LESCHENAULT INLET MANAGEMENT AUTHORITY



AND

SHIRE OF DARDANUP



EATON FORESHORE
DRAFT MANAGEMENT PLAN



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EATON FORESHORE DRAFT MANAGEMENT PLAN

Report to the Leschenault Inlet Management Authority and Shire of Dardanup

Prepared by E Wright and L Barrett

Waterways Commission 216 St Georges Terrace Perth WA 6000

> Report No 53, February, 1995

ACKNOWLEDGMENTS

The members of the working group assisted with preparation of the recommendations.

Staff of the Waterways Commission assisted with information included in this report, and with editing the document.

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

Maps and plans prepared by Brett Harrison.

Mrs Judy McClymont provided advice on the naming of the Eaton townsite.

ISBN 0730961575 ISSN 08146322

Printed on recycled paper

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.

The Eaton foreshore contains a mix of the most used river foreshore in the region, and also some of the least used and isolated river foreshore in the region. The grassed recreation areas near the Collie River bridge are a regional attraction and in great demand for large group functions and picnics, and have been well managed and serviced by the Shire of Dardanup.

The purpose of this management plan is to integrate the more natural parts of the river foreshore at Eaton into a functional river foreshore that provides for the recreational and amenity needs of the community, and to maintain and enhance conservation values.

This draft 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 recreational and conservation opportunities of this foreshore, and to protect fringing vegetation and riverbank and foreshore stability. 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.

We urge you to read the Draft Plan and should you wish to make a submission you may use the enclosed form which has been prepared to assist in this process. We trust you will forward your comments to the Leschenault Inlet Management Authority so they may be considered before the final management plan is prepared.

Sir Donald Eckersley OBE

Chairman
Leschenault Inlet Management
Authority

Cr Danny Harris

Shire President
Shire of Dardanup

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GUIDE FOR READERS

How can I make a submission

Public submissions on the Eaton Foreshore Draft Management Plan are now invited. All public submissions will be considered before preparation of the final Management Plan.

If you would like to make a submission towards preparation of the final document please comment on any part of the document you agree or disagree with. A tear out form is provided on the following page for this purpose. Send this to the Leschenault Inlet Management Authority by the end of April 1995 at the address provided on the top of the form. Please note that submissions do not have to be confined to the length or layout of the form provided.

If more information is required prior to making your submission, officers of the Leschenault Inlet Management Authority will be available to discuss any aspect of the Draft plan.

Where can I get other copies of this document

Further copies of the draft management plan are available for viewing at:

Local government public libraries in the Shire of Harvey, Shire of Dardanup and City of Bunbury, and at the One Stop Shop, Podium level Bunbury Tower.

Copies of the document can also be obtained free of charge from:

o Leschenault Inlet Management Authority
Inner Harbour Road
Bunbury
WA 6231
(097) 211666

Eaton Foreshore Draft Management Plan Public submission form

Project Officer
Eaton Foreshore Draft Management Plan
C/- Leschenault Inlet Management Authority
PO Box 261
Bunbury WA 6231

Name:	
Title:	
Organisation:	
Address:	

I would like to make the following comments on the Eaton Foreshore Dra Management Plan and would like them considered in the preparation of the Final Management Plan.	
Comments:	

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I would also like a copy of the Final Ma	nagement Plan cent to the above
I would also like a copy of the Final Ma	magement I fan sent to the above
address on its completion.	
Signed	

1. INTRODUCTION

Located alongside the Collie River, the Eaton foreshore area is one of the most intensely used foreshore environments in the Bunbury region.

The need for a management plan has arisen from this intense use of the foreshore and the need to manage public access and use of the area and to control the incidence of vandalism to public facilities.

As a result the Shire of Dardanup requested the assistance of LIMA in the preparation of a management plan to outline the measures by which the Eaton foreshore area can be enhanced, protected and managed.

2. DEVELOPMENT OF THE PLAN

A working group was formed in February 1993 to prepare a management plan for the Eaton foreshore. The management plan has been prepared as a draft document to present background information, and recommendations for management and use, to the community. Once community input has been received, a final management plan will be prepared and implemented.

2.1 Working group members

The working group comprises 6 members drawn from the local community, the Shire of Dardanup and the Leschenault Inlet Management Authority (LIMA).

