ENANO LAND SYSTEM

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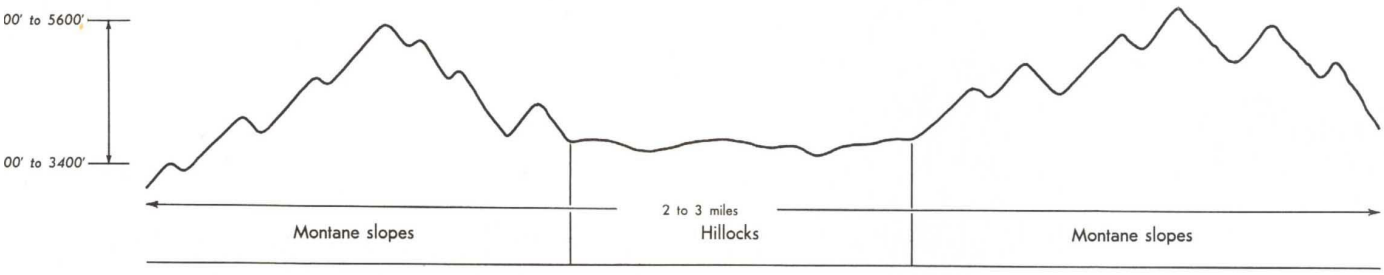
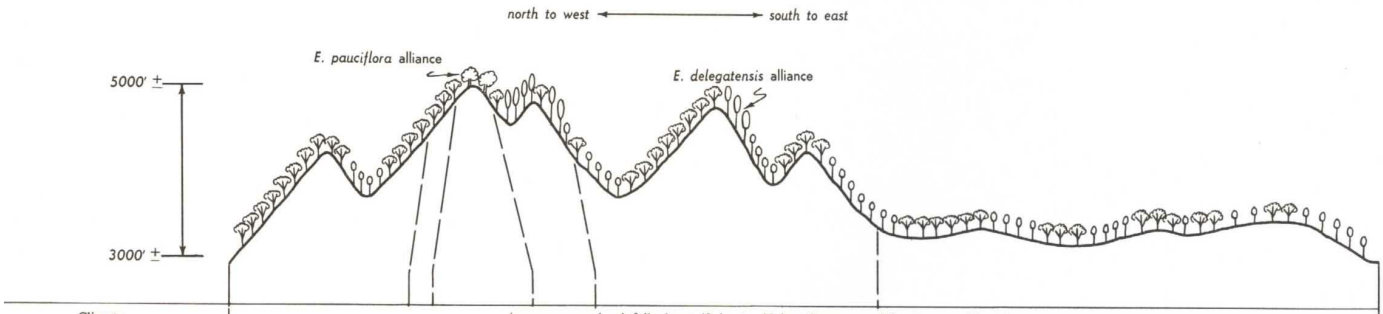
Area: 142 square miles 3·7% of catchment

i) Distribution of land forms



ii) Land system diagram



Climate	Average annual rainfall about 40 in. to 45 in. Summers mild, winters cold with some snow			
Geology	Variable—quartz porphyry, granite, schist, Ordovician shales and mudstones, small areas of Silurian limestone			
Topography	Steep to very steep			Rolling to hilly, some flat
Land Form	Montane slopes			Hillocks with some small areas of stream flats
Soil Groups	Cryptopodzols	Acid brown earths: Transitional alpine humus soils	Cryptopodzols some lithosols	Cryptopodzols, leptopodzols, some stream regosols and limited areas of prairie soils on stream flats
Vegetation Structure	Wet sclerophyll forest tending to tall woodland			Wet sclerophyll forest tending to tall woodland
Vegetation Floristics	*E. rubida–E. pauciflora* alliance, *E. radiata–E. rubida–E. dives* alliance, with small areas of *E. delegatensis* alliance on upper southerly slopes			*E. rubida–E. pauciflora* alliance and *E. radiata–E. rubida–E. dives* alliance
Present Land-use	Forestry—catchment protection. Summer cattle grazing			Catchment protection. Summer cattle grazing
Potential Land-use	Forestry—management for catchment protection and utilization of *E. delegatensis* forests. Controlled cattle grazing			Controlled cattle grazing. Catchment protection
Hazards	Low to moderate sheet erosion hazard if ground cover was damaged Access roads are inclined to erode. The soils derived from porphyry and granite have a higher erosion hazard than the fine-textured soils			Low to moderate sheet erosion hazard and possibly gully erosion following damage of ground cover. Stream-bank erosion Access tracks could erode. Coarse-textured soils have higher erosion hazard
Problems	Fire protection and lack of vehicular access. Remoteness from population centres. Control of grazing			Fire protection and lack of vehicular access. Cold winters and isolation make permanent occupation undesirable. Improvement of summer grazing conditions and control of grazing

