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WETLANDS OF THE DARLING SYSTEM

WETLAND RESERVES AND THEIR MANAGEMENT

By Karen Majer

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Cover: Lake Joondalup, Shire of Wanneroo, showing fringing vegetation of Jointed Twig Rush, Bulrush and Swamp Paper-bark. Inset on right : White Ibis.

WETLANDS OF THE DARLING SYSTEM:

WETLAND RESERVES

AND THEIR MANAGEMENT

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Bulletin No. 62
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Department of
Conservation and Environment
Western Australia

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FOREWORD

The importance of conservation of wetlands in Western Australia has been recognized by the Western Australian Environmental Protection Authority (EPA) in putting forward recommendations on conservation reserves (National Parks and Nature Reserves) in Western Australia 1, 2, 3.

In the course of the EPA's consideration of its Conservation Through Reserves Committee's (CTRC) proposals for reserves, and the formulation of recommendations, it became clear that the extent and nature of current allocation of reserves on wetland areas was not known; information on the distribution and types of surviving wetlands was inadequate; the ownership and vesting of wetland reserves was diverse, and in consequence the use of their resources was potentially haphazard; the current status of management of wetland reserves, whilst varying with vesting authorities, localities and other factors, was generally inadequate. Virtually no formal management plans were known to exist and management tended to be of an ad hoc nature.

Recognizing that many of the wetland reserves are vested, and that the responsibility for management lies with the Authority in which they are vested, the EPA believed that it would be desirable to create a consistent pattern of allocation and development of wetland reserve resources. To achieve this there was the need to co-ordinate the approach to the development of management plans for wetland reserves, particularly in terms of overall management to cater for the differing demands made on such reserves.

As a result of these considerations the Wetlands Advisory Committee was convened in February, 1976, by the Department of Conservation and Environment, and was comprised of the following members :

Mrs. K. Majer (Chairperson)	Department of Conservation and Environment
Mr. N. Orr (Secretary)	Department of Conservation and Environment
Dr. N. Marchant	W.A. Herbarium
Dr. T. Riggert	Department of Fisheries and Wildlife
Dr. P.R. Wycherley	Kings Park and Botanic Gardens
Mr. R. Hiller	Town Planning Department
Mr. B. Bailey	Community Recreation Council

The terms of reference of the Wetlands Advisory Committee were to review and advise the EPA on the desirable allocation of wetland reserve resources and the adequacy of their management.

The area selected for the initial one-year study was the region from Moore River to Bunbury, known as the Darling System (Fig. 1). This area was chosen firstly because it presently contains about 76% of the State's population and is an area of intensive, and often competing, land-use which places a great deal of pressure on the wetlands. Secondly, it was felt that the information collected in the course of the study would form a useful input to the CTCRC committee, which was then initiating its consideration of the need for further conservation reserves in the Darling System.

The information collected by the Wetlands Advisory Committee between February, 1976 and July, 1977, and the resulting recommendations to the EPA have, however, wider relevance than purely as an input to the Darling System Study. The purpose of this bulletin is to increase the accessibility of this data, and allow dissemination of relevant information to those who may find it of practical value in future planning for wetlands.

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1. INTRODUCTION

Wetlands are valuable assets in Western Australia. They play important roles in drainage, in water balance and in the maintenance of surface and groundwater quality. They provide habitats for a wide range of aquatic and terrestrial plants and animals whose survival and well-being are directly related to that of the wetlands. Because of their biological diversity and high productivity, wetlands provide significant areas for scientific research and have educational importance. People also gravitate towards wetlands for their recreation. For instance they provide the venues for aquatic recreation including boating, swimming, water-skiing, fishing, crabbing, and prawning as well as for pursuits such as picnicking, walking, photography, rambling and bird-watching which, while not necessarily relying on wetlands, are greatly enhanced by their scenic and landscape value.

Wetlands have always been a focus for man's activities. They have been exploited for transportation, water supply, drainage, waste disposal, mining and agriculture, among other uses. Wetlands are filled to provide sites for urban, tourist and industrial development, and are frequently used as rubbish dumps. The largest losses have resulted from drainage of land for its conversion to arable, pastoral or other agricultural uses. Apart from direct destruction through filling and draining, wetlands are subject to pressures from human activity, both in the wetlands and in their catchment areas, which may lead to degradation of the water quality or quantity, for example by pollution, eutrophication, salination and silting. Even in the absence of man-induced alterations, wetlands are subject to changes through climatic influences.

It follows that conservation and management of the surviving wetlands is a matter of urgency.

The importance of conservation of wetlands was recognized by the Western Australian Environmental Protection Authority (EPA) in putting forward recommendations on conservation reserves (National Parks and nature reserves) in Western Australia 1, 2, 3.

The recommendations covered reservation of an array of wetland types and biological associations. In some cases where it was deemed necessary, reservation of adjacent land was suggested so as to protect the wetland from adverse effects of surrounding land-use development.

The EPA also stated that whatever the aim of reservation, whether it be for preservation of natural areas as "wilderness", biological reserves for scientific purposes, national parks, provision of recreational facilities, or water supply catchments, there will be some degree of conflict between various uses, and management is thus extremely important.