Chairman Mr Eric Wright (LIMA)

Community Representatives Mr Kevin Ryan (Eaton Community and Development

Association)

Cr Mick Bennett (LIMA)

Mrs Judy McClymont

Shire of Dardanup Mr Colin Spragg

Cr John Hamblin

2.2 Relevant studies and reports

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

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

System 6 Report (Department of Conservation and Environment 1983)

Clifton Park Foreshore Reserve Management Plan (Waterways Commission 1989)

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)

Lot 131 Clifton Park Draft Management Plan (Wright 1993)

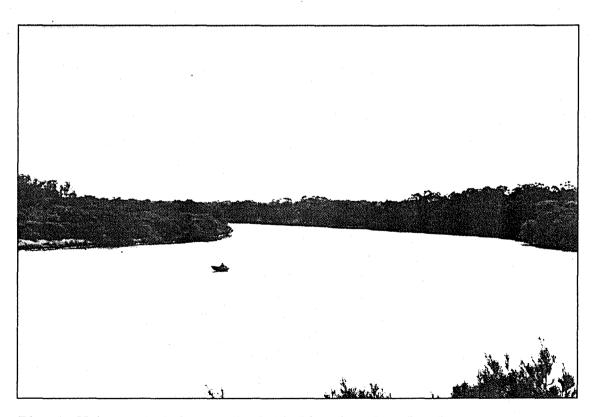
2.3 Public consultation

The draft management plan is scheduled for release for public comment during February 1995. The draft plan will be launched at a public meeting to provide initial explanation of the plan and provide guidance on the contents of the plan and how to make a submission. A public workshop is planned to be held during the public submission period, at which members of the working group will be available to explain the draft recommendations, and to listen to additional comments and points of view from the community.

A questionnaire will be available at the public workshop to help procure public input.

2.4 Schedule

Form Working Group
Draft Plan Completed
Release Plan for Public Comment
Finalise Plan from Public Input
Plan Completed
Release Final Plan and Commence Implementation
Review Plan



(Plate 1: Uninterrupted views up the Collie River from Pratt Road)

3. TERMS OF REFERENCE

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

3.1 Aim

To identify issues relating to the use and management of the Collie River foreshore at Eaton, and to prepare recommendations for the development and maintenance of the area to enhance public usage and protect the foreshore and river environment.

3.2 Objectives

3.2.1 Recreation

Provide opportunity for recreational use by local residents, and regional based visitors to the area, which is compatible with the natural environment.

Enhance the recreation value of the area.

Provide a means of access to and through the foreshore reserve.

3.2.2 Conservation

Protect and improve the indigenous flora and fauna in foreshore areas of the river system in order to maintain its natural conservation values.

3.2.3 Landscape protection

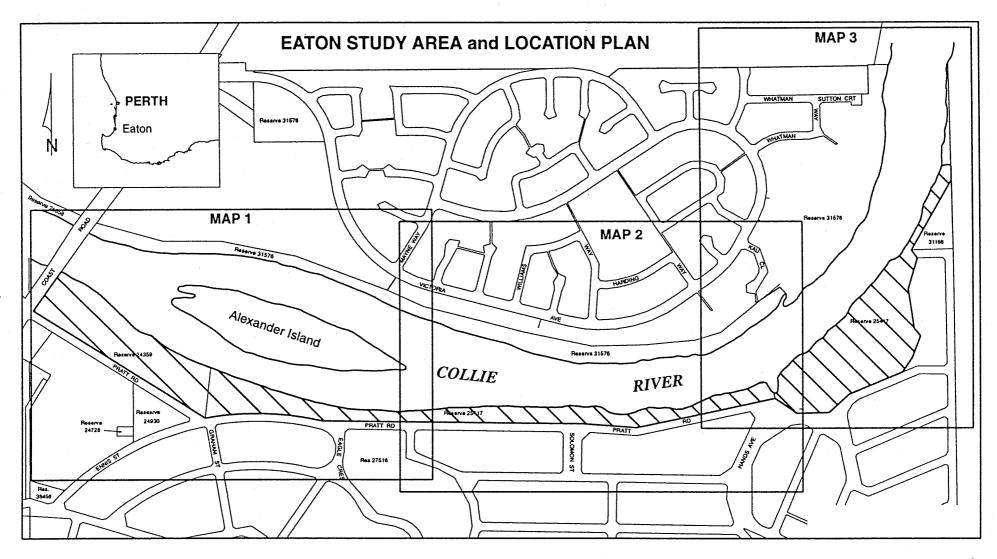
- Protect the foreshore reserve area from erosion.
- Provide a mechanism for rehabilitating river bank and foreshore vegetation.

