

**SOUTH WEST
DEVELOPMENT
COMMISSION**



AND

**LESCHENAULT INLET
MANAGEMENT
AUTHORITY**



**LOT 131 CLIFTON PARK
MANAGEMENT PLAN**



Report (W.A. Waterways Commission)

SOUTH WEST DEVELOPMENT COMMISSION

9th Floor Bunbury Tower
61 Victoria St
BUNBURY
Western Australia 6230
Telephone: (097) 912000
Fax: (097) 912025

Postal Address:
Box 2000, PO
BUNBURY
Western Australia 6230

LESCHENAULT INLET MANAGEMENT AUTHORITY

Inner Harbour Road
BUNBURY
Western Australia 6230
Telephone: (097) 211666
Fax: (097) 218 290

Postal address:
Box 261, PO
BUNBURY
Western Australia 6230

LOT 131 CLIFTON PARK MANAGEMENT PLAN

**Report to the South West Development
Commission and Leschenault Inlet
Management Authority**

Prepared by E Wright

**Waterways Commission
216 St Georges Terrace
Perth WA 6000**

**Report No 49,
June, 1994**

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Dr Ray George assisted with editing the document and provided advice on bird species using the Collie River foreshore area.

Mr Alan Grist assisted with advice on species for rehabilitation, and prepared the sketch plans for landscaping works.

Mr Andrew Horan from CALM provided advice on fauna use of the study area.

Maps prepared by Brett Harrison with the assistance of the Integrated Land Information Programme using the WA Land Information System.

Section 5.3.1 is reproduced from History of Lot 131 provided by Mrs M Smith.

LOT 131 CLIFTON PARK SUBCOMMITTEE

Chairman Sir Donald Eckersley OBE

Executive Officer Mr Richard Makowiecki

Shire of Harvey Cr Greg Hester

Mr Charles Lockwood

CALM Mr Bob Chandler

LIMA Mr Eric Wright

Community Representatives

Mr Pip Phillips

Mrs Margaret Radge

Mr Dennis Courtney

Dr Ray George

Mr Alan Grist

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FOREWORD

The waterways and foreshores of the Leschenault Estuary and associated rivers combine to form a singular significant conservation resource providing a recreation focus for the Bunbury region.

In order to maintain and enhance the conservation and recreation values for the community and the environment Lot 131 Clifton Park was purchased. This management plan has been prepared by a working group involving the local community. The plan is designed to promote a better understanding of the area and to provide a formal agreement between all the parties involved on how the area is to be used and managed.

It is the aim of the plan to develop the area as a regional and local conservation and recreation reserve. In order to achieve these objectives a series of recommendations have been developed. It is intended that these recommendations be implemented over a five year period, and to involve the community as much as possible in actively managing the area.

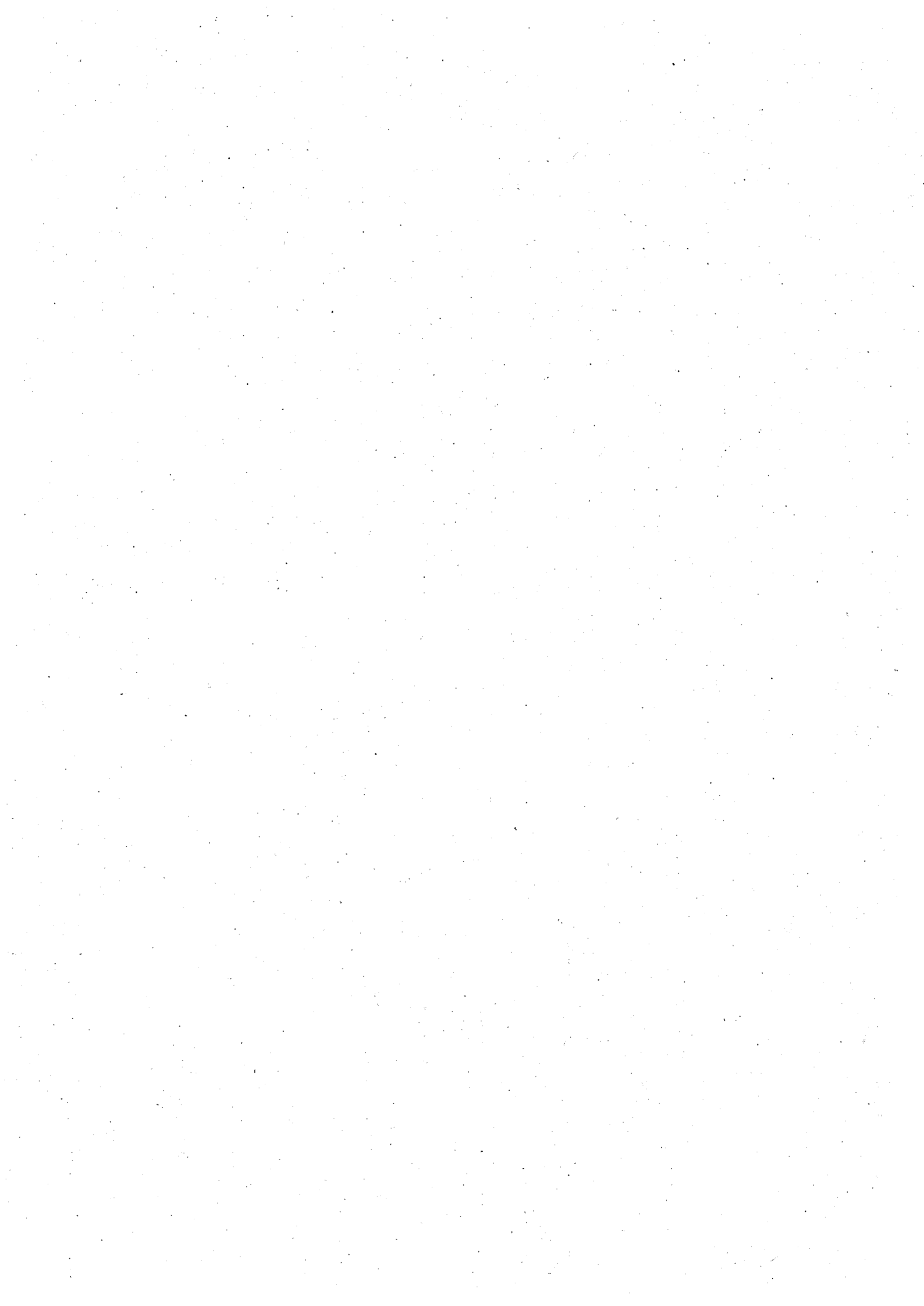


Sir Donald Eckersley OBE

Chairman
South West Development
Commission

and

Chairman
Leschenault Inlet Management
Authority



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1. INTRODUCTION

Located alongside the Collie River at Clifton Park, Lot 131 has been subject to a number of development proposals. As far back as 1976, owners of Lot 131 have prepared plans for development, including one suggestion that a canal be excavated into the lot. Another proposed development suggested a lake in the centre of a residential area, with housing lot areas filled above the 1:100 year flood level.

In 1992, a rezoning request by the Shire of Harvey and an application for subdivision for residential lots was rejected by the Minister for Planning after the local community raised concerns about the use of this land. Lot 131 was subsequently bought by the State Government to be used for community purposes.

The title is currently held in fee simple by the South West Development Commission (SWDC). The decision by State Cabinet in December 1992 to purchase Lot 131 for community use states that the land will be jointly vested with the SWDC and LIMA. The prescribed vesting has not occurred due to uncertainty over the future use of the site, and this process is to be completed after the plan has been finalised and endorsed by the Shire of Harvey, SWDC and LIMA.

This management plan has been developed essentially to address the issues related to how Lot 131 will be used, its function within the local and wider community, measures which can be taken to enhance and protect the area, and how it will be managed.

During the process of purchasing Lot 131, the lot boundaries were changed, and the lot has since been changed to Leschenault location 23 and being Lot 3 on diagram 83847. For the purposes of this management plan, the lot will be referred to by the commonly known title of Lot 131.

2. DEVELOPMENT OF THE PLAN

A working group was formed in March 1993 to prepare a management plan for Lot 131 Clifton Park. The management plan was initially prepared as a draft document to present background information, and recommendations for management and use, to the community.

2.1 Working group members

The working group comprised 11 members drawn from the local community, the Shire of Harvey, South West Development Commission (SWDC), Leschenault Inlet Management Authority (LIMA), and Department of Conservation and Land Management (CALM).

Chairman	Sir Donald Eckersley
Community Representatives	Mr Pip Phillips
	Mrs Margaret Radge
	Mr Dennis Courtney
	Dr Ray George

Shire of Harvey	Mr Alan Grist Cr Greg Hester Mr Charles Lockwood Shire Engineer
LIMA	Mr Eric Wright
CALM	Mr Robert Chandler
SWDC	Mr Alan Cross, Mr Richard Makowiecki

The Western Australian Water Authority declined membership of the working group, but were willing to provide advice as required.

2.2 Relevant studies and reports

The following studies and reports have been considered in the preparation of this management plan. Some of these studies influence how the area is to be managed and/or used and readers are referred to these reports for further information, and understanding of the approach taken in the preparation of the management plan.

Leschenault Estuary, Collie River, Preston River Regional Flood Study (George 1981)

Clifton Park Foreshore Reserve Management Plan (Waterways Commission 1989)

System 6 Report (Department of Conservation and Environment 1983)

Leschenault Waterways Management Programme (Waterways Commission 1992)

Collie and Brunswick Rivers Foreshore Reserves Study Draft Report (Woodcock 1993)

Fringing Vegetation of the Lower Collie and Brunswick Rivers 1992 (Pen 1992)

2.3 Public consultation

The draft plan was released for public comment during November 1993 with a two month period for submissions to be made. The process for public consultation was planned ahead to include a public launch for the draft plan, a public workshop several weeks later to explain the plan and provide guidance on the contents of the plan and how to make a submission.

A questionnaire was prepared to distribute at the public workshop to help procure public input.

2.4 Schedule

March 1993	Form Working Group
August 1993	Draft Plan Completed
November 1993	Release Plan For Public Comment
February 1994	Finalise Plan From Public Input
March 1994	Plan Completed
June 1994	Release Final Plan and Form Management Committee
April 1994	Commence Implementation
March 1999	Review Plan

3. TERMS OF REFERENCE

The following terms of reference for the working group were prepared by the SWDC, and amended by the working group after discussion at its first meeting.

