

Plate 1 – Lake Eildon, amongst its wooded hills

## **FOREWORD**

This publication is based on the report prepared in 1964 by Mr. A. S. Rundle, during his period of employment as Research Officer with the Soil Conservation Authority. The land systems map was printed at the same time.

The material is most relevant to an objective of great concern to the Authority, namely the correct use and management of lands within water supply catchments, based on adequate prior study of the ecosystems.

For various reasons, including other pressures on staff with the required expertise, it has not been possible to undertake an earlier revision of the original report. Several Authority officers have contributed to the revision, mainly Mr. F. R. Gibbons, and those staff members of the Land Studies Section named in the acknowledgments.

Land systems are areas with a characteristic pattern of the various land features, climate, parent material, relief, soils and vegetation. The patters are in the form of repetitive sequence of certain values of the features, for example, a topographic sequence from ridge to valley and carrying a particular sequence of soil and vegetation. Arbitrarily defined segments of these land systems may be recognised, and area comprised of these are termed land components.

In this study, land systems have been recognised on the basis of relative uniformity in environmental features. In the Eildon catchment, changes in climate and topography give rise to most of the differences in the land. They are particularly relevant to the chief land use, which is the supply of water. On the other hand, climate and topography in this are difficult to use directly as a means of delineation. Some related feature must therefore be adopted, and such a feature is the native vegetation which still covers most of the area. Vegetation has thus been used as the basis for mapping land systems.

The use of the pattern of native vegetation as the criterion for characterising the land systems differs from current methods of the Land Studies Section. In these latter, the initial breakdown of landscapes is based on geologic-geomorphic patterns. For this reason, and also because the interpretation of stereophotographs, now used, was not feasible at this time, land systems in this area may not be the same as, nor may their boundaries match, those now recognised in adjoining areas.