3.2.4. **General**

- Recognise the importance of the area for the passage and storage of floodwaters.
- Ensure public safety and protection of vegetation through the control of fire.
- Provide public education and information on the environmental and recreational value of the area.
- Involve the public with the ongoing management of the area in order to protect the area from vandalism.

3.3 Study Area

The study area is defined as the area from the Collie River Bridge to the Scout Camp



4. DEFINITION OF THE STUDY AREA

4.1 Physiography, landform and relationships

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

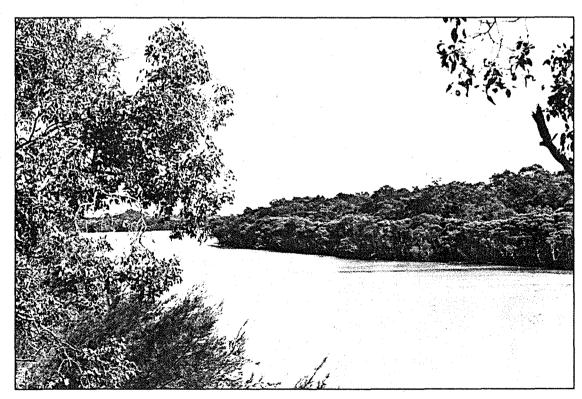
The Foreshore consists of two narrow reserves bordering the Collie River at Eaton, and extending from the Collie River traffic bridge as its western extremity, upstream to the Eaton Scout Camp as its eastern boundary.

The area forms part of the Collie River flood plain, and generally lies below the 2 metre contour. The western half is level and lies below the 1 metre contour. The Foreshore rises up a steep sandy slope from the river to Pratt Road in the central section and levels out further east to a low flood plain area at the Watson Street recreation area. A paperbark wetland occupies a large crescent shaped area around the recreation area, and is the remnant of an old river course or flood waters overflow route.

4.2 Vegetation

The foreshore contains three main categories of fringing vegetation;

- · estuarine fringing forest vegetation,
- fringing freshwater forest and sandy rise vegetation,
- and pastured woodland, (Pen 1993).



(Plate 2: Views across the river to dense stands of freshwater paperbark (M. rhaphiophylla)

4.2.1 Estuarine fringing forest vegetation

A thin band of open-closed forest Flooded Gum (Eucalyptus rudis) and Sheoak (Casuarina obesa) lines the Collie River riverbank. This vegetation has been greatly disturbed by clearing, frequent burning, recreational access and livestock damage. 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.

The riverbank from the Collie River bridge to the Pratt Road swimming area has been retained using large gravel rocks which have been placed under and around remaining trees to prevent further erosion and undermining resulting in trees falling into the river. The remainder of the riverbank is largely unretained and relies on natural vegetation to keep it together. Several small badly eroding sections have been retained using LIMA's log walling technique.

4.2.2 Fringing freshwater forest and sandy rise vegetation

The fringing freshwater forest comprising Flooded Gums and Paperbarks (E. rudis and M. rhaphiophylla) occurs as a paperbark wetland around the Watson Street recreation area. The native understorey has been depleted by grazing and frequent burning and has partially been replaced by abundant weeds. The main weeds are couch grass (Cynodon dactylon), with smaller infestations of wild oats (Avena spp.) and Pampas Grass (Cortaderia selloana) (Pen 1993).

Special attention should be paid to protecting and enhancing native understorey in this wetland area. Appropriate management to reduce weed infestation is necessary.

A long narrow area of sandy rise vegetation comprising Marri, Peppermint and Banksia (E. calophylla-A. flexuosa and B. attenuata-A. flexuosa) occurs in the central section of this Foreshore, adjacent to the Eaton Bowling Club and extending 750 metres in an easterly direction. A steep slope from the riverbank up to Pratt Road supports a fairly open forest or woodland comprising Marri, Peppermint and Banksia.