3.1 Aim

To develop a plan, management structure and implementation program for integrated recreation, conservation and other compatible uses within the study area - Lot 131 Lucy Victoria Avenue Clifton Park.

3.2 Study area

The study area is defined as Lot 131 (Lot 3) Lucy Victoria Avenue Clifton Park (15Ha), being the land contained within the area bounded by the Old Coast Road at Australind, Lucy Victoria Avenue, and reserve 31576 alongside the Collie River (Map 1).

3.3 Tasks

- Identify land uses that are compatible with the conservation of the river and foreshore.
- Conserve and enhance the natural environment.
- Provide opportunity for recreational use and public enjoyment of the land and the foreshore area.
- To seek consultation with the residents of Clifton Park to determine community aspirations for the study area.
- To encourage a sense of community ownership for the study area.
- To investigate and recommend other compatible uses.
- The completed final plan shall be forwarded to the Shire of Harvey for consideration.
- The working group is to consider alternative sources of income for ongoing development and maintenance of Lot 131.

3.4 Structure

The working group is chaired by the South West Development Commission and reports to the Board of the SWDC and also to the Board of the Leschenault Inlet Management Authority. The LIMA provides executive and administrative support.

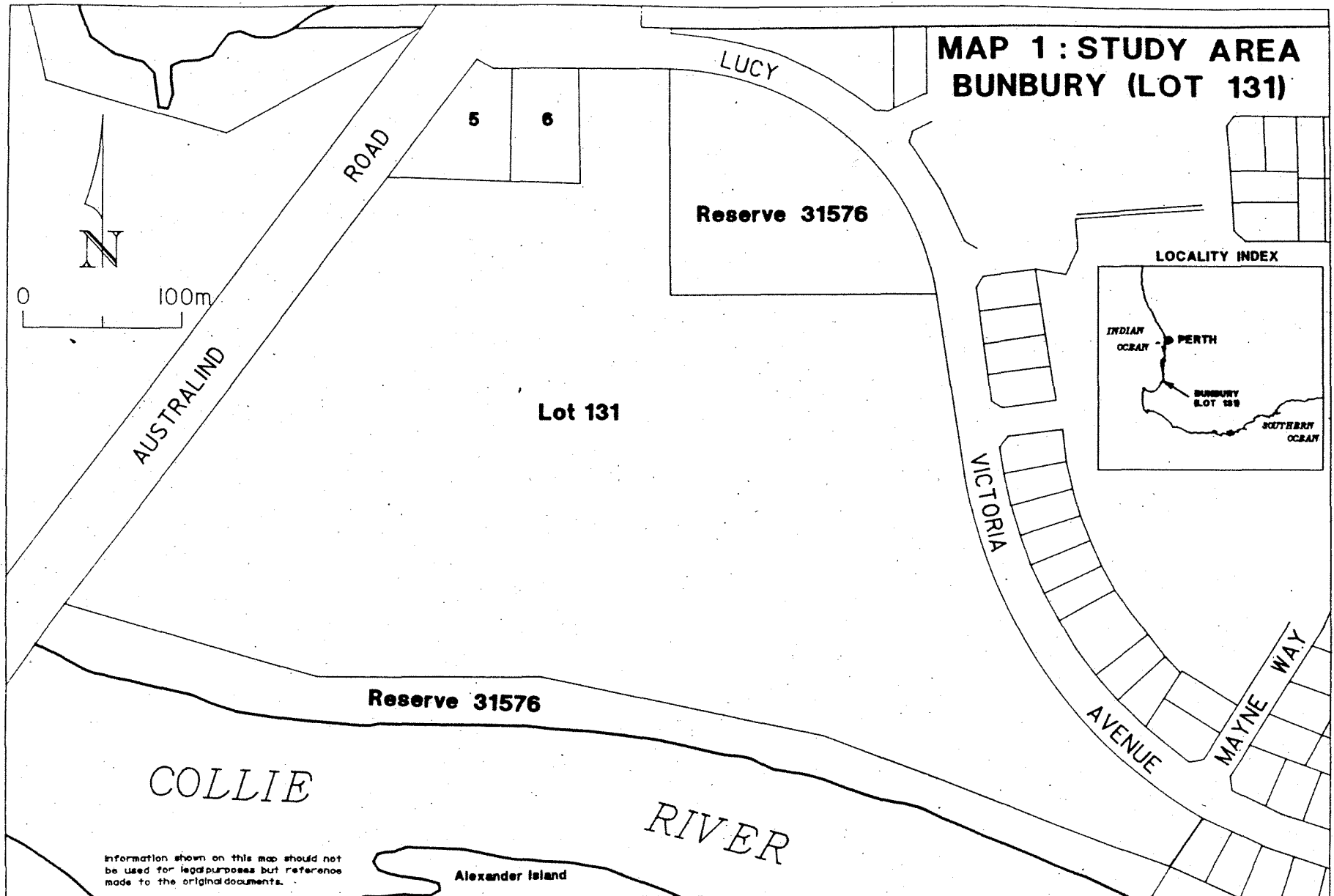
3.5 Status

The working group has the status of a sub-committee of the SWDC board, and a working group committee of the Leschenault Inlet Management Authority.

3.6 Duration

The working group will prepare and finalise the management plan during the period March 1993 to March 1994.

MAP 1 : STUDY AREA BUNBURY (LOT 131)



Information shown on this map should not be used for legal purposes but reference made to the original documents.

4. DEFINITION OF THE STUDY AREA

4.1 Physiography, landform and relationships

Lot 131 is located in the Bunbury Region of Western Australia (33° 21' S 115° 42' E). The region experiences a Mediterranean climate with an average annual rainfall of 871mm mainly occurring from May to August. Lot 131 is located on the northern foreshore of the Collie River adjacent to the Collie River traffic bridge.

The area forms part of the Collie River flood plain, and generally lies below the 2 metre contour. The western half including the wetland area lies below the 1 metre contour. The eastern end near the Mayne Way intersection with Lucy Victoria Avenue rises to the 5 metre contour.

The site is generally level with a small depression in the centre creating a wetland. This wetland has been connected to the Collie River with the excavation of a drain.

4.2 Vegetation

Lot 131 contains four main categories of fringing vegetation; wetland salt-marsh vegetation, pastured woodland, estuarine fringing forest, and sandy rise vegetation (Pen 1993).

The wetland area comprises salt marsh vegetation consisting of closed herbland (*Sarcocornia quinqueflora*) and surrounding low open heath (*Halosarcia indica bidens*). Pastured woodland (*Eucalyptus rudis* and *E. rudis-Agonis flexuosa*) comprises most of the land area, and the river fringe consists of remnant low-open forest (*Casuarina obesa-Melaleuca raphiophylla-E. rudis*) and open-closed forest (*C. obesa - E. rudis*). A small amount of sandy rise vegetation (*Eucalyptus calophylla-A. flexuosa* and *Banksia attenuata-A. flexuosa*) occurs at the eastern end.

4.2.1 Salt-marsh vegetation

The low samphire *S. quinqueflora* dominates this community, with other associated species including seablite (*Suaeda australis*) and *Sarcocornia blackiana*. Shorerush (*Juncus krausii*) can be found fringing the wetland.

The low-open heath community consists of the shrubby glasswort (*H. indica bidens*), samphire (*S. quinqueflora*) and saltwater couch (*Sporobolus virginicus*). This saltmarsh is highly disturbed with tracks and wheel ruts, and the community has become infested with annual weeds.

4.2.2 Pastured woodland

Much of Lot 131 has been cleared at some time in the past. All that remains of the old native forest and woodland communities which once covered this area are their larger trees. (Pen 1993) These trees now form a pastured woodland which imparts an attractive landscape and character to the area. A stand of ageing Flooded Gum (*E. rudis*) woodland remains near the Collie River bridge.

On the eastern side of Lot 131, the pastured woodland includes stands of Flooded Gum, Peppermints (*A. flexuosa*), Marri (*E. calophylla*) and Grey Stinkwood (*Jacksonia furcellata*). The understorey consists of introduced exotics and weeds, mainly of grasses, with some lupins (*Lupinus spp.*) and watsonia (*Watsonia bulbilifera*). The lupins regenerate each winter after the rains commence.

Reserve 31576 on the north east side of Lot 131 has stands of ageing Flooded Gum, and has been developed as a parkland cleared recreation area and the grass is regularly mown by the Shire of Harvey.

4.2.3 Estuarine fringing forest

A thin band of open-closed forest Flooded Gum and Sheoak (*C. obesa*) lines the Collie River riverbank. This vegetation has been greatly disturbed by clearing, frequent burning and livestock damage. The shorerush is found along the riverbank at the high water mark (HWM), and reflects the generally saline condition of the lower reaches of the Collie River.

4.2.4 Sandy rise vegetation

A small amount of sandy rise vegetation comprising Marri, Peppermint and Banksia (*E. calophylla-A. flexuosa* and *B. attenuata-A. flexuosa*) occurs at the eastern end of Lot 131 near to the end of Mayne Way. A moderate slope from the riverbank up to Lucy Victoria Avenue supports a fairly open forest or woodland comprising Marri, Peppermint and Banksia. The native understorey has been depleted by grazing and frequent burning and has largely been replaced by abundant weeds. The main weeds include veldt grass (*Erharta calycina*), lupins and wild oats (*Avena spp.*) (Pen 1993).

4.2.5 Exotic and introduced plants

The foreshore area and the majority of Lot 131 not including the wetland has a coverage of introduced grasses, predominantly couch (*Cynodon dactylon*), kikuyu (*Pennisetum clandestinum*), veldt grass, and wild oats. Lupins are an annual plant and bracken fern grows on parts of Lot 131 closest to the river. A stand of bamboo is located near the small wetland at the outfall of the Lowe Court drain.

The bulrush (*Typha orientalis*) has established in the Lowe Crt wetland, and has completely covered the wet area. To some extent it provides a habitat for wildlife, and occurring at the outfall of stormwater drains from Lowe Crt and Lucy Victoria Avenue it has a positive role in absorbing nutrients and collecting sediment and rubbish from stormwater runoff.

