

SOIL CONSERVATION AUTHORITY

REPORT ON THE

**McCRAE'S CREEK WATER SUPPLY CATCHMENT
GEMBROOK, COCKATOO, EMERALD TOWN
WATER SUPPLY**

Prepared for consideration by the
Land Utilization Advisory Council at
It's 63rd Meeting on 20th August, 1965

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1. INTRODUCTION

The area to be considered in this report is to be used as a town water supply catchment by the Gembrook-Cockatoo-Emerald Waterworks Trust. The Trust through its Engineers, Messrs. Gutteridge, Haskins and Davey, has applied for proclamation under Section 22 of the *Soil Conservation and Land Utilization Act*.

The pipeline is at present under construction and the offtake weir is to be constructed shortly, so that the system will probably be in use by summer 1965/66.

2. GENERAL DESCRIPTION OF CATCHMENT

(To accompany SCA Drawing No. 1690).

(a) *Area, Locality, Access*

The total area of the catchment to the weir is approximately 1,280 acres. This is made up of 800 acres freehold land, 400 acres Reserved Forest and the balance in a Quarry Reserve and Crown Land along the creek frontage.

The catchment drains to the east from the watershed of the Bunyip River Catchment, and these two catchments have a common boundary for approximately $1\frac{3}{4}$ miles.

The offtake weir is situated approximately 10 miles by road to the north east of Gembrook.

Access to the catchment on the south and east sides is by a Forest Commission road. A track leads down to the offtake weir site. At present there is no access to the north side of McCrae's Creek.

(b) *Climate*

Climate is similar to that found in the Bunyip Catchment. Rainfall would be in the vicinity of 60 inches per annum, and well distributed. The months of January and February would have the lowest registrations, being a little below 3 inches per month. The high rainfall and favourable ground conditions result in a permanent flow in the creek.

(c) *Geology and Physiography*

The land is all based on Devonian granite. The area is generally steep with deeply entrenched streams in the upper levels, the valley becoming somewhat wider at and below the offtake weir.

(d) *Soils*

Throughout this catchment soils are deeply weathered and consist of dark reddish-brown, well structured sandy to sandy clay loams on southern slopes with lighter coloured and coarser textured soils on the north and west aspects.

The only erosion seen on the catchment existed on old snig tracks on freehold land.

(e) *Vegetation*

Forest cover can be divided into two types. On the southern aspects and moister areas Mountain ash dominates, while on the north and west aspects Messmate and Silvertop exist as a mixed stand. Much of the mature timber has been removed from the freehold land, Crown Allotments 17, 18, 19. Parish of Beenak. Crown Allotment 21 and 22 have been partly cleared, and this area is now covered by bracken.

3. LAND TENURE AND MANAGEMENT

(a) Reserve Forest

This area of approximately 800 acres is being managed for hardwood forest, and there appears to have been little extraction for some years. Access tracks are overgrown and generally in a stable condition.

(b) Alienated Land

The major landholders, Messrs. J Sharp & Sons Pty Ltd, hold Crown Allotments 17, 18 and 19, Parish of Beenak, and have extracted much of the mature timber. They are believed to be holding this for future timber requirements. On Crown Allotments 20, 21 and 22 there has been no activity for some years. As previously mentioned this area has been partly cleared and now under bracken. A portion of this area could be developed for agriculture, but owing to the available area and the elevation of 1800 - 2000 feet the best land use would be Forestry.

4. LAND USE DETERMINATION

If the Land Utilization Advisory Council considers that this Catchment should be proclaimed, a simple land-use determination could be formulated. This should incorporate three main categories, that of protective forest only, along the streams and around the offtake weir. A second category where forest utilization should be permitted, and this would cover the balance of the catchment with the exception of a small portion in the NE corner.

This small area of approximately 40 acres of gently sloping land is at present cleared and under bracken. While it is not a farm unit and is considered to be ideal for forest purposes, it is also suitable and safe for agricultural purposes. A third category, allowing for alternative use of forestry or agriculture would therefore be incorporated.

CONCLUSION

The McCrae's Creek Catchment should be managed completely for forestry purposes on both Reserved Forest and freehold land, except for a small portion in the north-east corner.

The catchment conditions at present are good and a land-use determination could be formulated to maintain this position, should the Land Utilization Advisory Council recommend the proclamation of this area.

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