Many species of understorey are present in small numbers, and species are listed as follows;

Acacia cyclops Acacia pulchella

Adenanthos sp.

Acacia heuglii

Anigozanthos manglesii Kangaroo

Paw

Astartea fascicularis

Conospermum flexuosum Conostylis sp. Corynotheca micrantha (or Thysanotus dichotomus)

Dasypogon bromelifolius (Pineapple Bush) Dichondra sp.

Doda sp. (creeper)

Goodeniacae sp. Hardenbergia comptoniana

Hibbertia hypercoides Kennedia coccinea (creeper)

Leucopogon propinquus

Paspalum sp.

Ptilotus sp.

Swan River Daisy

Thomasia sp.

Xanthorrea preisii Blackboy

Acacia stenoptera

Bossaiea eriocarpa

Gompholobium sp. Hakea prostrata

Hemiandra pungens Snakebush

Jacksonia sternbergiana Kennedia prostrata

Macrozamia reidlii Zamia Palm

Phyllanthus calycinus Sterlingia latifolia Synaphea sp. Viminaria juncea

yellow pea flower

Other species of understorey may be present during spring. The species listed were identified during a survey carried out in February 1994. It is possible to regenerate understorey species by removing grasses and weeds from the sandy slopes by hand. Road and path verges could be sprayed with Fusilade to restrict the reintroduction of grasses.

4.2.3 Pastured woodland

The recreation areas adjacent to the Collie River Bridge, and the Watson Street recreation area have been largely cleared with only a few larger trees remaining of the old native forest. (Pen 1993) These trees now form a pastured woodland which imparts an attractive landscape and character to the area. The Shire of Dardanup maintains the grass on the recreation area near the bridge with reticulation and mowing. Grass is not maintained on the Watson Street recreation area and the ground surface is largely bare sand with a scattering of weeds and grass.

At the eastern end the foreshore near the bridge is only sparsely vegetated with tree cover. The pastured woodland includes stands of Flooded Gum, Peppermints (A. flexuosa), Marri (E. calophyla), Red Flowering Gum (E. ficifolia) and Bushy Yate (E. lemeni). There is no understorey present and the ground is covered with reticulated and mown grass.

4.2.4 Exotic and introduced plants

The Foreshore area has a coverage of introduced grasses, predominantly couch (Cynodon dactylon), kikuyu (Pennisetum clandestinum), Pampas Grass (Cortaderia selloana), Blackberry Brambles (Rubus sp.), Watsonia (Watsonia sp.), veldt grass, and wild oats. Bracken fern grows in small numbers in the paperbark wetland near Watson Street.

A number of exotic species have established on the steep sandy slope adjacent to Pratt Road as a result of garden clippings and rubbish being dumped down the slope by householders living across the road from the Foreshore. These plants include cactus. One old Mulberry tree is located on the Foreshore between Solomon Street and Hands Ave.

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 the Eaton foreshore area 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 (Wright 1994). 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 Eaton foreshore and adjacent Collie River for feeding and loafing. The waterbirds observed at this site include the Australian Pelican (*Pelecanus conspicillatus*), Yellow Billed Spoonbill (*Platelea flavipes*), Nankeen Night Heron (*Nycticonax caledonicus*), White Faced Heron (*Ardea novaehollandiae*), Great Egret (*Egretta alba*), Australian Shelduck (*Tadorna tadornoides*), and Black Duck (*Anas superciliosa*).

The Great Egret, Night Heron and White Faced Heron feed on frogs, insects, small fish and invertebrates. They utilise the river fringe, and the wetland area opposite Watson Street. Black Duck feed on invertebrates and mosquito larvae 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 the Eaton foreshore 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 the Eaton foreshore. The species likely to use the area include Wrens. Honeyeaters, Finches, Crows, and Parrots. Species which have been observed in the Collie River area include the following.

