1. **INTRODUCTION**

The broad aim of the Soil Conservation Authority is to achieve the adoption of soil-conserving land use practices by all land-users in the State. Land degradation, such as accelerated erosion, results from poor land use, which is commonly caused by a lack of understanding of the effects of activities on the land. To overcome this problem it is necessary to understand the ecology of the land and the natural processes that land use affects. Studies of the land, such as the one reported on here, are intended to provide basic information about those factors of the environment and the processes. They show the distribution of the different types of land and enable the impact of various uses to be assessed.

The Soil Conservation Authority has traditionally had a substantial involvement with freehold land that is, to varying extents, already developed. However, its responsibility extends also to areas still retained under State control (that is, public land), where it has exercised its responsibilities through government bodies responsible for land management. Increasing use-pressures on the land have meant increasing urgency for decisions on the future of the public land, as well as privately owned land, to be based on objective evaluation of the land's ability to sustain the desired uses.

Construction of water storages such as Lake Buffalo and Lake William Hovell on the King River and the need to protect them have increased the need for information about the environment of the catchments of these storages.

This study provides basic information about the physical characteristics of the land in the study area, mapped in Figure 1, which should form the basis for assessment of land capability.

The catchment of the upper Ovens and King Rivers is the last of the major catchments in north-eastern Victoria to be studied in this way. Others, which have already been studied, include the catchments of Lake Hume (Rowe 1967) and the Kiewa River (Rowe 1972), both to the east of the Ovens, and those of the Broken River (Rundle and Rowe 1974) and Lake Eildon (Rundle 1977) to the west. A similar but more detailed study of the Mount Buffalo National Park has also been carried out (Rowe 1970).

Because information relating to the public land was required with greater urgency than information about the relatively stable agricultural land in the north of the Ovens valley, this survey has been confined to the southern part of the valley, of which a large proportion is public land.

It covers the area defined as the catchment of the upper Ovens and King Rivers to the south of a line from just north of The Sugarloaf on the Ryans Creek-Middle Creek divide, through Moyhu, Whorouly and Bowman, to the catchment divide just to the south-west of Stanley.

Within the study area the Ovens River receives the waters of the Buckland, Buffalo, Rose and Dandongadale Rivers. Boggy Creek, Fifteen Mile Creek and Middle Creek are tributaries of the King River, but do not join it until north of the study area. The King River ultimately joins the Ovens River at Wangaratta about 25 km to the north.