Bulrush is generally regarded as a nuisance species, which takes over a habitat entirely, prohibiting natural species from the area. In this instance, the area covered is small and unlikely to expand. Nevertheless if not removed the bulrush will need to be monitored.

Five old trees adjacent to Lucy Victoria Avenue have been identified as Cape Lilac trees. These were probably established when the property was used for farming.

4.3 Fauna

A variety of animals use the area including waterbirds, bush birds, reptiles, mammals, invertebrates and insects.

4.3.1 Reptiles

Several species of snake inhabit Lot 131 including the Dugite (*Pseudonaja affinis*). The Tiger Snake (*Notechis scutatus*) and Carpet Python are likely to inhabit the area given the nature of the terrain and vegetation (Horan pers. comm.). A number of lizards are expected to be found on the site, however no attempt has been made to survey or observe these species.

4.3.2 Waterbirds

Waterbirds use the wetland area on Lot 131 for feeding and loafing. The waterbirds observed at this site include the Australian Pelican (*Pelecanus conspicillatus*), Yellow Billed Spoonbill (*Platylea flavipes*), Nankeen Night Heron (*Nycticorax caledonicus*), White Faced Heron (*Ardea novaehollandiae*), Great Egret (*Egretta alba*), Pied Oystercatcher (*Haematopus longirostris*), Australian Shelduck (*Tadorna tadornoides*), Black Duck (*Anas superciliosa*), and several unidentified species of small migratory wading birds.

The Great Egret, Night Heron and White Faced Heron feed on frogs, insects, small fish and invertebrates. They utilise the wetland area, and the drain into the Collie River. Egrets and Herons have also been observed feeding on insects over much of the grassed areas of Lot 131. The Yellow Billed Spoonbill and Black Duck feed on invertebrates and mosquito larvae in the wetland area. The migratory waders feed on invertebrates in the wetland area.

The Osprey (*Pandion haliaetus*) and the Nankeen Kestrel (*Falco cenchroides*) have been observed in the area of the Collie River mouth, and the area of coverage by these birds for feeding is likely include Lot 131 area.

4.3.3 Fringing forest birds

A variety of small birds are frequently observed feeding and roosting within the woodlands and fringing forest on Lot 131. The species likely to use the area include Wrens, Honeyeaters, Finches, Crows, and Parrots. Species which have been observed in the area include the following.

Golden Whistler (<i>Pachycephala pectoralis</i>)	Western Warbler (<i>Gerygone fusca</i>)
Sacred Kingfisher (<i>Halcyon sancta</i>)	Laughing Kookaburra (<i>Dacelo novaeguineae</i>)
Pied Butcherbird (<i>Cracticus nigrogularis</i>)	Australian Magpie (<i>Gymnorhina tibicen</i>)
Magpie Lark (<i>Grallina cyanoleuca</i>)	Black-Faced Cuckoo-shrike (<i>Coracina novaehollandiae</i>)
Red Wattlebird (<i>Anthochaera carunculata</i>)	Willy Wagtail (<i>Rhipidura leucophrys</i>)
Spotted Pardalote (<i>Pardalotus punctatus</i>)	Ringnecked Parrot (<i>Platycercus zonarius</i>)
Red-capped Parrot (<i>Purpureicephalus spurius</i>)	

Several species nest in the area including the Spotted Pardalote which uses hollow sections in the old Flooded Gums alongside the Collie River.

River foreshore areas provide for a high diversity of woodland bird species as a result of the variety of habitats created by the range of different plant communities.

4.3.4 Mammals

The largest animal inhabiting the Lot 131 area is the Western Grey Kangaroo (*Macropus fuliginosus*). The kangaroos use the area for feeding and resting, and appear to have some linkage with the kangaroos which inhabit the Bunbury Golf Course area. Kangaroos have been hit by cars crossing the road between Lot 131 and the golf course.

It is likely that the Western Ring Tail Possum (*Pseudocheirus peregrinus occidentalis*) and the Common Brush Tail Possum (*Trichosurus vulpecula vulpecula*) would have inhabited Lot 131 area prior to clearing earlier this century. Ring Tail Possums have been found in the bush near the golf course. The native water rat (*Hydromys chrysogaster*), inhabits rush and other dense fringing vegetation on the river and estuary foreshore in this area.

4.3.5 Other animals

Introduced species of animals such as domesticated cats (*Felis catus*) and dogs, foxes (*Vulpes vulpes*), and others including rabbits, degrade the natural environment, through predation, competition for food resources and habitat destruction. Their presence in the geographically restricted habitats such as river foreshores has led to a drastic reduction of native populations, and may lead to local extinction.

Cats along with foxes represent the greatest threat to native animals. Apart from a few native water rats, Western Grey Kangaroo, Western Ring Tail Possum and Common Brush Tail Possum there are no other mammals known to exist in the study area. Persisting populations of native animals have been severely reduced along the foreshores.

Local government authorities have little or no control over cats in their municipalities. Brief investigation by Swan River Trust staff has indicated that the LGAs support legislation for control of total cat numbers (Siemon 1993).

The Kings Park Board (KPB) conducts a cat control program which has been extremely successful in convincing adjacent land owners to control their cats. The program is based on trapping cats, transporting them to the Cat Haven where if not claimed within seven days, the cats are put down. The KPB funds the humane disposal (Siemon 1993).

Dogs disturb native fauna particularly frogs, lizards, birds and mammals. Unrestrained dogs accessing wetland and bushland areas threaten this native fauna (Siemon 1993).

Areas with little remnant vegetation are appropriate regions for exercising dogs, however it is up to the Shire of Harvey to determine such access. A section of the Collie River foreshore fronting Lot 131 has been designated a dog exercise area by the Shire.

The Shire has established quite rigorous controls over dogs because of their direct impact on people, unlike cats which do not effect people to the same extent. However cats do have a direct impact on birds and small mammals.

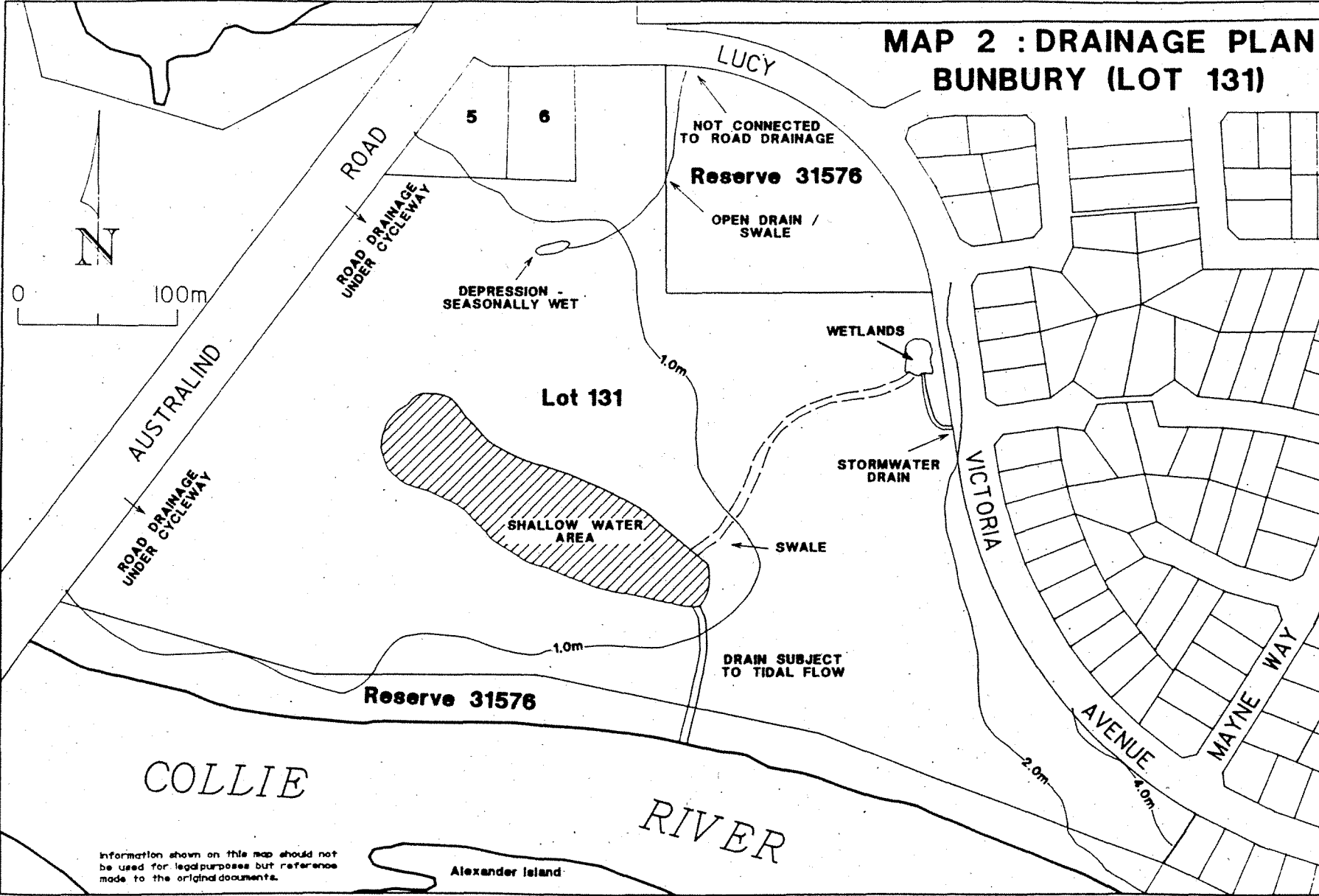
4.4 Hydrology and drainage

Map 2 shows the drainage and stormwater discharges onto Lot 131 from surrounding areas. The major feature of on site drainage is an open drainage channel connecting the wetland to the Collie River.

This open channel allows tidal interchange between the wetland and the Collie River. During winter the depth of water in the wetland rises to about 0.8m at high tide. During summer and at neap tides in the Estuary, the wetland bed becomes exposed. The water levels in the wetland are likely to vary between 0.0m and 0.6m depending on seasonal tidal and atmospheric conditions.

Depressions on Lot 131 drain surface runoff from the area near the Golf Course turn-off south across Lot 131 towards the wetland. A small wetland near to Lowe Court is used as a compensating basin for stormwater drainage from the Lowe Crt/Lucy Victoria Avenue area. Some stormwater runoff from the Old Coast Road drains onto Lot 131 near to the road reserve boundary.

