

MANAGEMENT PLANNING REPORT

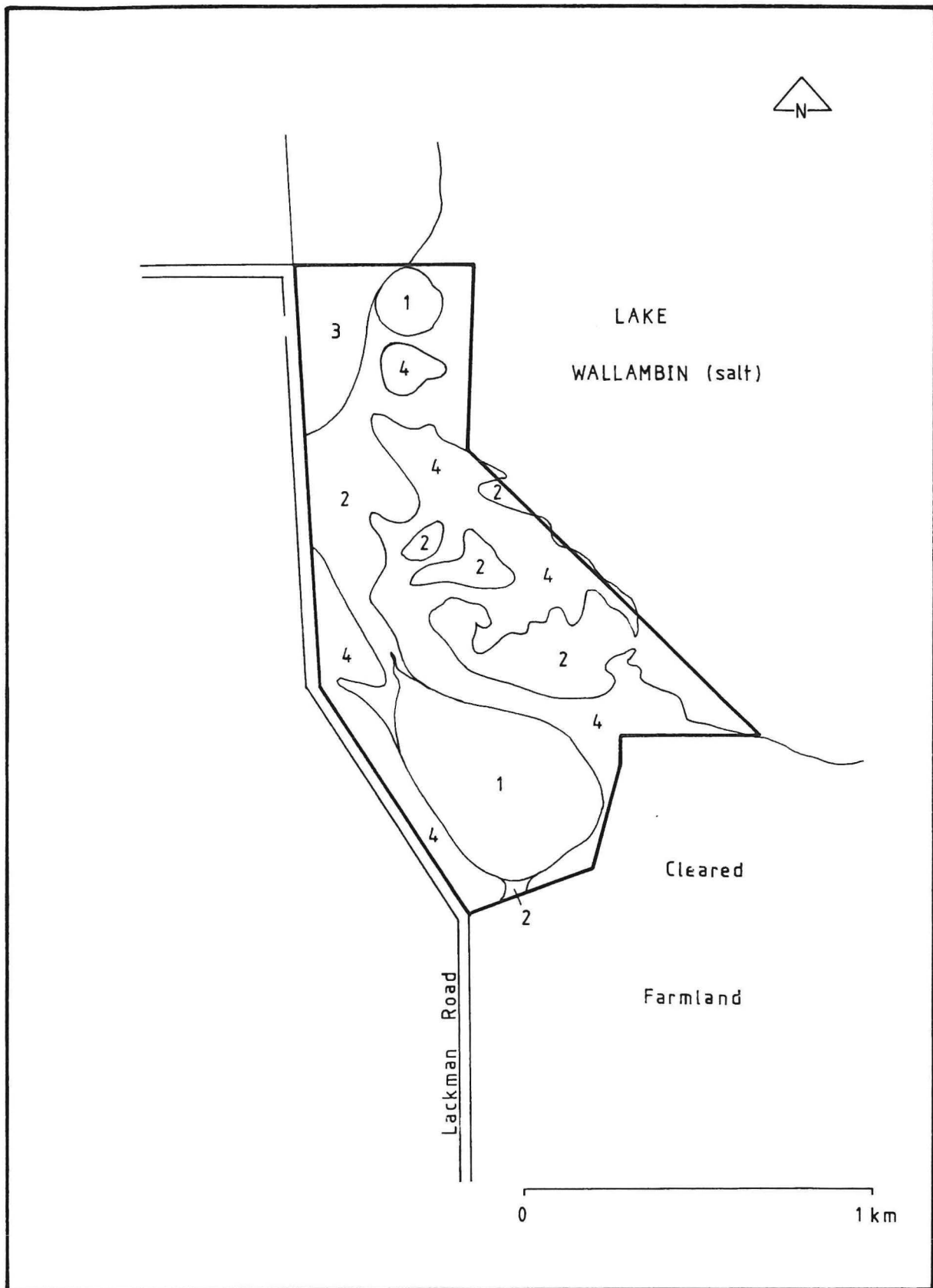
WYALKATCHEM SHIRE

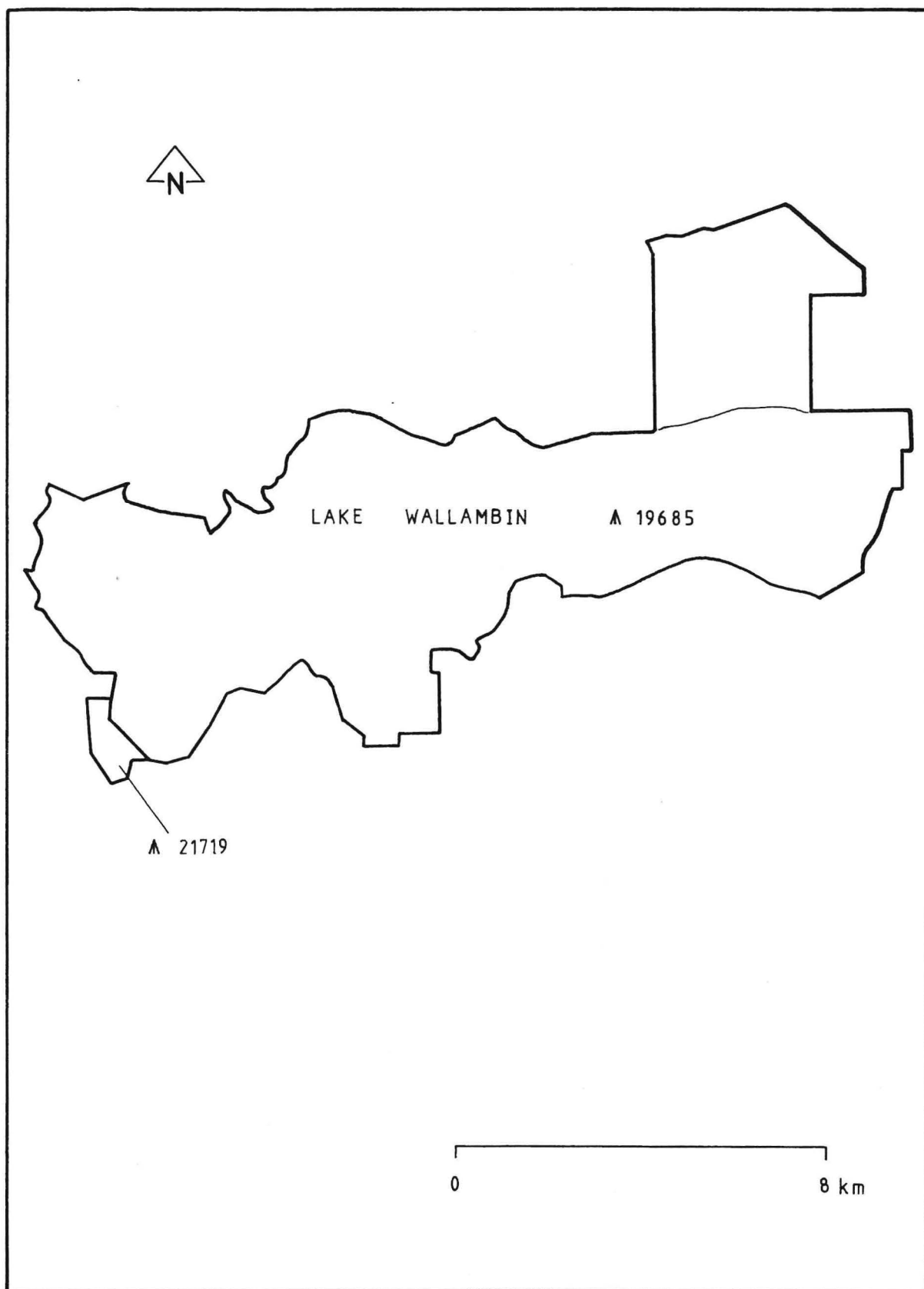
RESERVE NO.21719

Andrew A.E. Williams

WALLAMBIN

Λ 21719





Reserve No.21719 in relation to
Lake Wallambin (Reserve No.19687)

