

SUMMARY

Environmental features of the Eildon Catchment are examined, together with their inter-relationship and effects on use and management.

Sedimentary rocks of Devonian to Ordovician age predominate, with minor areas of rocks such as granite, porphyry, acid volcanics and basalt. Several geomorphic areas can be recognised. Climate varies with altitude from sub-humid to sub-alpine, and aspect effects are often pronounced. There is a distinct altitude sequence of soils, with notable changes in properties such as organic matter content, porosity, acidity and nutrient concentration in topsoils. The native eucalypt forests largely remain. Several groups of dominant species can be recognised and these also are in altitude sequence. Above the tree line communities of herbfield, grassland, bog, fieldmark and scrub occur.

Eight land systems are mapped and described, each with a characteristic range of climate, topography, geology, soils, native vegetation and land use problems.

The main forms of land use are water supply, forestry, nature conservation, recreation and agriculture. Several management practices, particularly over grazing, timber extraction and burning, cause soil erosion and compaction which affect productivity, the rate of delivery of water to streams and water quality. Wildfire, and possibly controlled burning, causes nutrient losses by leaching. The hazards are greatest at the extremes of elevation.

There are conflicts in land use and management. It is concluded that the primary function of the higher rainfall land systems is water supply. Management practices should be compatible with this function.