MAP 2 : DRAINAGE PLAN BUNBURY (LOT 131)



4.5 Visual qualities

Lot 131 offers a visual landscape dominated by parkland cleared open space, and views across to the Collie River. The area has important visual amenity values for locals living within the Clifton Park area, as well as for others passing the site each day commuting between Australind and Bunbury. People who use the extensive foreshore on the Eaton side of the Collie River have the Lot 131 area as a backdrop to the river. These people are drawn from the local and Bunbury regions.

5. LAND DEVELOPMENT AND USE

5.1 Land tenure and ownership

On 8 April 1992 Lot 131 was amalgamated with the old lots 5 and 6, and re subdivided to change the boundary locations for the two smaller lots. This arrangement was negotiated with the owners of Lot 131 as part of the purchase agreement. Lot 131 has now become lot 3 Volume CT1949 Folio 897 on diagram 83847.

For the purposes on this document, the study area will be referred to by the commonly known title of Lot 131.

Lot 131 was purchased by the State Government, and the title is held in fee simple by the SWDC. The decision by State Cabinet in December 1992 to purchase Lot 131 for community use states that the land will be jointly vested with the SWDC and LIMA. A copy of the Certificate of Title is shown as Figure 1.

Options for future ownership and management include

- transfer fee simple ownership to another authority such as Shire of Harvey or LIMA (WWC).
- transfer ownership to the Crown and create a new reserve and vest with Shire of Harvey, LIMA, or SWDC or some joint vesting of a combination of these Authorities.
- transfer ownership to the Crown and amalgamate Lot 131 with the existing foreshore reserve 31576 and vest with Shire of Harvey, LIMA, or SWDC or some joint vesting combination of these Authorities.

The process of transfer to the Crown includes removing Lot 131 from the provisions of the Transfer of Land Act by revestment action after transfer. The Department of Land Administration (DOLA) could then arrange for reservation and vesting in an appropriate Authority for a particular purpose. DOLA has advised there may be transfer and administrative expenses in this process.

5.2 Land zoning

Lot 131 lies within the Shire of Harvey land management area and is zoned "General Farming" (as at March 1994).

It is proposed Lot 131 be transferred to the crown and vested jointly with LIMA and Shire of Harvey (subject to their agreement) for Recreation and Conservation purposes. The Shire of Harvey have included a "Recreation" zoning for Lot 131 in the draft District Town Planning Scheme No. 1 which is in preparation. This zoning will reflect more accurately the proposed use of the area.

Figure 1: Certificate of Title Lot 3 Lucy Victoria Avenue

LT 37

ORIGINAL—NOT TO BE REMOVED FROM OFFICE OF TITLES

Application F1062&2

WESTERN



AUSTRALIA

REGISTER BOOK

VOL.

FOL

Volume 1949 Folio 894

CT 1949

897

CERTIFICATE OF TITLE

UNDER THE "TRANSFER OF LAND ACT, 1893" AS AMENDED



I certify that the person described in the First Schedule hereto is the registered proprietor of the undermentioned estate in the undermentioned land subject to the easements and encumbrances shown in the Second Schedule hereto.

Dated 16th February, 1993

REGISTRAR OF TITLES



ESTATE AND LAND REFERRED TO

Estate in fee simple in portion of Leschenault Location 23 and being Lot 3 on Diagram 83847, delineated on the map in the Third Schedule hereto.

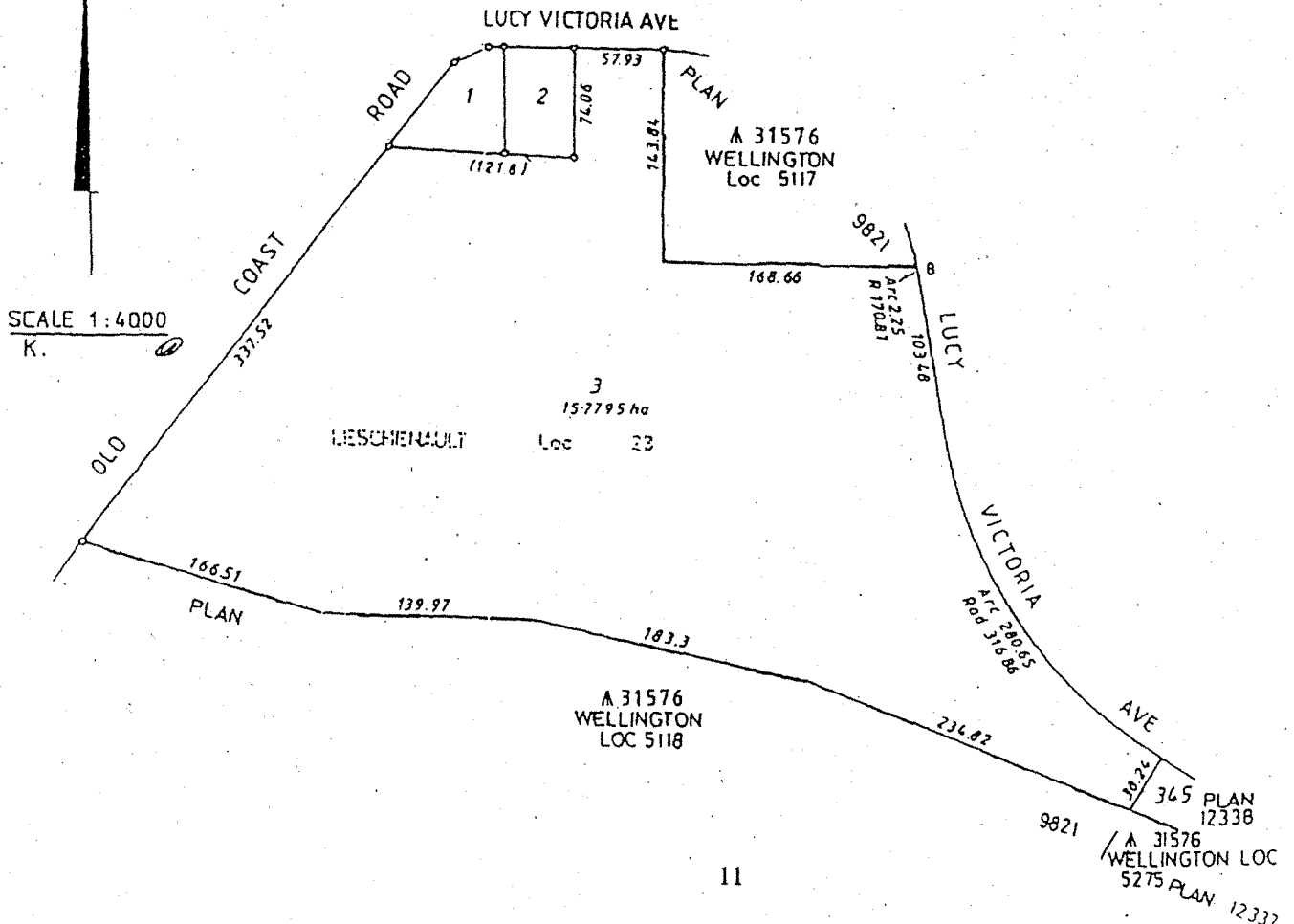
FIRST SCHEDULE (continued overleaf)

~~Vukelic Holdings Pty. Ltd. of 12 undivided 25th shares, Kintyre Holdings Pty. Ltd. of 8 undivided 25th shares and Koombana Investments Pty. Ltd. of 5 undivided 25th shares, all of Post Office Box 128, Bunbury, as tenants in common~~

SECOND SCHEDULE (continued overleaf)

NIL

THIRD SCHEDULE



Page 1 (of 2 pages)

1949 897

VOL. FOL.

PERSONS ARE CAUTIONED AGAINST ALTERING OR ADDING TO THIS CERTIFICATE OR ANY NOTIFICATION HEREON

NOTE: ENTRIES MAY BE AFFECTED BY SUBSEQUENT ENDORSEMENTS

5.3 Patterns of human use

5.3.1 Recent history of the site

In a report to the W A Company written in April 1844 was the first mention of someone living on the land known as Lot 131 Clifton Park. It was then called "Greenwood" - Leake's block and was Location 23 on the maps of the day. In November of 1844 it was stated that Houghs lived there, seven persons in all, two of them employees and they had 3½ acres of wheat on the property and 1 acre of potatoes. It is possible that Hough was just a tenant and worked this land until he took up his own property, "Glen Huon" across the Collie River.

A few years later Abraham Hurst and his son Basil were known as the owners of "Greenwood". Abraham was an agricultural labourer and a tailor who was recorded as part of the "townsite population" of Australind in November 1844. No doubt he turned his hand to either trade to make a living.

Originally the block consisted of 320 acres, but now all that remains since subdivision, and still zoned "General Farming", is Lot 131 - still "at the mouth of Collie" as it was described all those years ago. It was always a small block for farming operations and through the years more intensive farming of pigs and fowls took place. Basil Hurst was known for the number of pigs he raised, while the Gibbs' had 2,000 fowls and milked 20 cows on the block.

The property name "Greenwood", was carried on by the Hursts and later by the Gibbs family. However a story has come down from those very early days that the land generally around the mouth of the Collie River was referred to as "Mardalup". It was said this name meant "many waters" to them. (Oral History, T Gibbs)

In C Staples' book "They Made Their Destiny" he refers to Basil Hurst being the original occupier of the Greenwood grant just north of the Collie River mouth. However, other documents show that Hough was there for a time. John Hurst son of Basil, left this property and took up land at Cookernup, probably with his brother; leaving the old home built by Basil Hurst near the Cape Lilac trees which are still surviving. The old home had been expanded from its original two rooms by various additions and verandas around these rooms. This old home was still there in the 1940's occupied by Samuel Gibbs, son of James Dagley Gibbs, and his wife Lavinia - always known as Bina, nee Hurst. The Gibbs had come from Aylesbury, Buckingham County, England, and a descendant, Tom Gibbs, with his wife, has recently been back to Aylesbury to trace the families' connections there.