TABLE 1: VEGETATION CLASSIFICATION AS USED IN WHEATBELT SURVEY

| LIFE FORM/HEIGHT CLASS | | CANOPY COVER | | | |
|------------------------|-------------------|-------------------------------|----------------------------------|-------------------------------|-----------------------------------|
| | | DENSE 70-100% ^d | MID-DENSE 30-70% ^c | SPARSE 10-30% ⁱ | VERY SPARSE 2-10% ^r |
| T | Trees >30m | Dense Tall Forest | Tall Forest | Tall Woodland | Open Tall Woodland |
| M | Trees 15-30m | Dense Forest | Forest | Woodland | Open Woodland |
| LA | Trees 5-15m | Dense Low Forest A | Low Forest A | Low Woodland A | Open Low Woodland A |
| LB | Trees <5m | Dense Low Forest B | Low Forest B | Low Woodland B | Open Low Woodland B |
| KT | Mallee tree form | Dense Tree Mallee | Tree Mallee | Open Tree Mallee | Very Open Tree Mallee |
| KS | Mallee shrub form | Dense Shrub Mallee | Shrub Mallee | Open Shrub Mallee | Very Open Shrub Mallee |
| S | Shrubs >2m | Dense Thicket | Thicket | Scrub | Open Scrub |
| SA | Shrubs 1.5-2.0m | Dense Heath A | Heath A | Low Scrub A | Open Low Scrub A |
| SB | Shrubs 1.0-1.5m | Dense Heath B | Heath B | Low Scrub B | Open Low Scrub B |
| SC | Shrubs 0.5-1.0m | Dense Low Heath C | Low Heath C | Dwarf Scrub C | Open Dwarf Scrub C |
| SD | Shrubs 0.0-0.5m | Dense Low Heath D | Low Heath D | Dwarf Scrub D | Open Dwarf Scrub D |
| P | Mat plants | Dense Mat Plants | Mat Plants | Open Mat Plants | Very Open Mat Plants |
| H | Hummock Grass | Dense Hummock Grass | Mid-Dense Hummock Grass | Hummock Grass | Open Hummock Grass |
| GT | Bunch grass >0.5m | Dense Tall Grass | Tall Grass | Open Tall Grass | Very Open Tall Grass |
| GL | Bunch grass <0.5m | Dense Low Grass | Low Grass | Open Low Grass | Very Open Low Grass |
| J | Herbaceous spp. | Dense Herbs | Herbs | Open Herbs | Very Open Herbs |
| VT | Sedges >0.5m | Dense Tall Sedges | Tall Sedges | Open Tall Sedges | Very Open Tall Sedges |
| VL | Sedges <0.5m | Dense Low Sedges | Low Sedges | Open Low Sedges | Very Open Low Sedges |
| X | Ferns | Dense Ferns | Ferns | Open Ferns | Very Open Ferns |
| | Mosses, liverwort | Dense Mosses | Mosses | Open Mosses | Very Open Mosses |

MANAGEMENT PLANNING REPORT

WYALKATCHEM SHIRE

RESERVE No. 21719

I. INTRODUCTION

Reserve No. 21719 (Cowcowing Agricultural Area Lot 152) is situated in the northern part of the Shire, ca. 7 km east-north-east of Nalkain Siding and ca. 20 km north of Korrelocking Siding. It lies on the south-western edge of Lake Wallambin, and is shown on lithographs 2335-1 - Wyalkatchem and 2435 - IV - Yelbeni.

In July 1976 the Department of Lands and Surveys put forward a proposal that Lake Wallambin (Public Utility Reserve No. 19685 and No. 21719) should be set aside for the "Conservation of Flora and Fauna". However, the Department of Mines opposed the proposal on the grounds that Lake Wallambin was regarded as a useful future source of gypsum. Further correspondence confirmed that the Department of Mines was not willing to withdraw its objection.

On 30 March 1979 Reserve No. 21719 (which covers only a small fraction of the lake system) was gazetted for the Conservation of Flora and Fauna with vesting in the Western Australian Wildlife Authority.

2. PHYSICAL CHARACTERISTICS AND RELATIONSHIPS

Reserve No. 21719 is irregular in shape with an area of 121.5226 ha and an external perimeter of ca. 5.25 km. It lies on the south-western edge of Lake Wallambin and is in effect part of this system. Within the Reserve are two seasonal salt lakes surrounded by low-lying samphire flats. *Melaleuca* scrub is found on the areas of slightly elevated ground. To the west and south the land has been cleared for farming. The best route of access is along Lackman

Road which borders the reserve on the western side. Most of the reserve is flat with only minor variations in elevation. To the north-west and south-west the altitude rises ca. 10 metres where the Reserve borders on cleared farmland.

3. SOILS AND VEGETATION

Heavy clays are characteristic of the lake beds and samphire flats, becoming more loamy in texture on the slightly elevated areas. The vegetation can be separated into the following categories:

AREA 1.

Seasonal salt lakes

Shallow clay pans which support no vegetation apart from a narrow belt of Samphire Halosarcia pergranulata around the edges.

AREA 2.

Samphire flats

Halosarcia pergranulata Low Heath D to ca. 0.25 metres, average cover ca. 50%.

AREA 3.

Grassland

Low Grass and scattered Atriplex sp. shrubs to ca. 0.5 metres with a few degenerate eucalypts emergent to ca. 18 metres.

AREA 4.

Elevated margins of salt lakes and samphire flats

Melaleuca uncinata and Melaleuca lateriflora Thicket/Scrub to ca. 3 metres with Acacia colletioides to ca. 2.5 metres. This over an Atriplex sp. dominated Dwarf Scrub D and Open Low Grass understorey.

On the higher ground along the western border of the Reserve, Eucalyptus salmonophloia and Eucalyptus loxophleba are emergent ca. 15 to 20 metres.

