use. As the slope decreases, the capability increases for both types of land uses.

The majority of the rhyodacite areas in the south west of the Shire can sustain agricultural uses with low to moderate levels of land disturbances. This land has a fair to poor capability for residential development.

Much of the Kerry Conglomerate is still forested, which gives an indication of the limited capability it has for both intensive agricultural purposes and for residential development.

The sedimentary hills in the east of the Shire are generally highly susceptible to land degradation, and this, combined with the steep to moderately steep slopes which predominate, leads to a poor capability to support both intensive agriculture and residential development. West of Lancefield, there are areas of gentler sloping sedimentary hills. Many drainage depressions dissect these areas, making much of this area unsuitable for intensive agriculture and residential development.

The complexity of the Mount William landscape necessitated a different mapping approach, with three complexes being identified, but the individual land types within the complexes not mapped. The capability of the area for residential development will vary within the complexes, and additional investigations will be required to plan and evaluate any proposed development.

Table 1.1 gives a summary of the land capability classes for each map unit.

**Table 1 Summary of land capability classes**

**Note:** The map unit legends on the relevant land capability map, or the map unit description in Section 4 of this report, detail the major limiting features for each type of land use.

7 MAP UNITS		LAND CAPABILITY CLASS					
Symbol	Description	Agriculture	Effluent Disposal	Farm Dams	Building Foundations	Erosion Risk	Potential Recharge
Qa1	Quaternary alluvium, terrace	3	4	3	3	3	Low
Qff	Quaternary fan, gentle slope	5	5	5	4	3	Low
Qba	Quaternary basalt, steep crest	5	4	5	5	4	High
Qbb	Quaternary basalt, steep slope	5	5	5	5	5	High
Qbc	Quaternary basalt, moderately steep slope	4	4	5	4	4	Moderate
Qbd	Quaternary basalt, moderate slope	3	3	4	4	3	Moderate
Qbe	Quaternary basalt, gentle crest	3	2	3	2	3	Moderate
Qbf	Quaternary basalt, gentle slope	3	2	3	3	3	Moderate
Qbg	Quaternary basalt, very gentle slope	3	3	3	5	3	Low
Qbh	Quaternary basalt, drainage depression	4	5	3	5	3	Low
Qbr	Quaternary basalt, gentle slope, rocky	5	5	5	5	3	High
Qva	Quaternary volcanic, steep crest	4	4	5	3	4	High
Qvb	Quaternary volcanic, steep slope	5	5	5	5	5	High
Qvc	Quaternary volcanic, moderately steep slope	4	4	5	4	4	Moderate
Qvd	Quaternary volcanic, moderate slope	3	3	4	4	3	Low
Qve	Quaternary volcanic, gentle crest	4	4	5	3	3	Moderate
Qvf	Quaternary volcanic, gentle slope	3	3	3	3	3	Low
Qvg	Quaternary volcanic, very gentle slope	2	3	3	2	2	Low
Qvh	Quaternary volcanic, drainage depression	3	5	3	4	3	Low
Dg1a	Devonian granitic, red, steep crest	4	3	5	3	4	Low
Dg1b	Devonian granitic, red, steep slope	5	5	5	5	5	Low
Dg1c	Devonian granitic, red, moderately steep slope	4	4	5	4	3	Low
Dg1d	Devonian granitic, red, moderate slope	3	3	4	4	3	Low
Dg1h	Devonian granitic, red, drainage depression	4	5	4	5	3	Low
Dg2a	Devonian granitic, yellow, steep crest	5	4	5	4	3	High
Dg2b	Devonian granitic, yellow, steep slope	5	5	5	5	4	High
Dg2c	Devonian granitic, yellow, moderately steep slope	4	4	5	4	4	Moderate
Dg2d	Devonian granitic, yellow, moderate slope	4	3	4	4	3	Moderate
Dg2f	Devonian granitic, yellow, gentle slope	4	3	4	4	3	Low
Dg2h	Devonian granitic, yellow, drainage depression	4	5	5	5	3	Low
Dg2x	Devonian granitic, yellow, plateau	4	3	4	3	3	Moderate
Dra	Devonian rhyodacite, steep crest	3	2	5	3	3	Moderate
Drb	Devonian rhyodacite, steep slope	5	5	5	5	5	Moderate
Drc	Devonian rhyodacite, moderately steep slope	4	4	5	4	4	Moderate
Drd	Devonian rhyodacite, moderate slope	4	3	4	4	3	Moderate
Drh	Devonian rhyodacite, drainage depression	4	5	4	5	4	Low
Dsa	Devonian sediments, steep crest	4	3	5	3	4	High
Dsb	Devonian sediments, steep slope	5	5	5	5	4	High
Dsc	Devonian sediments, moderately steep slope	4	4	5	4	3	Moderate
Dsd	Devonian sediments, moderate slope	3	3	4	4	3	Low
Dsf	Devonian sediments, gentle slope	3	3	4	3	3	Low
Ssa	Silurian sediments, steep crest	4	2	4	4	3	Moderate
Ssb	Silurian sediments, steep slope	5	5	5	5	5	Moderate
Ssc	Silurian sediments, moderately steep slope	4	4	5	4	4	Low
Ssd	Silurian sediments, moderate slope	4	3	4	4	4	Low
Ssf	Silurian sediments, gentle slope	3	3	3	3	3	Low
Ssg	Silurian sediments, very gentle slope	3	3	3	3	3	Low
Ssh	Silurian sediments, drainage depression	4	5	5	5	4	Low