A son of James and Bina, Clarence Leicester Gibbs, had built a weatherboard home near the original family home and ran a poultry farm as well as doing fencing and other farming jobs around the district. It was very easy to let the fowls "range free" in those days as there were very few fences. (Oral History, T Gibbs)

When Tom Gibbs, son of Clarrie, married in 1956, the young couple remained on "Greenwood" and built their home nearer to where Lucy Victoria Avenue is today. This was a modern home and was relocated across Lucy Victoria Avenue by the Patersons when the subdivision, sometimes known as "Rare Earth" was begun by Johnson and his partners. Again because of the smallness of the farm it was necessary for Tom Gibbs to get work away from home, and for many years he worked at "Parkfield" for Mr Bonny. At times he also worked at CSBP superphosphate works at Picton, driving to work in his father's old utility. The farm had a horse paddock and stables near the river under the big gum trees, some of which are still there, but by the 1940's the horses had given way to motor transport. (Oral history, T Gibbs)

Later, when the property was sold in 1961, Tom and his wife moved to their present farm up the Ferguson Valley. Alexander Island went with the "mainland" to the new owner as the old title "went to the middle of the river". The title remained like this although there were several more owners - Fred Roberts and Forrest "Barney" Hay - probably because it has always remained a rural or "general farming" block and was not subdivided for housing. When the Patersons lived there it was becoming more "urban" than a farming proposition.

The latest changes saw Johnson's company selling to private developers, and the South West Development Authority buying Lot 131 as a regional park for the State Government.

Briefly, this is the history of Location 23, first bought from the Crown by George Leake in May 1839 at 5.0 shillings an acre, and finally returned to the Crown in 1994 to become a regional park.

5.3.2 Recent usage

Prior to the development of the Clifton Park residential area, Lot 131 was part of a larger rural lot used for grazing stock. Since the cessation of farming activity, very little of Lot 131 has received active people use. The portions of reserve 31576 on the Collie River foreshore and adjacent to Lucy Victoria Avenue near Hayward Place have received significant use by local Clifton Park people.

A small playground is located on the reserve (31576) near to Hayward Place, and the mown grass area is also used for walking, exercising dogs, flying kites, and golf practise. The Shire of Harvey bylaws prohibit golf practice on reserve 31576, and the Shire have installed a sign advising reserve users that golf practice is not permitted.

The foreshore reserve adjacent to the Collie River is used for walking, dog exercising, fishing access to the river, and commuting to the local shops at Eaton.

Boat launching in the Collie River occurs at the Shoalhaven ramp on Taylor Road, and the Eaton ramp on Pratt Road. The Eaton boat ramp is located on the opposite bank of the Collie River from Lot 131. Most local people launching boats in the river do so at the Eaton and Shoalhaven ramps.

Most of the people use the foreshore reserve between the Collie River bridge and the Lucy Victoria Avenue and Mayne Way intersection. The generally unkempt appearance of the Lot 131 area, and high grass and lupin growth has deterred people access and use of the area. People would also have respected the fact that Lot 131 was private property. A scenic and visual outlook is the major attraction of the area.

The Shire of Harvey have been carrying out mosquito control works on Lot 131 in accordance with the Mosquito Control Strategy (Chester and Klemm 1990). Some minor excavation using a shovel has occurred to enable trapped water to drain from parts of the wetland area. "Abate" has been used in the wetland to control mosquito larvae, and sprays have been used to control adult mosquitoes.

Previous owners of Lot 131 contracted the Eaton Australind Volunteer Bush Fire Brigade to burn off grass on the site each summer or late spring. Two years ago the Shire of Harvey grader created a firebreak along the boundary of Lot 131 with the foreshore reserve 31576, to protect tree plantings on the reserve from fire damage.

The Bunbury Triathlon Club triathlon course includes a run section around Lot 131. The Club holds six local events during summer, which include a river swim from the Eaton foreshore, cycle along Pratt Road, and run westward along Pratt Rd over Collie River bridge following the cycleway around Lucy Victoria Avenue to the Mayne Way intersection and return.

6. MANAGEMENT ISSUES

The following issues have been identified by the working group, and from public comments on the draft plan, for the management of the Lot 131 area.

- preserving the natural features of the site
- providing additional recreation space for the local community
- preserving the scenic amenity
- control of fire risk
- access to the Collie River
- providing flora and fauna interpretation
- revegetation of degraded areas
- provision of additional facilities such as car-parking areas, walk trails, fishing jetties
- provision of adequate resources for ongoing management
- community involvement in management
- conserve and enhance regional values for waterways and wildlife protection and management

7. RECOMMENDATIONS FOR MANAGEMENT

The following recommendations for management have been prepared by the Working Group after consideration of previously listed issues and public comments on the draft plan.

7.1 Land use and management

- R1: Ensure Lot 131 is managed to protect and enhance wildlife values, and to provide recreation area for both local and regional communities.
- R2: Ensure recreation activities are in keeping with protection and enhancement of wildlife values.
- R3: Establish Lot 131 as a separate reserve and jointly vest with the Leschenault Inlet Management Authority (WWC) and the Shire of Harvey for Waterways Management and Recreation.
- R4: Establish a Community Management Committee for Lot 131 comprising representatives from the local community, the Shire of Harvey and LIMA as follows. One representative each from the Shire of Harvey and LIMA, and five representatives from the local community. The Management Committee to be responsible for ongoing management and maintenance.
- R5: Involve the general community in the provision of resources for recommended works, and in seeking sponsorship and grant funding to assist with the works program and general maintenance.
- R6: Request Shire of Harvey to include a change in zoning for the study area to recreation and conservation in the review of the District Town Planning Scheme No. 1 currently in progress.
- R7: Recommend to the vesting Authorities that the area be named the "Clifton Community Reserve".

7.2 Environmental

- R8: Reshape the drain into the wetland from the river so that the banks have a suitable batter slope to help reduce bank erosion.
- R9: Establish shorerush along the edges of the wetland drain (*Juncus pauciflorus*, *Juncus krausii*).
- R10: Excavate approximately 1.5m at the eastern end of the wetland where the drain connects. Maintain existing depth profile for central and western parts of wetland for wading bird access. Maintain drainage from shallow wetland areas to reduce mosquito breeding using methods in accordance with the Mosquito Control Strategy (Chester and Klemm 1990).
- R11: Continue to plant Flooded Gums (*E. rudis*) at the western end between the bridge and the wetland. Infill planting of listed species as shown in Appendix 2. Plant more Flooded Gums (*E. rudis*) and Swamp Sheoak (*C. obesa*) along the riverbank.
- R12: Spray weeds in specific locations on the site with environmentally friendly herbicide to allow regeneration of native species, and control growth of weeds.
- R13: Excavate Lowe Crt wetland to deepen marginally, remove most bulrush, and shape sides to provide safe access. Extend pipes from the road drain outlet to replace existing open drain with steep eroding sides.
- R14: Shape swale from Lowe Crt wetland to the main wetland to allow for overflow of stormwater. Establish rushes (*Juncus pauciflorus*) in the swale area.
- R15: Retain the five old Cape Lilac trees as an historical feature of the site, and provide interpretation. The Cape Lilac trees may be replaced as they die through old age or other natural causes, and the interpretation of the historical use of the site will remain.
- R16: Rip and remove old road entry to bridge adjacent to Old Coast Road. Feature plant whole area through to bridge in accordance with the management plan, and species listed for rehabilitation in Appendix 2.

7.3 Recreational

- R17: Construct a new footbridge across the drain connecting the wetland area with the river. Construct a footbridge to provide access across the swale drain from Lowe Crt.
- R18: Use fill from excavation of wetland to create viewing mound in centre of Lot 131. Provide views across wetland to the river, and connect viewing area to the network of walk trails on the site.
- R19: Establish picnic and BBQ areas at the car parking site at the Collie River bridge; at the car parking site near to Lowe Crt; adjacent to the recreation area opposite Hayward Way; adjacent to the Cape Lilac trees, and adjacent to the drain on the west side.
- R20: Establish two fishing platforms along the riverbank, as marked on the management plan, map 4.
- R21: Establish a river access site down the slope from the Mayne Way/Lucy Victoria Avenue intersection for hand launching of dinghies and canoes.
- R22: Establish a river access site adjacent to the Collie River bridge for hand launching of dinghies and canoes.
- R23: Preclude the construction of a boat launching ramp.

R24: Construct walk trails along the river foreshore linking the existing foreshore walk trail with the Collie River bridge. Construct a walk trail connecting the Lowe Crt car parking area with the foreshore reserve, and provide access to a mounded earth viewing area adjacent to the wetland (walk trails to be compacted limestone or other appropriate material).

R25: Construct walkway under Collie River traffic bridge to connect Lot 131 foreshore with Pt Douro foreshore, subject to approval of WAWA and Main Roads WA.

7.4 Other

7.4.1 Road and vehicle access

R26: Vehicle access to the site to be confined to the carparking areas adjacent to the Collie River bridge, at the recreation area near Hayward Way and near to Lowe Court intersection (as shown on management plan, map 4).

R27: Construct a single 6 metre wide entry off the Old Coast Road, opposite the break in the central road island and to meet the requirements and specifications of Main Roads Western Australia (as shown on management plan, map 4). The roadway to provide access to a car parking area adjacent to the Collie River Bridge.

7.4.2 Site interpretation

R28: Construct a gazebo on the viewing mound adjacent to the wetland to house interpretive information. The information bay to provide details of flora and fauna which can be seen from the viewing area.

R29: Provide additional signage around the site to enable interpretation of special features, including flora, fauna, and items of historical significance.

7.4.3 Fire control

R30: Control grasses and other weeds by slashing twice per year, in late August and December.

R31: Plant additional areas to shade out some grasses.

R32: Restrict use of fire to control growth of grasses and weeds to avoid damage to native vegetation and the smoke and ash nuisance to local residents and examine the use of herbicide sprays to control grasses and weeds in specific locations on the site.

7.4.4 General earthworks

R33: Grade over and level out previous earthworks such as the grader mound along the firebreak which are no longer required.

8. REVIEW OF PUBLIC CONSULTATION

Comments and suggestions received during the public consultation period were reviewed by the working group during February 1994. The draft plan was released for public comment on Wednesday 24th November 1993 for the period up to 31st January 1994. Seven formal written submissions were received, and comments were also recorded at two public meetings held to discuss the draft plan. The results of this community input are presented in Appendix 3.