4. FAUNA

Birds

Emu
Black Swan
Black Duck
Crested Pigeon
Galah
Port Lincoln Ringneck
Richard's Pipit
Yellow-rumped Thornbill
Willy Wagtail
White-fronted Chat
Singing Honeyeater
Black-faced Wood-swallow

~~21/6/84~~
21/6/84: Chestnut-breasted Shelduck
white-faced Heron
Magpie Lark
Port-Lincoln Ringneck
Galah
Corvid

9/7/84: Blue and white Wren
Grey Teal
Aust. Wood Duck
Yellow Throated Miner
Black-faced cuckoo-shrike
Nankeen Kestrel

Mammals

Rabbits - common
Fox - tracks noted
Grey Kangaroo - tracks noted

Euro

5. PAST MANAGEMENT, USES AND FIRE HISTORY

This reserve has in the past been subjected to considerable human pressure. The land surrounding the lake system was cleared when the area was first opened up for farming. At this time salt mining was apparently an important activity.

According to the District Wildlife Officer's report of 26 November 1976 the lake system had been worked for salt from the time of the first settlement, although he found no sign of recent workings.

The area has also suffered from grazing pressure. When the reserve was originally gazetted for Public Utility in 1937, it was the subject of an annual renewable grazing lease. The results of this pressure are still evident to this day. At some time the north-west corner of the reserve was largely cleared and is now predominantly grassland.

The farmland bordering the reserve to the west and south is well fenced and firebreaked. There are no fences along the northern boundary or across the salt flats to the east. At the northern end of the reserve a track leads to a sizable rubbish dump next to one of the salt lakes. No fire history exists for the reserve. The area does not appear to have been recently burnt. It has survived in its present state simply because it is not suitable for agricultural purposes. Farmers interviewed by the District Wildlife Officer in 1976 regarded the area as useless and had no objection to its becoming a Flora and Fauna reserve.

6. NATURE CONSERVATION VALUES

The reserve's main conservation value is undoubtedly as a seasonal wetland. On a brief visit to the area in the spring of 1982, Black Swans were seen with young and the lakes were also being utilized by ducks. The scrub along the western perimeter provided habitat for small passerine birds and Galahs were nesting in the emergent Salmon Gums.

A second visit to the reserve at the end of the summer showed a massive decrease in both the passerine and non-passerine birds, which suggests that the area is used as a transit locality by many species.

No mammal trapping programme has yet been undertaken but

the Fat-tailed Dunnart Sminthopsis crassicaudata may well occur on the samphire flats. (pers. comm. J. Rolfe).

7. MANAGEMENT OBJECTIVES

Management of the nature reserve will continue at a low level and will be primarily directed towards maintaining its value as an area suitable for waterbirds. Provisions for management include the following:

7.1. RUBBISH DISPOSAL

To remove the accumulation of farm related rubbish from the site at the northern end of the Reserve.

7.2. PROTECTION FROM FIRE

To protect the assets of the adjoining landowner from fire while at the same time maintaining the biological values of the Reserve.

7.3. PROTECTION FROM PESTS, ANIMAL AND WEED CONTROL

To protect the Reserve and surrounding farmland from damage as a result of infestation with animals and plants which are declared from time to time under the provisions of the Agricultural and Related Resources Protection Act.

7.4. RESERVE SIGNPOSTING

To erect standardised wooded routed reserve signs on the reserve.

7.5. NAMING OF RESERVE

It is hereby proposed that the name "Lake Wallambin Nature Reserve" be submitted to the Nomenclature Advisory Committee of the Department of Lands and

surveys for adoption and gazettal as the official name for the Reserve.

8. MANAGEMENT

8.1. RUBBISH DISPOSAL

The unsightly rubbish at the northern end of the reserve will be buried in a hole specifically dug for the purpose. The earth fill will then be replaced and compacted to as near the original contours as possible.

8.2. FIRE PROTECTION

Reduction of the dry grass at the northern end of the reserve will be carried out if this area is perceived as a threat by the adjoining landowner. Additional firebreaks are not required on this reserve.

8.3. CONTROL OF ANIMAL PESTS

Periodic inspections of the area will be carried out to monitor the rabbit population on the reserve. If this is seen to reach unacceptable levels officers of the Agriculture Protection Board will be requested to carry out an eradication programme.

8.4. RESERVE SIGNPOSTING

Standardised wooden routed signs bearing the name of the reserve will be erected at the northern and southern ends of the reserve alongside Lackman Road.

9. MANAGEMENT - GENERAL

During the currency of this Plan the Department of Fisheries and Wildlife may, with the approval of the Wyalkatchem Shire Council and the Chairman of the Western

Australian Wildlife Authority, undertake or authorise such other work or action as may be seen to be necessary or desirable to properly promote the stated objectives of management of the Reserve.

10. ACKNOWLEDGEMENTS

In this report the vegetation descriptions follow B.G. Muir's key devised for Wheatbelt vegetation. Bird nomenclature follows those names recommended by the R.A.O.U. My personal thanks are due to the staff of the Western Australian Herbarium for identifying plant specimens collected in the field.