Adequate reserve management and some degree of catchment management, if the surrounding land is not included in the reserve, is essential if the wetland is to be protected

and the reserve fulfil the purpose for which it was set aside.

The problem is to ensure adequate reservation of wetlands and subsequent appropriate reserve (and catchment) management.

This booklet sets out information on reserves with wetland resources in the area from Moore River to Bunbury, known as the Darling System (System 6) (Figure 1)⁴.

The information includes :-

- . the current allocation, vesting, area and gazetted purpose of all reserves which include or are adjacent to all or part of a wetland;
- . the nature or types of wetlands in the reserves;

This information, together with comments on the uses and adequacy of current management of wetland reserves and some recommendations on management, is provided as an input to those with an interest or a practical involvement in wetland management.

2. WETLANDS IN THE DARLING SYSTEM

2.1 Wetland resources

Figure 1 shows the boundaries of the Darling System, as defined by the Conservation Through Reserves Committee of the EPA. The Local Authority areas which lie wholly or partly within the Darling System are listed in Table 1, (Perth Metropolitan Region) and Table 2 (The Darling System outside the Perth Metropolitan Region).

There has been no recent overall survey of the wetland resources in this area, but preliminary inventories of the major lotic* wetland systems^{4,5} and lentic** wetlands⁴ have been compiled, and there have been surveys of some specific areas⁶.

2.2 Land use pressures on wetlands

The Darling System encompasses most of the original European settlements in Western Australia and, although it represents only 1.06% of the total area of the State, it accommodates in excess of 76% of the population (approximately 93% of this in the Perth Metropolitan Region).

It follows that this is an area of intensive land use with alternative uses often competing. Wetlands in the area are thus subject to pressures for use of their resources and from land uses in their catchment areas which usually affect the quantity or quality of water sustaining them.

* Lotic: running water

** Lentic: standing water

These pressures on wetlands in Western Australia have been described in Guidelines to the Conservation and Management of Wetlands in Western Australia⁷.

In summary, the greatest threats to wetlands in Western Australia are:

- . drainage and filling
- . pollution
- . eutrophication
- . erosion
- . water level changes
- . aesthetic disruption
- . noxious weeds
- . insect pest control measures

A survey carried out between 1964 and 1966 highlighted the extent of the effects of exploitation of wetlands on the Swan Coastal Plain. It was estimated that by 1974, 75% of the wetlands had been reclaimed, amounting to about 200,000 hectares of land, and of the remaining 65,000 hectares, about 40% was potentially reclaimable using existing techniques^{8,9}.

Since then, an increasing population and a "development" oriented economy have increased the potential for drainage, filling and pollution of the remaining wetlands, and for the use of the water supplies (both surface and underground) which sustain them. This represents a threat to the flora and fauna associated with them, as well the loss of scenic, recreational and educational resources¹⁰.

2.3 Wetland ownership

Many of the wetlands in the Darling System are privately owned, particularly in rural areas where they form part of large agricultural holdings.

Those wetlands which are not in private ownership may fall within State Forest, Water Catchment Reserves, or vacant Crown land, or may be wholly or partly contained in various types of reserves.

The term "reserve" is defined for the purposes of this booklet as land reserved under Section 29 of the Land Act (1933). Under Section 30 of this Act, "A description of every such reserve and of the purposes for which it is made, shall be published in the Gazette, and all reserves shall be set forth on authenticated maps of the department". These reserves are set aside for a wide variety of

purposes as set out under S. 29 (1), and include National Parks, flora and fauna, recreation, drainage and water supply reserves.

In the Metropolitan Region, wetlands may also occur in land which is reserved for Parks and Recreation under the Metropolitan Region Scheme. Some of this land has been acquired by the Metropolitan Region Planning Authority (MRPA) and some is still freehold, yet to be acquired. Wetlands in this category may already fall within some other type of reserve. e.g. Loch McNess and associated wetlands (in Yanchep National Park), and Lake Nowergup (an "A" Class Reserve). Other wetlands in MRPA reserves are not covered (or completely covered) by any other form of reservation, e.g. Lake Joondalup, Carine Swamp, Perry Lakes and Yangebup Lake.

Wetlands in urban areas may also fall within local open space reserves which are generally smaller than their regional counterparts and include areas for active recreation, small parks, etc. Some of these are acquired by Local Authorities, and many at the time of subdivision under conditions imposed by the Town Planning Board. Wetlands held in freehold by Local Authorities have usually been set aside for recreation.

3. WETLAND RESERVES IN THE DARLING SYSTEM

3.1 Method of Data Collection

For convenience, the Darling System area was divided into Local Authority areas in the Perth Metropolitan Region (Table 1) and those in the Darling System outside the Perth Metropolitan Region (Table 2).

The Darling System Outside the Perth Metropolitan Region:

A search was made of all current working plans held by the Department of Lands and Surveys. Listings of all reserves on or adjacent to wetlands were compiled. All drainage and water supply reserves were included as it was assumed that these are generally associated with wetlands or utilize natural drainage contours.