The draft plan was launched at a public meeting, where LIMA staff provided initial explanation of the plan and provided guidance on the contents of the plan and how to make a submission. A public workshop was also held during the public submission period at the Clifton Park Primary School, at which members of the working group detailed explanation of the draft recommendations, and recorded additional community comment and points of view.

A questionnaire was available at the public workshop to help procure public input. Five questionnaire forms were returned, two tear out forms from the draft plan were returned and one written submission was received (one person completed a questionnaire and a tear out form from the draft plan).

Generally the community were supportive of the recommendations within the draft plan, and comments received indicated support for the level of consultation. The only point at issue was the construction of roadways over Lot 131 to provide access to carparking and picnic areas. The overwhelming community advice was to keep vehicle access to the perimeter of the lot and this principle has been agreed to by the working group and is reflected in recommendations R26 and R27.

9. IMPLEMENTATION

9.1 Funding and management responsibilities

The proposed Community Management Committee for Lot 131 will be responsible for the day to day management and maintenance of the area. The Authorities with the vesting of Lot 131 will have prime responsibility for ensuring the Community Management Committee is established and functions appropriately.

It has been recognised however, that funding for general works and maintenance by government departments and local authorities is decreasing and that significant community input will be required in order to implement all of the recommendations.

The community can assist with construction and maintenance through direct sponsorship; provision of equipment, materials or labour; and by seeking State and Federal Government grants for community based programs or environmental programs.

9.2 Implementation schedule

The recommendations developed in the final management plan will be implemented over a five year period, subject to sufficient funding and resources being available from managing authorities or the community.

Year 1 July 94 to June 95

Initial earthworks involving grading areas of the site, shaping the swale between the Lowe Crt wetland and the central wetland, and reshaping the drain connecting the wetland with the river.

Construct footbridge across newly shaped drain into central wetland. Complete limestone walk trail from foreshore reserve through to Collie River bridge.

Commence tree planting and revegetation. Ground preparation including grading of topsoil and spraying of grasses and weeds.

Construct fishing platforms on Collie River riverbank.

Construct walk trail along Collie River foreshore to connect Collie River bridge with the existing foreshore reserve walk trail.

Construct river access site on river foreshore.

Slashing for fire control. Initial spraying of dense weed growth, specifically watsonia.

Year 2 July 95 to June 96

Construct roadways and carparks off Old Coast Road. Establish picnic areas and carry out landscaping of surrounding area.

Provide firewood to picnic areas.

Construct walkway under Collie River bridge.

Construct walk trails across the site, connecting Lowe Crt wetland and picnic area with the central wetland and mounded viewing area.

Continue tree planting and revegetation. Ground preparation including grading of topsoil and spraying of grasses and weeds.

Maintain fishing platforms on riverbank.

Slashing for fire control. Some spraying to control weed growth.

Year 3 July 96 to June 97

Construct roadways and carparks off Lucy Victoria Avenue. Establish picnic areas and carry out landscaping of surrounding area.

Provide firewood to picnic areas.

Construct river access site on foreshore.

Maintain fishing platforms on riverbank.

Continue tree planting and revegetation work.

Slashing for fire control. Some spraying to control weed growth.

Year 4 July 97 to June 98

Provide firewood to picnic areas.

Carry out infill planting of trees and understorey to replace losses.

Slashing for fire control. Some spraying to control weed growth.

Year 5 July 98 to June 99

Slashing for fire control. Some spraying to control weed growth.

Carry out additional tree planting as required.

Provide firewood to picnic areas.

Maintain tree plantings.

Maintain drainage channels and timber walkway structures.

Maintain roadways, carparks and picnic areas.

10. REVIEW OF MANAGEMENT PLAN

The management plan is to be reviewed and revised after five years. This process will include further public consultation and review of existing recommendations and implementation progress.

11. REFERENCES

- Chester ET and Klemm VV (1990) Draft Integrated Mosquito Control Strategy for the Leschenault Estuary Region, Western Australia. Waterways Commission, Perth WA.
- Department of Conservation and Environment (1983) Conservation Reserves for Western Australia as recommended by the Environmental Protection Authority - 1983. The Darling System - System 6. Department of Conservation and Environment, Western Australia.
- George PL (1981) Leschenault Estuary, Collie River, Preston River Regional Flood Study. Public Works Department of Western Australia, Perth, WA.
- Pen LJ (1992) Fringing Vegetation Of The Lower Collie And Brunswick Rivers 1992, Waterways Commission, Perth, WA.
- Siemon N (In Prep.) Draft Lower Canning River Management Plan, Waterways Commission, Perth, WA.
- Waterways Commission (1989) Clifton Park Foreshore Reserve Management Plan. Waterways Commission, Perth, WA.
- Waterways Commission (1992) Leschenault Waterways Management Programme 1992. Waterways Commission, Perth, WA.
- Woodcock S (1993) Collie and Brunswick Rivers Foreshore Reserves Study Draft Report, Waterways Commission, Perth, WA.

APPENDIX 1 :

REHABILITATION AND WEED CONTROL

Seed bank establishment

Seed banks are an important technique in the maintenance of genetic stock in specific regions. The process includes collection of seed from areas of remnant vegetation with subsequent germination and development in a greenhouse. The aim is to reinforce the local vegetation with locally derived specimens. In the long term LIMA could maintain a greenhouse in its existing nursery area from which Parks and Recreation officers, interested locals and consultants working on landscape plans in the area, could obtain plants for planting in collection areas.

It is important to recognise that seed collecting requires a permit under the Conservation and Land Management Act. It may be difficult and expensive to get permits from CALM.

Weed control

Eradication of pampas would be best achieved by slicing the foliage approximately 20 cm from the base, and subsequently applying a translocated herbicide to the transportation vessels in the plants. This would restrict faunal exposure to the herbicide.

Eradication of seedlings could be achieved by hand removal, however, larger plants would require eradication through implementation of a practice similar to that outlined for the pampas grass.

Additionally a number of weed species are prevalent throughout the study area. The removal of leguminous species such as Lupins, and control of grasses including Couch Grass, Veldt Grass, Kikuyu and Guildford Grass should be first priority. Further problematic species include Cape Tulip, Sorrel, Dandelions, Watsonia, Arum Lily, and Blackberry.

To prevent immediate re-colonisation of exotics where control measures have been implemented, it is necessary to re-establish native species in the areas. Genera such as *Juncus* and *Schoenoplectus* would be suitable for this procedure in areas where these two taxa are known to occur.

Planting native species immediately following the removal of exotics will minimise potential reinvasion by undesirable species. These areas will require comprehensive maintenance for a minimum of 12 months, followed by monitoring.

Bulrush control and eradication

In areas dominated by the introduced bulrush, the encouragement of *Melaleuca* regeneration will decrease the distribution of *Typha orientalis* which is achieved by the reduction of light penetration. Regeneration of the understorey should occur following the establishment of the understorey by natural propagation.

It is probable that *Typha domingensis* could dominate the peripheral stands without competition from the introduced bulrush. To establish a native *Typha* dominated stand would be extremely difficult. An associated problem with the persistence of *Typha orientalis*, is the development of hybrids of the two species. This will decrease the distribution of the native *Typha* further. The use of contact herbicides for *Typha* control is strongly opposed.

In enclosed wetlands, it is important to control the spread of *Typha*, or a situation similar to that seen in Herdsman's Lake in Osborne Park may occur. The nutrient loadings and freshwater input to isolated wetlands further facilitates invasion by *Typha orientalis*.

In regions where *Typha orientalis* is currently advancing into adjacent *Juncus*, the establishment of a *Melaleuca* border between the two communities can restrict further encroachments. By clearing away any *Typha* around the juvenile paperbarks and maintaining a vegetation-free zone it should be possible to encourage re-establishment.

Selection of species for rehabilitation

Riverine plants

The selection of plants for river edge and foreshore planting should remain consistent with the species which characterise this section of the river. Appropriate species include:

<i>Atriplex</i> sp.	<i>Baumea juncea</i>	<i>Casuarina obesa</i>
<i>Eucalyptus rudis</i>	<i>Juncus kraussii</i>	<i>Juncus pauciflorus</i>
<i>Lepidosperma gladiatum</i>	<i>Melaleuca raphiophylla</i>	<i>Melaleuca viminea</i>
<i>Melaleuca incana</i>	<i>Sarcocornia blackiana</i>	<i>Sarcocornia quinqueflora</i>
<i>Suaeda australis</i>		

Methodology of planting

Planting of rushes and sedges is outlined in Appendix 2. Planting methodology for salt marsh species such as *Sarcocornia* and *Halosarcia* is outlined below.

Salt marsh species may be established by first raking the sediment, sprinkling mixed segments of the required species into the area, covering the soil and compacting the substrate by foot. This should occur close to the high tide mark at the end of winter, although planting can occur at any time of the year. Collection of these species for planting must occur in a manner satisfactory to the Leschenault Inlet Management Authority.

The planting regime should reflect the mosaic of homogeneous stands characterising the adjacent sections of the river.

Potential sources of riverine plants

The use of local seed stock and plants local to the rehabilitation area is desirable in all cases. Establishment of a seed bank and greenhouse for many species is appropriate. Difficulties arise with replicating sedges and rushes with tissue culture being the only successful technique. If purchasing through a company specialising in rush growing, it may be possible to utilise plants specific to the rehabilitation site.

Floodplain vegetation

There are a number of opportunities for landscape plans to enhance the continuity of fringing and floodplain vegetation for this region of the Collie River. The species listed below characterise the mix of sandy and loamy, relatively low-lying regions in this area and their inclusion in species selection would further enhance the natural landscape.

Most of the species listed below are readily available from nurseries. It is important to reiterate that the use of local seed stock is desirable to ensure the integrity of genetic material in the region.