Golden Whistler (Pachycephala pectoralis) Western Warbler (Gerygone fusca)

Sacred Kingfisher (*Halcyon sancta*)

Pied Butcherbird (Cracticus nigrogularis)

Magpie Lark (Grallina cyanoleuca)

Laughing Kookaburra (Dacelo novaeguineae) Australian Magpie (Gymnorhina tibicen)

Black-Faced Cuckoo-shrike (Coracina

novaehollandiae)

Red Wattlebird (Anthochaera carunculata) Willy Wagtail (Rhipidura leucophrys)

Spotted Pardalote (Pardalotus punctatus) Ringnecked Parrot (Platycercus zonarius)

Red-capped Parrot (Purpureicephalus spurius)

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 to have inhabited the Eaton foreshore area is the Western Grey Kangaroo (Macropus fuliginosus). Kangaroos are rarely seen on the foreshore these days, and would have used the area for feeding and resting.

It is likely that the Western Ring Tail Possum (Pseudocheirus peregrinus occidentalis) and the Common Brush Tail Possum (Trichosurus vulpecula vulpecula) would have inhabited the Eaton foreshore area prior to clearing earlier this century. 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 cattus) 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 Dardanup to determine such access.

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 discharge through and onto the Eaton foreshore from surrounding areas. The major drainage feature is the floodplain character of the foreshore. The area 1 and area 3 recreation reserves are located within the floodplain of the Collie River and become inundated at times of extreme flood conditions.

The wetland behind the Watson Street reserve in area 3 becomes a pathway for floodwaters during medium to high flood conditions, and also drains and filters stormwater and groundwater flows to the river. Most other drainage consists of piped stormwater drainage from the Eaton townsite passing through the reserve and discharging into the Collie River. The location of these outfalls is shown on Map 2.

4.5 Visual qualities

The Eaton foreshore area is extremely popular throughout the year with picnickers and walkers. This popularity is no doubt due in some measure to the reserve's proximity to the river and the aesthetic appeal the waterspace provides.

Lot 131 at Clifton Park and Alexander Island provide a undeveloped and vegetated backdrop to the river at the main picnic area near the Collie River Bridge

The river bank is lined with shady trees and there are groups of shade trees throughout the well-maintained and reticulated grassed areas which are attractive to picnickers. Additional groups of shade trees may improve the area.

Further east along the foreshore the view across the river is to attractive, dense stands of freshwater paperbarks (M. rhaphiophylla) on the Clifton Park foreshore.

Bright and colourful wildflowers including kangaroo paws (Anigozanthos manglesii) line the limestone walkways which lead to the recently constructed hill top viewing platform from which views both up and down the river can be seen.

The walk through the paperbark wetland at the Scout Camp end of the foreshore provides a distinctive and attractive variation to the visual amenity on the open parkland at the western end of the reserve.

5. LAND DEVELOPMENT AND USE

5.1 Land tenure and ownership

The study area is made up of two Crown reserves (24359 and 25417), both vested with the Shire of Dardanup.

Reserve 24359 consists of 4.7424ha between Pratt Road and the Collie River from the Collie River Bridge to Graham Street and Reserve 25417 consists of 11.9844ha from Graham Street to the Eaton Scout Camp, bounded by Pratt Road.

5.2 Land zoning

The Eaton foreshore reserve area lies within the Shire of Dardanup land management area and is zoned for "Public Recreation".

5.3 Patterns of human use

The foreshore reserve along the river at Eaton has been under intense pressure from local residents, with Eaton undergoing a rapid growth stage with new residential subdivisions taking place. Considerably more growth is expected in the next ten years with the development of the Glen Huon area which will expand the townsite and further increase the number of people in the area.

The name Eaton was adopted in recognition of the work by the late Mr Foster Eaton, a fisheries and game inspector in the area.

5.3.1 Area 1 - Apex Park and Lions Park recreation area

Area 1 consists of two designated recreation areas separated by the road access to the boat ramp car park. Apex Park lies to the west between the Old Coast Road and the boat ramp road access way, and Lions Park lies to the east between the boat ramp road access way and the Eaton Bowling Club carpark.

The Eaton Foreshore has primarily a recreation focus. Apex Park and Lions Park at the western end have been developed by the Shire of Dardanup and LIMA as passive recreation areas being grassed, reticulated and mown. Barbeques have been constructed on this grassed area in sufficient numbers to support large group picnic functions. Additional barbeques are located at the eastern end of Area 1 to the east of the swimming area.

The foreshore provides good access opportunities to the Collie River with a two boat concrete boat launching ramp and carpark and a swimming beach and jetty. The carpark has long parking bays to accommodate cars with attached boat trailers.