Perth Metropolitan Region:

Lists of reserves on Metropolitan wetlands were compiled from overall listings of reserves in each Local Authority area supplied by the Department of Lands and Surveys. The Shires of Rockingham and Wanneroo were considered to warrant more extensive study as many important wetlands lie within these Shires, and for these areas searches were made of all current working plans as for the Darling System outside the Metropolitan Region. Due to the number of reserves involved, drainage and water supply

reserves were not included unless specifically known to contain a wetland.

The following information was recorded for each reserve:

Reserve number
 Local Authority
 Area
 Purpose
 Vesting
 Presence of wetland areas in or adjacent to reserve
 Type of wetland

The wetlands were classified according to a system developed by the Wetlands Advisory Committee⁴.

The major divisions were :

Lentic (standing or non-flowing water)
 Lotic (running water)
 Estuarine (tidal part of river)
 Artificial (man-made, including reservoirs, excavated lakes)

The lentic wetlands were further divided according to the primary criteria of size, salinity and permanence, and secondly on the degree of vegetative cover. Such a classification has value in identifying wetland groups, their potential uses and management requirements. It is acknowledged, however, that the simplicity of the system may lead to grouping of some biologically dissimilar wetlands. The classification of wetlands on the Swan Coastal Plain is dealt with in more detail by Marchant (in prep.)¹¹.

Wetland resources in reserves were largely identified from maps because it was not possible, within the time allocated for the study, to inspect every reserve to identify wetland areas. Some wetlands, particularly seasonal swamps and winter wet depressions, are not consistently shown on maps, and some reserves containing these may have been omitted from the inventory.

3.2 Wetland Reserve Listings

Reserves which include, or are adjacent to, all or part of a wetland (regardless of the purpose of the reserve) in the Darling System are detailed in the Appendices. The area, gazetted purpose and vesting of each reserve are given (together with the type of

wetland, where this information was available).

The large number of reserves with wetland resources has necessitated splitting the reserve listings into a number of appendices + as follows:

- Appendix 1: Wetland reserves in Perth I. (Local Authority areas of Perth, Subiaco, Nedlands, Claremont, Cottesloe, Mosman Park, Peppermint Grove, Stirling, Bassendean, Bayswater, Belmont, Melville, Canning, South Perth, Fremantle, East Fremantle).
- Appendix 2: Wetland reserves in Perth II. (Local Authority areas of Wanneroo and Swan).
- Appendix 3: Wetland Reserves in Perth III. (Local Authority areas of Cockburn, Kwinana and Rockingham).
- Appendix 4: Wetland Reserves in Perth IV. (Local Authority areas of Gosnells, Armadale-Kelmscott and Serpentine-Jarrahdale).
- Appendix 5: Wetland Reserves in Perth V. (Local Authority areas of Mundaring and Kalamunda).
- Appendix 6: Wetland Reserves in the Northern Agricultural Area*. (Local Authority areas of Gingin, Chittering and Victoria Plains).
- Appendix 7: Wetland Reserves in the Central and Southern Agricultural Areas* (Local Authority areas of Toodyay, Northam, York, Beverley, Brookton, Wandering, Williams and West Arthur).
- Appendix 8: Wetland Reserves in the South-West I. (Local Authority areas of Mandurah and Murray).
- Appendix 9: Wetland Reserves in the South-West II. (Local Authority areas of Harvey and Waroona).
- Appendix 10: Wetland Reserves in the South-West III. (Local Authority area of Bunbury).
- Appendix 11: Wetland Reserves in the South-West IV*. (Local Authority areas of Boddington, Collie, Nannup, Dardanup, Boyup Brook, Bridgetown - Greenbushes, Donnybrook - Balingup).

This grouping is based primarily on the Western Australian Statistical Divisions¹², and secondarily on geographical relationships and numbers of wetland reserves involved.

+ Copies of relevant Appendices are provided to Local Authorities. Complete sets of Appendices are included with copies of Bulletin 62 provided to libraries. Additional copies of the Appendices may be obtained by writing to the Information Centre, Department of Conservation and Environment, 1 Mount Street, PERTH.

* Parts of some of the Local Authority areas fall outside the Darling System (see Table 2). Only those reserves within the Darling System are listed.

4. USES OF WETLAND RESERVES

Wetland reserves are subject to high pressure and conflicting demands for use, particularly in the Metropolitan area and areas easily accessible from Perth, (or from regional population centres).

Table 3 lists the major uses of wetlands, under the broad headings of recreation, education, extractive industry, agricultural or rural use, urban and industrial use, and flora and fauna conservation. All these are uses to which reserved wetlands are put in various situations and also the uses, except urban and industrial, that could occur in conservation reserves.

4.1 Recreation

Although there has, to date, been no detailed survey of the nature or intensity of recreational use of wetlands in the Darling System for either land or water based recreation, it is clear that the pressure of recreational use of wetlands in and near Perth is great¹³. Available aquatic recreation areas, particularly the Swan-Canning River system, the Peel-Harvey Inlet and the landscaped lakes around Perth, are often over-crowded; there is particularly high pressure on areas suitable for boating; there is often competition for use of suitable areas for differing recreational pursuits¹³.

4.2 Education

Wetlands frequently form the basis of student projects, and there is a very considerable interest in wetlands at both school and tertiary level.