Species should include a selection from;

Sandy Areas

<i>Acacia cyclops</i>	<i>Eucalyptus gomphocephala</i>	<i>Eucalyptus ficifolia</i>
<i>Hakea prostrata</i>	<i>Hemiandra pungens</i>	<i>Jacksonia sternbergiana</i>
<i>Kennedia prostrata</i>	<i>Melaleuca armillaris</i>	<i>Melaleuca thymoides</i>
<i>Melaleuca viminea</i>	<i>Olearia axillaris</i>	<i>Scaevola crassifolia</i>
<i>Xylomelum occidentale</i>	<i>Banksia attenuata</i>	

Wetter Areas

<i>Banksia littoralis</i>	<i>Eucalyptus rudis</i>	<i>Melaleuca preissiana</i>
<i>Melaleuca raphiophylla</i>	<i>Melaleuca uncinata</i>	<i>Viminaria Juncea</i>

Both Sandy and Wet Areas

<i>Agonis flexuosa</i>	<i>Eucalyptus calophylla</i>	<i>Hibbertia cuneiformis</i>
<i>Jacksonia furcellata</i>	<i>Xanthorrhoea preissii</i>	

APPENDIX 2:

RUSH AND SEDGE PLANTING GUIDELINES

Planting procedure

- o Individual plants should have their leaves cut off about 10 cm above the base just prior to planting to reduce post-planting stress and to stimulate new growth.
- o Plant only on moist stable sediment at the upper foreshore level.
- o Plant rushes and sedges about 50 cm apart.
- o Plant rushes no closer than 1 m near existing shore-rush tufts.
- o If using seed stock, fill a pair of stockings with sand and seed mixture and bury approximately 5 cm beneath topsoil. Stocking usage restricts seed loss. May require baffle boards to reduce erosion until seeds germinate and the plants become stable (Fig 2).

Planting time

- o The best time to plant is in early winter, just prior to the maximum growth period from July to October followed by reinforcement in early spring.

Planting zones

Freshwater zones

- o Relatively freshwater zones where groundwater or surface water flushes through the ground are indicated by swamp paperbarks, flooded gums or by perennial grasses growing down onto the beach.
- o Plant rushes at any time of the year, although early winter is best.

Saline zones

- o Indicated by nearby samphire or saltwater paperbarks.
- o Plant only in winter so that the rushes can capitalise on the relatively low salinity period between late-summer and autumn.

High erosion and wave energy zones

- o Immediate planting - plant rushes in areas where is not being eroded and protect against waves and strong currents with buffers such as baffle boards (Fig 2).
- o Delayed planting - place buffers in high erosion or wave energy zones in the first year and return the following year to plant rushes where sediment has accumulated.

Fertilised zones

- o Foreshore areas below reticulated sporting fields and parks are usually flushed with nutrient rich freshwater for most, if not all, of the year. Shore-rush grows extremely well under these conditions.
- o Procedure - spray or clear grasses if necessary prior to planting. Plant rushes at upper foreshore level in a long strip parallel to shoreline, from which they will grow vigorously towards the water.

On occasion, the Swan River Trust has access to rush and sedge beds suitable for transplanting. Contractors undertaking the work should contact Barry Johnson of the Swan River Trust (327 9777) in the Perth area, or the Leschenault Inlet Management Authority in the Bunbury/Australind area prior to commencement of operations to determine availability of such plants.

Transplants or seedlings may be planted directly at the waters edge provided a series of baffle boards are deployed to reduce the impact of boat and wind waves and strong currents.

It is important that the success of the seedlings is monitored. The Swan River Trust and the LIMA would be interested in results of the plantings.

APPENDIX 3:

SUMMARY OF PUBLIC SUBMISSIONS

Submissions were received from the following people/organisations.

Mrs M Staples
John and Marion Burns
South West Environment Centre
John Redgment
and several unidentified.

Summary of Submissions (not in any order)

1. Support revegetation through R11, emphasise native species. Suggest car parking areas be minimised (2) and placed near to the Collie bridge and between lot 6 and reserve 31576. Suggest two names for consideration (Greenwood Reserve and Mardalup Nature Reserve) but do not think this is an important issue.

They found the plan clear and easy to follow; agreed with R1; two people on existing committee should be reappointed to the management committee; suggested an annual review of operations be presented to a public meeting; were able to visualise how the area will look; agree with priorities that have been set.

2. Support the intent of the plan and most of the recommendations. Impressed with quality of plan and level of community consultation. Main concern is carparks which should be kept as far from the centre of the reserve as possible.

Have suggested a number of changes. Car parking and picnic areas on the northern boundary; river access site to be alongside the Collie River bridge; change the walk trail alignment to connect with the changed locations of carparks; amend road entries to reflect changed carpark locations.

Have suggested further recommendations.

Ensure recreation activities on the shore of the Collie River have a minimal impact on fringing vegetation; dogs should be restricted to paths and only if restrained on a leash, and exercising of dogs should be allowed to continue on the north east boundary; community committee should undertake actions deemed necessary and acceptable including community education to minimise impact of domestic and feral cats and foxes; a public meeting should be held following the release of the final plan so that the author can justify the changes or otherwise.

3. Agree that plan is clear and easy to follow; agree with recommendation 1; management committee membership should be sought by calling for expressions of interest; toilet facilities on the reserve should be considered; were able to visualise how the area will look; agree with priorities that have been set; should have a public workshop to explain the final plan.

4. Does not want a gazebo on Lot 131; disagrees with car parking and roads and suggests carparks be limited to one near the park swings and one near the bridge; suggests construction of walkway under bridge be advanced.

Agree that plan is clear and easy to follow; strongly agree with recommendation 1; no comment on management committee membership; agree with priorities that have been set; no feedback is necessary because it may cause further delay.

5. Funding to support the plan could include a one off rate charge on all households in Clifton Park of \$5, called an environmental levy.

6. They found the plan clear and easy to follow; agreed with R1; an advert should be placed in the local paper to find appointments to the management committee; the plan has identified all the issues considered important; were able to visualise how the area will look; strongly disagree with priorities that have been set and suggest the walkway under the Collie River bridge be brought forward, wants some tree planting in 94/95 and wants walk trails in 94/95; requested a written report and a meeting to provide feedback after the public submission period.

7. They found the plan clear and easy to follow; strongly agreed with R1; wanted less roads and cross walking trails; a public meeting should be held to elect management committee and also an advert should be placed in the local paper to find appointments to the management committee; suggested there should be a balance between human intrusion and the need for buffer zone for fauna and birds; were able to visualise how the area will look; cars to be limited to parking at playground area and also near to the Collie River bridge; strongly disagree with priorities that have been set and suggests the walkway under the Collie River bridge be brought forward; requested a written report and a meeting to provide feedback after the public submission period.

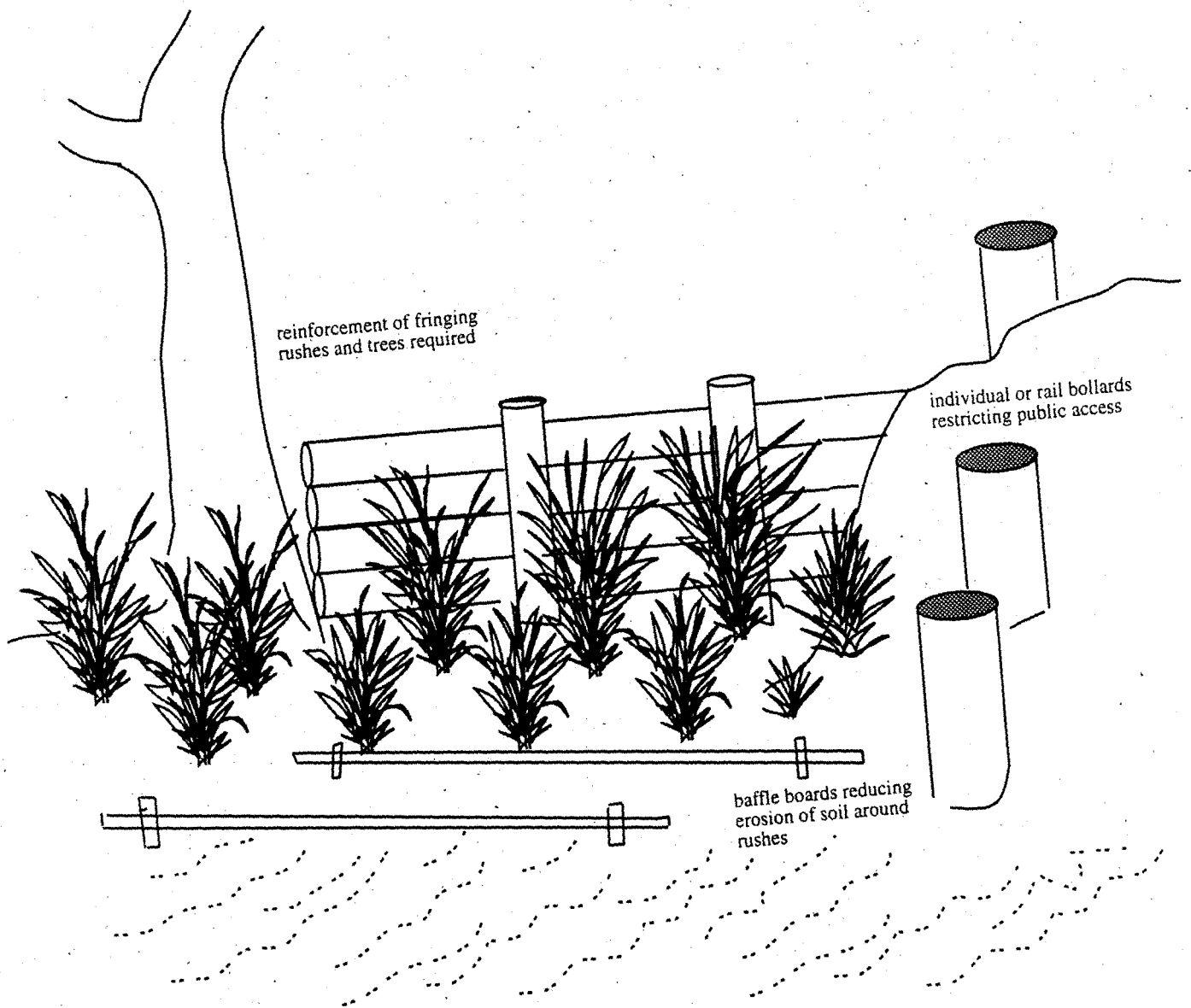
Public Meeting

A public meeting was held on Wednesday 15th December 1993 at Clifton Park Primary School. Notes from this meeting are attached. Attendees at this meeting were generally agreed on the following points.