A public toilet building is located alongside the carpark to service people using the boat ramp as well as people using the general recreation areas and the swimming area. The toilet facility also attracts patronage from the large sporting oval on the opposite side of Pratt Road from the foreshore area.

Children's swings and jungle gym type playground equipment are located near the toilet block, and also further west on Apex Park. The equipment near the toilet block is in poor condition and needs to be replaced. Jungle Gym climbing equipment is also located in Lions Park near the swimming area as well as at the eastern end near the Bowling Club. Apex Park and Lions Park form a common theme of passive recreation area involving grassed picnic areas, supported by children's play equipment and good facilities for access to the Collie River.



(Plate 3: The Apex and Lions Park areas are popular sites for picnics and social gatherings)

5.3.2 Area 2 - Bowling club to boardwalk

Area 2 consists of the narrow river foreshore from the Eaton Bowling Club to the boardwalk opposite Hands Avenue intersection with Pratt Road.

This narrow foreshore strip provides limited opportunities for recreation and development. A carpark has been built on the foreshore across Pratt Road from the Bowling Club and a walk trail has been constructed along the foreshore connecting area 1 with area 3. Several riverbank sites have been developed for fishing access to the river.

From Solomon Street to Hands Avenue the foreshore profile changes to become a steep sandy slope from Pratt Road down to the river. The vegetation on this sand slope has been degraded through frequent fires and weed infestation. Some local residents have used the slope for dumping rubbish and garden clippings and refuse, which has gone largely unnoticed because it is difficult to see from the road. Locals have also established a number of access tracks down the steep slope from Pratt Road to the river.

A viewing platform and boardwalk have been being constructed at the eastern end of area 2, providing viewing opportunities of the Collie River and foreshores, and access across a backwater linking the foreshore walk trail into the Watson Street recreation reserve (area 3).



(Plate 4: The recently constructed boardwalk links the walk trail to the Watson Street recreation area)

5.3.3 Area 3 - Boardwalk to scout camp

Area 3 consists of the Watson Street recreation reserve and the paperbark wetland adjacent to Pratt Road through to the Eaton Scout camp. The Watson Street recreation reserve consists of a low level parkland cleared floodplain area subject to inundation during extreme flood conditions.

The Shire has built a toilet block facility on the reserve, and placed logs alongside vehicle access tracks to control vehicle movement on the reserve. LIMA has constructed log and rock walling along the riverbank to control erosion, and has built a river access point into the walling.

Two barbeques have been installed and the newly constructed timber boardwalk links the reserve with the foreshore walk trail from area 1. A small boat launching ramp has existed at the western end of this recreation reserve for many years and provides access to the river for small boats and dinghies.

The paperbark wetland is situated in a low lying area between the river foreshore and Pratt Road. The thick vegetation in this swamp prohibits most pedestrian access, and provides a refuge for many small animals and birds. Flood waters from the Collie River will pass through this swamp and around the recreation reserve during medium to high flood conditions.

An informal walk trail follows the riverbank from the recreation reserve through to the Scout camp. This section of the foreshore is popular for fishing access to the Collie River.

The Watson Street recreation reserve is isolated from community view being screened from Pratt Road by the dense wetland vegetation, and this has contributed to the reserve and facilities being damaged by vandals. Part of the justification for the construction of the boardwalk is to encourage more people to use the area and remove the feeling of isolation and being unseen from the vandal element which has frequented the area in the past.



(Plate 5: Considerable work is proposed to rehabilitate and upgrade the Watson Street recreation area)

6. MANAGEMENT ISSUES

The following issues have been identified by the working group, and from public comments, for the management of the Eaton Foreshore area.

- dumping of rubbish on the reserve
- provision of rubbish bins
- erection of signs
- · provision for public access
- control of public and vehicles access
- control of exotic trees and shrubs
- erosion control
- fire control
- control of speed boats
- provision of public facilities
- public education and information
- · control of vandalism
- · protection for vegetation
- responsibility for implementation of the management plan

7. RECOMMENDATIONS FOR MANAGEMENT

The following recommendations for management have been prepared by the Working Group after consideration of previously listed issues.