With an increasing population it seems reasonable to assume that the use of reserved wetland areas for teaching and research will become increasingly important. Such use is extremely valuable, not only in accumulating data which may provide an input to future management of wetlands, but also in fostering an interest amongst students, and hence the community, in the wetland areas.

4.3 Extractive Industry

Wetland reserves may be subject to applications for mining for minerals or peat, may fall within large mining claims (for example for bauxite), may be a source of water supply, or may be affected by a regional lowering of the water table due to groundwater abstraction. Lentic wetlands which were the subject of mining claims in the Darling System in 1976 are listed in Table 4⁵. Wetlands with existing, or possible future dam sites, and those which may possibly be affected by groundwater abstraction are listed in Tables 5 and 6 respectively. Again, this information was compiled in 1976⁵.

4.4 Agricultural Use

Probably the most common agricultural use of reserved wetlands is for stock grazing and watering, either under a lease from the vesting authority, or simply because the reserve is not fenced and cattle or sheep from adjacent properties stray onto the reserve. With proper management, access by stock for water at restricted points may cause little damage to the wetland, but it is often the case that unrestricted trampling by stock, and grazing on wetland vegetation, causes erosion, disruption of wildlife habitats, and hampers regeneration of natural vegetation.

An example of such a problem is Wallering Swamp (†26756, Conservation of Flora and Fauna) which was once a breeding area for the Straw-necked Ibis. A combination of a fire which went through the reserve, and subsequent grazing by cattle from an adjacent agricultural property (the reserve is unfenced) preventing regeneration of the paperbarks (*Melaleuca* spp.) which provided the breeding sites for the birds, has destroyed the usefulness of the reserve for this purpose. The ibis were subsequently forced to seek a new breeding ground.

4.5 Urban Use

Wetland reserves may be set aside for various purposes in an urban situation, including water supply, drainage, waste disposal, and open space¹⁴. Many of the gazetted purposes of reserves incorporating all or part of a wetland are unrelated to the presence of the wetland area (for example Church site)¹⁴. Probably the major uses of reserved wetlands in an urban context (apart from recreation which has already been discussed) are related to their landscape value and their function for stormwater drainage. They may also be used as sites for the disposal of municipal wastes, which is obviously destructive in terms of wetland conservation, and tends to conflict with most other uses. Although, in the past, sanitary landfill of part of a reserved wetland was considered an acceptable means of creating recreational areas such as playing fields or formal parkland on the verges of lakes and rivers, the potential for pollution and particularly for the spread of *Salmonella* serotypes by this activity is now realized¹⁵. Many existing, and proposed future, sanitary landfill sites are, however, still located in low lying swamp areas and on river foreshores.

Often seasonal wetlands are subjected to excavation and landscaping to fulfil the role of stormwater drainage basins, landscape features, and recreation areas¹⁶. Many creeks are used (and often modified) for urban drainage, and these, as well as piped stormwater drains, carry urban run-off into rivers and lakes. The wetlands directly affected by drainage in the Darling System (in 1976) are listed in Table 7⁵.

4.6 Conservation

Conservation reserves and National Parks are important in conserving biologically important wetland areas and maintaining a range of wetland types and thus habitat diversity. The use of a reserve for conservation purposes may, in some cases, be in association with some degree of recreational use¹⁷.

5. MANAGEMENT OF WETLAND RESERVES

5.1 Legislative Aspects

The use and management of wetlands are covered by a number of pieces of legislation, notably the following:¹⁸

Land Act

Rights in Water and Irrigation Act

Metropolitan Water Supply, Sewerage and Drainage Act

Water Boards Act

Land Drainage Act

Swan River Conservation Act

Fisheries Act

National Parks Authority Act

Wildlife Conservation Act

Forests Act

Mining Act

Local Government Act

Public Works Act

Town Planning Act

Environmental Protection Act

Waterways Conservation Act

The inter-relationships between the Acts will clearly be complex and, in some cases, probably unclear until tested by legal proceedings. A more detailed consideration of the legislative aspects is therefore beyond the scope of this bulletin.

5.2 Current Status of Management

The reserves of most concern from the point of view of wetland conservation are those set aside for conservation, recreation and National Parks. The vesting authorities involved in management of these reserves are as follows :

- | | | |
|-----------------------|---|---|
| Conservation reserves | - | Local Authorities
WA Wildlife Authority
National Parks Authority |
| Recreation reserves | - | Local Authorities
Conservator of Forests
National Parks Authority |
| National Parks | - | National Parks Authority |

Many reserves under these three headings are not vested¹⁴.

The number of Local Authorities involved (see Tables 1 and 2) and their diverse approaches to management of reserves vested in them, renders the statement of an overall management policy impossible. There have been some attempts to develop management plans for wetlands, an outstanding one being the Cockburn Wetlands Study¹⁹. In general, however, attempts at management are fragmented and there are some problems which appear to be encountered by most Local Authorities who are attempting to conserve and develop management plans for wetlands vested in (or owned by) them. For instance there are often financial constraints in managing large areas of open space. Low-lying areas including wetlands are often given by land-owners as 'local open space' because they cannot be developed easily, but this does not ensure their protection as wetlands. The Local Authorities in whom these reserves may be vested are responsible for the provision of adequate areas for active sports, parks and playgrounds; they therefore fill many of them, and turn them into playing fields. They encounter prejudice against the untidy appearance of natural swamplands. They come under pressure from the residents of adjacent areas to eradicate mosquitoes from swamps and they find difficulty in doing this without damaging the swamp habitats. Finally, there is often a lack of available expertise to advise on wetland management.

