LAND CAPABILITY ASSESSMENT

A "Single worst factor" method was used to assess land capability in this study. It is an adaptation of those described for grazing in Rowe *et al*. (1981) "Guidelines for Land Capability Assessment in Victoria" (Soil Conservation Authority, Victoria).

The table for the study area is shown below:

Table 1

Land features affecting use	Capability Class				
	1	2	3	4	5
Slope	<10%	10-20%	20-30%	30-45%	>45%
Aspect*	E	SE NE S NW S	W N	-	-
Soil type	Gradational Um	Duplex with A horizons 20-50 cm thick	Other duplex Uf Ug	Uc	-
Average soil depth##	>1.0 m	0.6 to 1.0 m	0.4 to 0.6 m	0.2 to 0.4 m	<0.2 m
Site drainage	Well drained	Moderate well drained	Poorly drained	Very poorly drained	-
Surface rock	<2%	2 to 15%	15 to 25%	25 to 40%	>40%
Soil salinity status	Non-saline and not considered to be at risk.	Non-saline considered to be at low risk of salinity developing.	Pasture species growth just affected by incipient salinity, or considered to be at a high risk of salinity developing.	Pasture growth severely affected; dominance of salt-tolerant species#	Either only salt-tolerant species# growing or soil scalded or eroded.

* Aspect should only be taken into account in the assessment of land capability if the slope if >5%.

Salt tolerant species which 'invade' pastures when they become saline in the study area include: Yellow water buttons (*Cotula coropifolis*), Sea barley grass (*Hordeum marinum*), Spiny rush (*Juncus acutus*), Buck's horn plantain (*Plantago coronopus*).

Soil depth has been modified to allow for the general relationship that greater recharge (or runoff) of water to watertables will occur on shallower soils.

Table 2 – Land Capability Classes – Generalised Definitions

(after Rowe et al. (1981) 'Guidelines for Land Capability Assessment in Victoria' (Soil Conservation Authority, Victoria)).

Capability Class	Degree of Capability	Limitation or Hazard	Levels of Special Management* Needed to: (a) attain acceptable levels of production (b) contain adverse effects to land and water to acceptable levels.
1	Very good	None to very low	(a) and (b) no special technology or management needed.
2	Good	Low or slight	(a) No special technology needed, and/or (b) The risk of adverse effects to land and water is low Limited, simple conservation measures are required. Careful management is needed for both (a) and (b).
3	Fair	Moderate	(a) Special technology is needed, and/or (b) A moderate risk of adverse effects to land and water is always present. Special conservation measures are required. Careful management is essential for both (a) and (b).
4	Poor	High	(a) Highly specialised technology is required, and/or (b) A high risk of adverse effects to land and water is always present. Extensive conservation measure are required. Skilled management is essential for both (a) and (b).
5	Very poor	Severe	The high levels of technology and management needed are unlikely to be achieved or sustained. Severe risk of adverse effects to land/or water is always present.

* The capability classes are based on the typical or average levels of technology and management appropriate to the land utilization type being considered. Thus Class 1 can be used satisfactorily with normal inputs, i.e. no special technology or management is needed. With increasing levels of limitations, increasing levels of inputs (e.g. special management such as fencing and grazing limitations) are needed. The kind of special management needed depends on the nature of the limitation. These limitations are indicated in each map Unit.