7.1 Land use and management

- R1: Ensure Reserves 24359 and 25417 are managed to protect and enhance wildlife values, and to provide recreation areas for both local and regional communities.
- R2: Ensure recreation activities are in keeping with protection and enhancement of wildlife values.
- R3: 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.
- R4: The Eaton Community Development Association be requested to accept management responsibility for the Eaton foreshore reserve and for implementation of the recommendations from the management plan.

7.2 Environmental

- R5: Ensure public access is managed to prevent erosion problems developing along the riverbank and steep sandy slopes.
- R6: Establish understorey and tree plantings along steep sandy slopes to retain soil on the embankments.
- R7: Maintain drainage from shallow wetland areas to reduce mosquito breeding using methods in accordance with the Mosquito Control Strategy (Chester and Klemm 1990).
- R8: Infill planting of river bank and foreshore areas with listed species as shown in Appendix 2. Plant more Flooded Gums and Swamp Sheoak along the riverbank.
- R9: Spray weeds in specific locations on the site with environmentally friendly herbicide to allow regeneration of native species, and control growth of weeds.
- R10: Remove rubbish and garden refuse from the steep bank adjacent to Pratt Road where residents have thrown litter and garden clippings.
- R11: Remove exotic species which have established a foothold on the steep bank alongside Pratt Road.
- R12: Provide advice to Pratt Road residents that rubbish and garden refuse dumping will not be allowed to continue, and produce a public information pamphlet on this issue for wider distribution.

7.3 Recreational

- R13: Construct a second swimming area between the boat ramp and the Collie River bridge.
- R14: The walk trail alignment to be directed back to Pratt Road verge at Solomon Street to allow continuous access along the foreshore. Close off access track directly down from Solomon Street to control bank erosion. Rehabilitate disturbed bank below Solomon Street.
- R15: Remove old jetty remains and debris along riverbank.

- R16: Construct a small carpark and drop off point for approximately 12 cars on the foreshore near the Solomon Street access to the walk trail. Construction of a barrier fence along the edge of Pratt Road to discourage parking in the area of the drain.
- R17: Establish several fishing platforms along the riverbank, as marked on the plan.
- R18: Establish signage at all river access sites to direct people to preferred use areas.
- R19: Construct walk trails along the river foreshore linking the existing foreshore walk trail which connects the Collie River bridge with the Eaton Bowling Club. Construct a walk trail traversing the river foreshore from the Eaton Bowling Club through to the Eaton Scout camp. (Walk trails to be formed and compacted limestone)
- R20: Connect the foreshore walk trail with the boardwalk into the recreation reserve at Watson Street.
- R21: Install more playground equipment in Area 1 east of boat launching ramp.
- R22: Replace old playground equipment near the toilet block in Area 1, and provide more equipment to the Foster St end of reserve 24359.
- R23: Feature plant reserve 24359 area between the bridge and Foster St in accordance with the Area 1 concept plan, and species listed for rehabilitation in Appendix 2. The main function of the trees will be for shading the recreation area.
- R24: Construct new stepped access down the bank from Bowling Club carpark to the walk trail.
- R25: Construct walkway under Collie River traffic bridge to connect reserve 24359 foreshore with Pelican Point foreshore, subject to approval of WAWA and Main Roads WA.
- R26: Construct timber boardwalk across backwater of Collie River adjacent to Hands Avenue to link foreshore walk trail with the recreation reserve at Watson St. Include lighting either on boardwalk or on foreshore at one end.
- R27: Construct timber viewing platform at Hough's hill, with views upstream and downstream on the Collie River.
- R28: Construct carpark area and drop off point at Hough's hill viewing platform.
- R29: Construct stepped access down steep bank from viewing platform to the boardwalk on the riverbank.
- R30: Plant understorey species on steep bank along Pratt Road to control erosion and stabilise bank soil.
- R31: Establish picnic and BBQ areas on the Watson St recreation reserve in accordance with the Area 3 concept plan.
- R32: Develop road access, car parking areas and walk trails on the Watson St recreation reserve as shown on the Area 3 concept plan.
- R33: Establish play ground equipment on the Watson St recreation reserve as shown on the Area 3 concept plan.
- R34: Grade and level the Watson St recreation reserve and encourage the establishment of grass under the treed areas.
- R35: Maintain the existing boat launching ramp on the Watson St recreation reserve, and construct turn-around and car parking area at the western end as shown on the Area 3 concept plan.