Fig. 28 – Enano Land System

The Enano land system is in the south-eastern corner of the catchment. It includes the catchments to Limestone Creek and Dead Horse Creek and the headwaters of the Buckwong Creek, as well as those of several minor creeks flowing west into Benambra Creek. The Indi River is the eastern boundary. The Mts. Cobberas, Mt. Murphy and Forest Hill are prominent peaks in the land system.
The area is almost entirely Timber Reserve but a small proportion of Crown land occurs in the north and there is a small freehold allotment in the Limestone Creek valley. The area of the land system is about 142 square miles which is about 31 per cent. of the catchment.

Montane slopes make up about 75 to 80 per cent. of the land system, and hillocks and occasional small areas of stream Hats make up the remainder (Figure 28). Most of the less-steep country is confined to the Limestone Creek valley where the elevation ranges from about 3,000 feet to 3,500 feet. Ridge-top elevations range up to about 4,500 feet with some peaks over 5,000 feet.

The geology of the area is varied, Rhyodacites make up a large part of the land system to the cast of Limestone Creek and grey granite occurs in the north-west. Unaltered Ordovician fine sandstones, claystones and siltstones, make up most of the remainder, however, in the lower Limestone Creek valley, Silurian shales, sandstones and conglomerates with inter-bedded lenses of limestone, occur over a small area (Crohn 1950 ; Geological Survey of Victoria 1964).

The climate of this land system has to be inferred from the nature of the vegetation and the topography, as there is no meteorological station within a reasonable distance of the area. The central part of the land system appears to be affected by a rain shadow, with a maximum reduction of rainfall in the Limestone Creek valley. The average annual rainfall in the rain shadow is probably under 45 inches, and may be as low as 30 inches in places. To the north-west and south-west where the country is higher, rainfall of up to 50 inches per annum may occur. Winter snow, which may lie for a week or more at a time, is common in this land system. Summer maximum temperatures are mild but minima are low and winters are very cold. Severe frosts may occur at most times of the year, but are most frequent and severe from autumn through to spring.

In the drier central parts of the land system the soils are leptopodzols to cryptopodzols, and acid brown earths occur where rainfall is higher. Lithosols occur on many of the steeper and more exposed ridges and peaks. Regosols and prairie soils occur on Recent alluvium along some streams, particularly Limestone Creek, but are generally of limited occurrence. Transitional alpine humus soils occur on the highest areas.

Over the greater part of this land system the vegetation is a minimal wet sclerophyll forest tending to tall woodland of the *E. rubida-E. pauciflora* alliance. The undergrowth consists of *Daviesia latifolia, Platylobium formosum* and *Pultenaea juniperina. Poa australis* generally forms a discontinuous sward, and with dry forest litter, provides good cover in most places. In the higher-rainfall areas, in sheltered places and on southerly aspects, the *E. rubida-E. pauciflora* alliance is replaced by the *E. delegatensis* alliance.

There is some mild sheet erosion in the Limestone Creek valley, and stream-bank erosion of some of the soils of alluvial origin along the Limestone Creek is probably indicative of a higher run-off than is desirable. In general however, the area is in fairly good condition.