The Department of Fisheries and Wildlife and the Western Australian Wildlife Authority (WAWA) are responsible for the conservation of the native fauna and flora of the State. Because many indigenous animals and plants cannot exist outside their unaltered natural ecosystems the main approach to conservation has been to set aside nature reserves, vested in the WAWA and managed on their behalf by the Department of Fisheries and Wildlife. /

The Authority has established a working policy of conserving a wide range of wetland types located in the different watershed systems throughout the State. In particular the Authority has tried to conserve two types of wetland :

- . large areas of permanent water which are used as drought refuges and managed to ensure the least possible disturbance by the direct or indirect action of man;
- . fresh-water swamps utilised as breeding or drinking areas by those species of wildlife which cannot survive solely in brackish or salt-water areas.

Under the Fauna Conservation Act, the WAWA has power to prepare management schemes for "sanctuaries" (including reserves for fauna conservation) or any area of land of which the Authority is the owner, in that it shall "... cause to be prepared a detailed written scheme of the operations that the Authority proposed to undertake on or in relation to the area for such period, not exceeding ten years, as is specified in the scheme". Few such plans have been formally prepared, although management has been implemented for certain reserves, e.g. Lake Dumbleyung, Twin Swamps, Ellen Brook Reserve.

The National Parks Authority has delineated overall management policies for areas under its jurisdiction, including the wetlands within these areas. National Parks are established to preserve for all time scenic beauty, wilderness, native wildlife, indigenous plant life and areas of scientific importance, and to provide for the appreciation and enjoyment of those things by the public in such a manner and by such means as will leave them unimpaired for the future²⁰.

The management, classification and appropriate uses of National Parks have been described by Smith (1975)²⁰.

State Forests and reserves vested in the Conservator of Forests are managed by the Forests Department which has outlined management plans for these areas²¹. Briefly, the general concept is one of multiple use management, including flora and fauna conservation, recreation and tourism, science and education, as well as timber and other forestry productions. Several areas have been selected in which conservation of flora, fauna and landscape are the management priority, and these include some wetland areas, such as Gunapin Swamps, Lake Ngartiminy, and parts of the Blackwood River Valley.

Apart from those authorities in whom conservation and recreation reserves are vested, there are also

other bodies with a major involvement in wetland management. For instance, there are large areas of "Regional Open Space", including wetlands, which are held by the Metropolitan Region Planning Authority, which acquired them. The Authority has undertaken planning studies of some of these areas - such as the White Lake, (Rockingham Lakes Study), Lake Joondalup and Herdsman Lake, and has co-operated with Local Authorities in other investigations - such as the Cockburn Wetlands Study, and Lake Carine Study. However, the MRPA has encountered difficulties similar to those outlined for Local Authorities particularly in that it has lacked financial resources to acquire and manage reserves simultaneously; it has commissioned a study of this problem.

The Metropolitan Water Supply, Sewerage and Drainage Board and the Public Works Department (PWD) are also involved in wetland management in both short and long term planning for drainage and water resource development inside and outside the Metropolitan area respectively. An example is the interaction of the PWD with the Department of Fisheries and Wildlife in manipulating wetland habitats at Benger and Busselton as waterbird habitats.

The effectiveness of a reserve in fulfilling the purpose for which it was set aside depends on more than the policy of the vesting authority, particularly if the purpose depends on protection of the wetland feature (for example maintenance of the water quality for recreation).

Deficiencies in management are also associated with the following factors:

- . diverse ownership and vesting (and hence management responsibility) of areas which form part of the same wetland or wetland system;
- . lack of management policies and objectives - there are very few formally prepared management plans;
- . lack of 'policing' of management, associated with insufficiency of funding, staff and expertise in some categories of vesting authorities;
- . impact of adjacent land-use activities (for instance on private land) over which the management authority has no control;
- . lack of knowledge on wetland ecosystem management to preserve habitat diversity.

6. WETLAND RESERVE MANAGEMENT RECOMMENDATIONS

Protection of wetlands involves far more than reservation of representative areas under the Land Act. The

Metropolitan Region Scheme, and zonings and land use controls imposed under Local Authority Town Planning Schemes are most important in determining the future of wetlands, as is public opinion and the actions of private land owners and developers. Management plans for State Forests and Water Catchment areas also affect wetland preservation. Guidelines for planners, developers, Local Authorities and land owners as to the desirable approach to integrating wetland conservation and management into the planning for development proposals, (for example, for rural and urban subdivision, mining, sanitary landfill and agriculture) are given in the booklet "Guidelines to the Conservation and Management of Wetlands in Western Australia"⁷.

The following comments and recommendations are therefore largely confined to the management of wetlands which are wholly or partly reserved or fall within regional or local "Open Space". They are intended as a guide for those who are interested in, or responsible for, management of wetland reserves and specifically to assist in the development of management plans for such reserves. Recommendations on other aspects of wetland management are dealt with in other bulletins^{13,14,17}.