- R36: Install drainage pipes under walk trails along the river foreshore through to the Eaton Scout camp, adjacent to the wetland area.
- R37: Install bore and reticulation to principal picnic nodes as shown on the Area 3 concept plan.
- R38: Define all car parking areas with pole barrier fencing to prevent vehicle access to the foreshore reserve.
- R39: Determine a name for the Watson Street recreation area.
- R40: Erect bench seats along walk trail.



(Plate 6: Limestone walk trails provide controlled pedestrian access along the foreshore)

7.4 Other

7.4.1 Road and vehicle access

R41: Construct road access to carparks on Watson Street reserve as shown on concept plan for Area 3. Prevent vehicle access to all other areas on the recreation reserve.

7.4.2 Site interpretation

- R42: Construct a gazebo adjacent to the viewing platform on Pratt Road to house interpretive information. The information bay to provide details of flora and fauna and do's and don'ts for the recreation area.
- R43 Provide additional signage along the foreshore to enable interpretation of special features, including flora, fauna, and historical significance.

7.4.3 Fire control

- R44: Control grasses and other weeds by slashing and mowing grassed areas.
- R45: Plant additional areas to shade out some grasses.
- R46: Adopt a three year burning cycle for the removal of accumulated dry material from the reserve under the supervision of the local fire control officer and that herbicide spraying be used only for the eradication of specific weeds.
 - An annual inspection of the foreshore area to be made in conjunction with the fire brigade to determine burning off required.
- R47: Construct firebreak around the wetland area near Watson Street, and encourage local residents to assist with approved fire control methods.

8. REVIEW OF PUBLIC CONSULTATION

Comments and suggestions received during the public consultation period will be reviewed by the working group.

9. IMPLEMENTATION

9.1 Funding and management responsibilities

The Shire of Dardanup as the Authority with vesting of the reserve is responsible for the day to day management and maintenance of the area, and the Shire Council has support from LIMA for works associated with the river, riverbanks and fringing vegetation

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. Individuals within the community are welcome to approach the Shire Council with suggestions on how they may assist.

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

Maintain grassed recreation areas, carparks, roadways, walk trails and barrier fencing.

Construct boardwalk across backwater of Collie River to connect walk trail into area 3.

Construct walk trail along Collie River foreshore to connect Collie River bridge with the Eaton Scout Camp.

Install barrier fencing to prevent unauthorised vehicle access to the reserve.

Provide firewood to picnic areas.

Remove dumped garden rubbish from the foreshore reserve.

Commence consultation with nearby residents on management practices with regard to dumping of garden rubbish, lawn clippings and tree/bush cuttings.

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

Carry out annual inspection for fire control.

Maintain fishing platforms and jetties on riverbank.

Year 2 July 95 to June 96

Maintain grassed recreation areas, carparks, roadways, walk trails and barrier fencing.

Construct roadways and carparks off Pratt Road into area 3 near Watson St. Establish picnic areas and carry out landscaping of surrounding area.

Replace damaged and broken barbeques.

Provide firewood to picnic areas.

Construct additional boardwalks over wetland and drains near area 3 to connect walk trail to Eaton Scout camp.

Commence tree planting and landscaping on Rotary Park and Apex Park. Ground preparation including ripping and spraying of grasses and weeds.

Construct river access site/swimming area adjacent to Rotary Park.

Maintain fishing platforms and jetties on riverbank.

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

Carry out annual inspection for fire control.

Year 3 July 96 to June 97

Maintain grassed recreation areas, carparks, roadways, walk trails and barrier fencing.

Provide firewood to picnic areas.

Construct walkway under Collie River bridge.

Maintain fishing platforms on riverbank.

Continue tree planting and revegetation work.

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

Carry out annual inspection for fire control.

Year 4 July 97 to June 98

Maintain grassed recreation areas, carparks, roadways, walk trails and barrier fencing.

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.

Carry out annual inspection for fire control.

Year 5 July 98 to June 99

Maintain grassed recreation areas, carparks, roadways, walk trails and barrier fencing.

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

Carry out annual inspection for fire control.

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.

Review management plan.

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

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