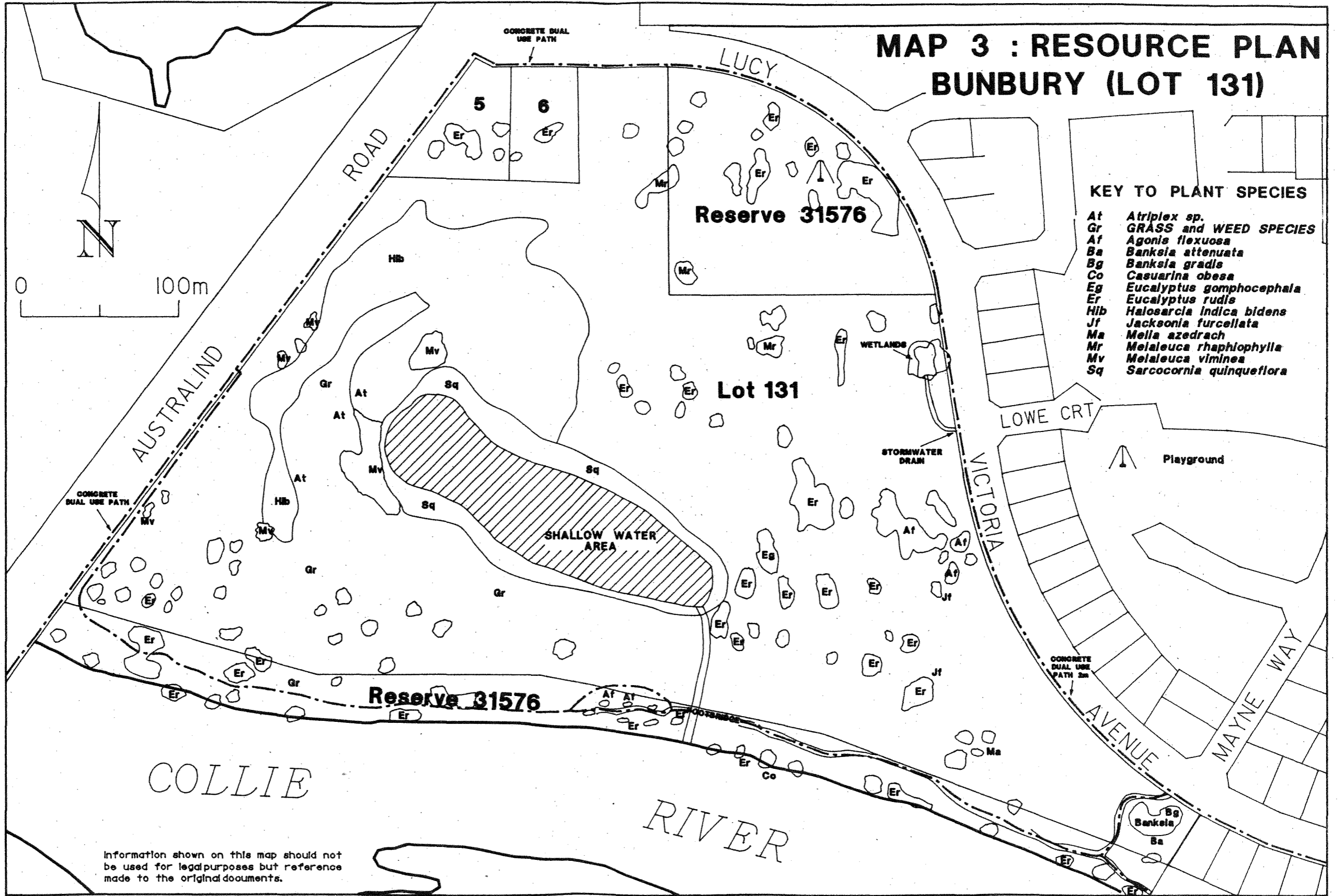
- Change the road access and car parking to have a carpark near the playground area at the top of the lot, and a second carpark near the Collie River bridge. There was some agreement with a small carpark and turnaround area halfway between the bridge and the central drain.
- The river access site to be located near to the bridge and not at the Mayne Way end of Lot 131.
- The walkway under the Collie Bridge should be brought forward if possible.
- Use of fire to control grass and weeds should be minimised.
- Increase size of the grassed recreation area R31576 towards lot 6.
- Construction of toilets was a low priority and not favoured by many.

- The community management committee should comprise
 - 3 community reps
 - 1 Shire of Harvey rep
 - 1 LIMA rep
 - 1 Clifton Park Community Association rep
 - 1 Clifton Park Primary School rep (to be invited to participate at least)
 - 2 reps from SCM and Worsley (1 each)
 - Sponsors rep (1 to be invited from all donating organisations)
- The existing working group should call for nominations from interested people to be community reps and to make the final selection. The term on the management committee to be decided by the committee.
- One single name did not arise which was suitable for all concerned, although a number were suggested. The working group to finalise.
- The working group to determine whether Lot 131 could be vested in the new management committee.

Figure 2: Rush planting and protection guidelines



MAP 3 : RESOURCE PLAN BUNBURY (LOT 131)

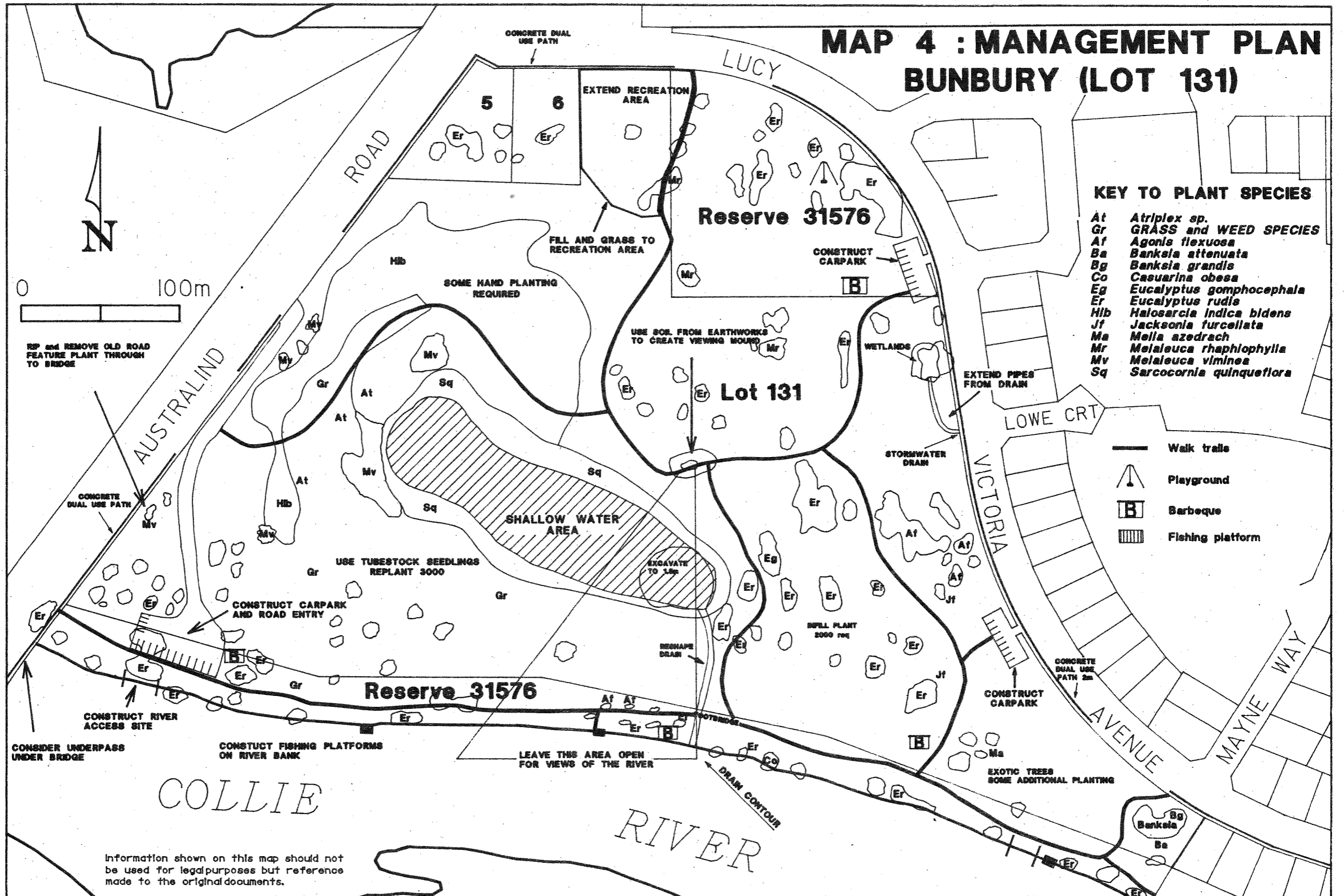


KEY TO PLANT SPECIES

- At *Atriplex sp.*
- Gr **GRASS and WEED SPECIES**
- Af *Agonis flexuosa*
- Ba *Banksia attenuata*
- Bg *Banksia gradls*
- Co *Casuarina obesa*
- Eg *Eucalyptus gomphocephala*
- Er *Eucalyptus rudis*
- Hib *Halosarcia indica bidens*
- Jf *Jacksonia furcellata*
- Ma *Melia azedrach*
- Mr *Melaleuca raphiophylla*
- Mv *Melaleuca viminea*
- Sq *Sarcocornia quinqueflora*

Information shown on this map should not be used for legal purposes but reference made to the original documents.

MAP 4 : MANAGEMENT PLAN BUNBURY (LOT 131)



KEY TO PLANT SPECIES

- At *Atriplex* sp.
- Gr GRASS and WEED SPECIES
- Af *Agonis flexuosa*
- Ba *Banksia attenuata*
- Bg *Banksia grandis*
- Co *Casuarina obesa*
- Eg *Eucalyptus gomphocephala*
- Er *Eucalyptus rudis*
- Hib *Halosarcia indica bidens*
- Jf *Jacksonia furcellata*
- Ma *Melia azedarach*
- Mr *Melaleuca raphiophylla*
- Mv *Melaleuca viminea*
- Sq *Sarcocornia quinqueflora*

- Walk trails
- ▲ Playground
- ⊞ Barbeque
- ▤ Fishing platform



RP and REMOVE OLD ROAD FEATURE PLANT THROUGH TO BRIDGE

CONSIDER UNDERPASS UNDER BRIDGE

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