It is considered that those authorities in which wetland reserves are vested, (and those who are responsible for management of wetlands in private ownership, regional or local Open Space etc) should be encouraged to develop management plans for their reserves and associated wetlands.

The following approach is suggested as a means of assessing the management requirements of a reserve with wetland resources, as a preliminary to the preparation of such plans.

1. Assessment of current status of reserve in terms of:
 - . reserve area and location;
 - . current use(s) of reserve and wetland within (or adjacent);
 - . major surrounding land-uses;
 - . major pressures on wetlands;
 - . current reserve management plans and procedures;
 - . existing management problems (e.g. eutrophication, use conflicts);
 - . data available (e.g. contour maps, vegetation mappings, biological surveys, recreational surveys, etc).

2. Prediction of future demands for use of the reserve and associated wetland (based on current use and any data available on, for example, population growth predictions).
3. Assessment of appropriate reserve and wetland uses (in terms of wetland conservation, meeting demands for various uses, compatibility of activities, and predictions of future demands).
4. Assessment of adequacy of reserve for these appropriate uses in terms of:
 - . Size;
 - . Current management (e.g. is there provision for protection of fragile or biologically important features? Are developed areas and facilities in keeping with current and projected future requirements? Is the wetland feature adequately protected from degradation? Is there any control of undesirable or inappropriate use of reserve?).

On the basis of these considerations, recommendations for future extensions of reserves and for their management can be developed.

In the context of this approach, the following general recommendations are made :

- . Where possible, the size of the reserve should be sufficient to encompass the wetland and provide some buffer against the impact of adjacent land-use activities.
- . For the purpose of conservation of a wetland the foreshore reservation should cover the extent of the wetland vegetation, plus at least 20 - 30 metres of surrounding land to act as a "buffer zone".
- . Existing reserves for conservation of flora and/or fauna should be reviewed to assess the adequacy of their size, with a view to acquisition of further adjacent areas as these become available.
- . Management should aim as far as is practicable to ensure that the wetland is maintained for the purpose for which it was reserved. In this respect, management does not necessarily mean effecting any development of a reserve. In the case of a conservation reserve the aim may be primarily to ensure that the ecosystem is protected from impact of surrounding and reserve uses, e.g. by fencing. In the case of reserves for recreation or other human use, it is necessary to include measures both to ensure that the

wetland is not degraded in the long term, and to provide the facilities or amenities necessary to the purpose of the reserve (e.g. access roads or footpaths toilets, litter bins, barbecue sites, launching ramps). With suitable management, multipurpose use of a reserve is possible despite the specificity of its purpose under the Land Act.

The following fundamental management procedures are recommended to ensure maintenance of wetlands:

- . No waste disposal (e.g. sanitary landfill) should be permitted in wetland reserves.
- . Reserves should be fenced to exclude stock. Where stock access is required for watering, this should be only at limited access points, or, preferably, water should be pumped to a watering point outside the reserve boundary.
- . Current grazing leases on wetland reserves should be re-examined as they come up for renewal, and cancelled if the wetland is of particular value, or could be rehabilitated, for flora and fauna.
- . Heavily used reserves, e.g. congested river areas and developed lake sites, should be policed to ensure on-site management.
- . Steps should be taken to define and protect recharge areas of the wetland (streams and underground water) in order to maintain water quality.
- . Where wetland reserves fall within major drainage schemes, steps should be taken to ensure the wetland's water supply.
- . River training programmes should not be undertaken without an assessment of their environmental impact and the development of measures to reduce potential adverse effects.

The management of water-based recreation should include the following measures:

- . Limitation of activities which:
 - . pollute waterways;
 - . disturb bottom sediments;
 - . endanger the preservation of wildlife;
 - . endanger other users of the area;
 - . cause a noise nuisance;
 - . reduce marginal vegetation.

- . Management plans for recreation reserves should be prepared before demand leads to the construction of substantial facilities or before uncontrolled use damages the habitat of wetland systems.
- . Lakes and estuaries with large areas of reasonably deep open water should be made available for aquatic recreation if this does not adversely affect an area of conservation value.
- . The feasibility and desirability of allowing recreational use of water supply dams in the future should be further investigated.

Degraded areas and man-made lakes created by mining and excavation should be rehabilitated to create permanent fresh water areas for recreation or wildlife, particularly waterfowl, and to maximise habitat diversity; measures to prevent unnecessary disruption to the wetland, especially the foreshore vegetation, should be incorporated in any plans to mine existing wetland areas.

Owners of permanent fresh water wetlands on private land, including farm dams, should be encouraged, and advised on methods, to protect and to maximise the value of these areas.

The possibility of protection of privately owned wetlands by financial incentives such as rating adjustments, leasing, contracts, or through land-use controls under Local Authority Town Planning Schemes should be investigated.

7. ACKNOWLEDGEMENTS

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FIGURE 1: Area map for the Darling System as defined by the Conservation Through Reserves Committee of the Environmental Protection Authority.

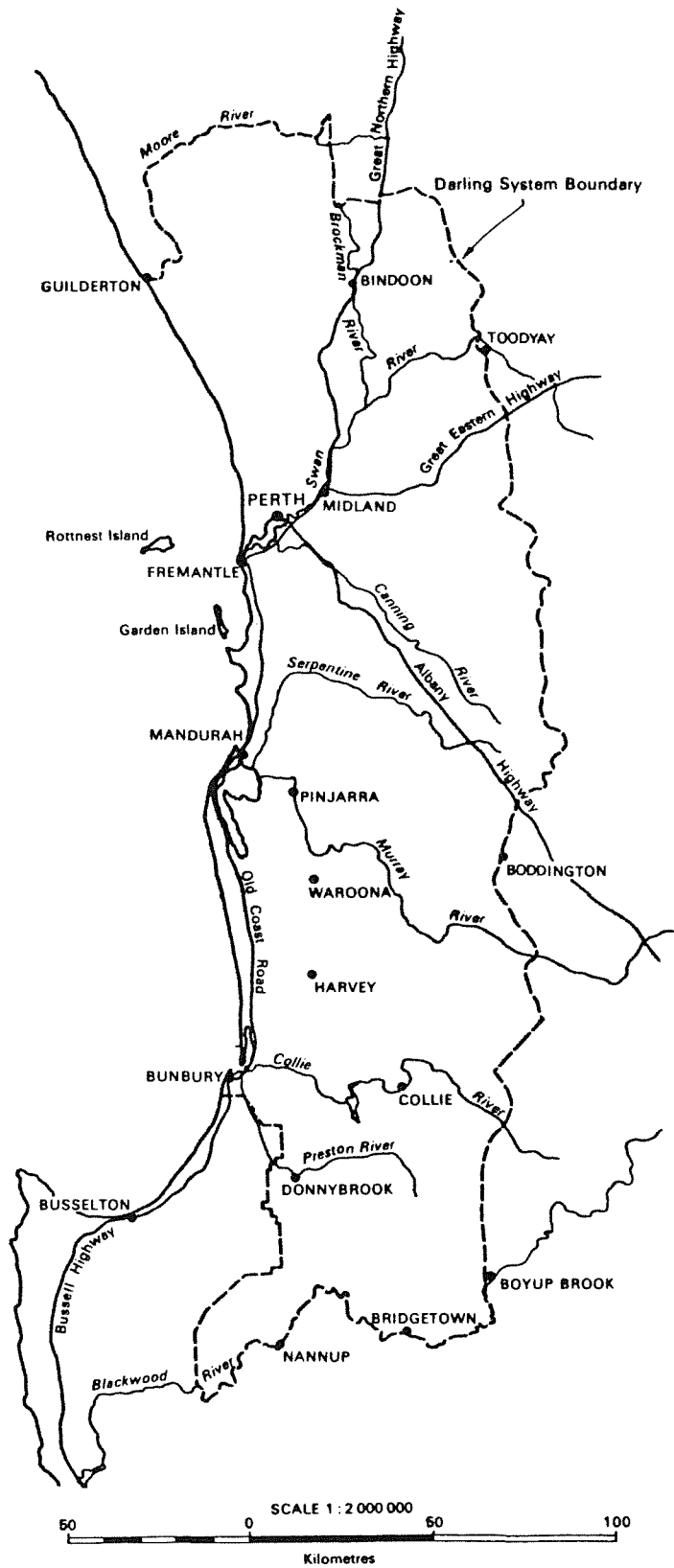


TABLE 1: Local Authorities in Perth Metropolitan Region

NAME OF AUTHORITY	TYPE OF AUTHORITY
ARMADALE	TOWN
BASSENDAN	TOWN
BAYSWATER	SHIRE
BELMONT	CITY
CANNING	CITY
CLAREMONT	TOWN
COCKBURN	TOWN
COTTESLOE	TOWN
EAST FREMANTLE	TOWN
FREMANTLE	CITY
GOSNELLS	CITY
KALAMUNDA	SHIRE
KWINANA	TOWN
MELVILLE	CITY
MOSMAN PARK	TOWN
MUNDARING	SHIRE
NEDLANDS	CITY
PEPPERMINT GROVE	SHIRE
PERTH	CITY
ROCKINGHAM	SHIRE
SERPENTINE-JARRAHDALE	SHIRE
SOUTH PERTH	CITY
STIRLING	CITY
SUBIACO	CITY
SWAN	SHIRE
WANNEROO	SHIRE

TABLE 2: Local Authorities in the Darling System Outside
the Perth Metropolitan Region

SHIRE (OR TOWN)	AREA WITHIN DARLING SYSTEM BOUNDARY
BEVERLEY	PART
BROOKTON	PART
BOYUP BROOK	PART
BRIDGETOWN-GREENBUSHES	PART
BUNBURY (TOWN)	ALL
BODDINGTON	PART
CHITTERING	PART
COLLIE	ALL
DARDANUP	ALL
DONNYBROOK-BALINGUP	PART
GINGIN	PART
HARVEY	ALL
MANDURAH	ALL
MURRAY	ALL
NANNUP	PART
NORTHAM	PART
TOODYAY	PART
VICTORIA PLAINS	PART
WANDERING	PART
WAROONA	ALL
WEST ARTHUR	PART
WILLIAMS	PART
YORK	PART

TABLE 3: Major Wetland Uses

RecreationExamples:

Trail Bikes	Fishing - water based (including crabs, prawns, mussels, oysters, fish)
Houseboats	shallows
Camping (foreshore)	by boat
Model boating	Digging for bait
Horse training	Swimming
Horse riding	"Play"
Retrieving	Visual and photographic (e.g. scenery, birdwatching, wildlife observation)
Duck shooting	Wading
Water Skiing	Orienteering
Hang gliding	Walking or hiking
Boating - power	Picnicking and barbecues
wind	
rowing	
canoes	
Fishing - shore based	

EducationExamples:

Research - experimental	Study centres
observational	Bird Hides
Nature trails	

Extractive IndustryExamples:

Peat	Clay
Diatomaceous earth	Water
Sands - Mineral sands	Gypsum
Lime	Salt
River sands	

Agricultural or Rural UseExamples:

Water use - irrigation	Use of natural products e.g. paperbark
stock watering	boronia
Grazing	banksia
Cropping	reeds
Horticulture	firewood

Urban and Industrial UseExamples:

Filling, drainage	Water Supply
Waste disposal	Open space
Drainage sump	

Flora and Fauna ConservationExamples:

Habitat preservation

TABLE 4: Lentic Wetlands in the Darling System with Mining Claims* in 1976

Name	Mining Map Location	Claim
Adams Lake	Yanchep 40 sheet 4	MC 70; MC 14230
Balmanup Lake	341 A/40	ML 1SA [†]
Banganup Lake	341 A/40	ML 1SA [†]
Beridup Lake	411 D/40	MC 6285 H
Bibra Lake	341 A/40	ML 1SA [†]
Big Lake	380 D/40	ML 1SA [†]
Big Camelup Swamp	414 B/40	ALWEST [†] ; ML 1SA [†] ; CML 1268
Bollard Bulrush Swamp	341 D/40	ML 1SA [†]
Bootine Spring	31/80	MC 14960
Bootine Swamp	31/80	MC 14963, 14964, 14973
Coogee Lake	341 A/40	ML 1SA [†]
Cooloongup Lake	341 D/40	ML 1SA [†]
Ebenezer Flats	2A/40	PACMINEX [†]
Freshwater Lake	30/80	MC 16290; MC 16292
Gnangara Lake	1A/40	(MC 78; MC 30; (MC 241H; MC 10673
Goegrup Lake	380 A/40	ML 1SA [†]
Jandabup Lake	1A/40	MC 10675-10677
Jandakot Lake (Forrestdale)	341A/40	ML 1SA [†]
Joondalup Lake	1A/40	DC 600; MC 1176H
Josephine Lake	383 D/40	MC 11623
Kogolup Lake	341 A/40	MC 12207; ML 1SA [†]
Leschenaultia Lake	1B/20 SE	ML 1SA [†]
Little Camelup Swamp	414 B/40	ML 1SA [†] ; ALWEST [†] ; [†] CML 1267
Long Swamp	341 A/40	ML 1SA [†]
Manarin Lake	2A/40	ML 1SA [†]
Mangenup Lake	341 A/40	ML 1SA [†]
Maringiniup Lake	1A/40	MC 10674
Mealup Lake	380 D/40	ML 1SA [†]
Mundiunun Swamp	341 C/40	ML 236 SA
Nalyerin Lake	384 D/40	ML 1SA [†]
Neerabup Lake	Yanchep 40 sheet 3	CML 2143
Ngartiminny Lake	415 A/40	ALWEST [†]
Nundedine Lake	410 D/40	ML 1SA [†]
Preston Lake	383 A/40 & D/40	MC 1298H; MC 11623
Richmond Lake	341 D/40	ML 1SA [†]
Salt Lagoon	380A/40	ML 1SA [†]
Spade Lake	3C/80	MC 16287
Thompson Lake	341 A/40	ML 1SA [†]
Walyungup Lake	341 D/40	MC 13363; ML 1SA [†]
White Lake	31/80	MC 14978
Wild Pig Swamp	380 B/40	ML 240 SA
Yangebup Lake	341 A/40	ML 1SA [†]
Yangedi Swamp	341 D/40	ML 1SA [†]
Yeal Swamp	Gingin 40 sheet 4	MC 15771
Yourdamung Lake	410 A/40	ML 1SA [†]

* Information compiled from 40 chain lithos supplied by the Mines Department.⁵

[†] ML 1SA, ALWEST and PACMINEX refer to the large bauxite lease areas which cover much of the Darling System.

TABLE 5 : Lotic wetlands in the Darling System with existing or possible future dam sites.

Bancell Brook	Joshua Creek
Bickley Brook*	Logue Brook*
Blackwood River	Long Gully
Brunswick River	Marrinup Brook
Canning River*	McKnoe Brook
Canning River south	Moore River
Chalk Brook	Munday Brook*
Charleys Creek	Murray River (2)
Churchmans Brook*	North Dandalup River
Clarke Brook	Nowra Brook
Collie River (2)*	Preston River (2)
Collie River east	Red Swamp Brook
Crooked Brook	St. John Brook
Darkin River	Samson Brook
Davis Brook	Serpentine River (3)**
Dirk Brook	South Dandalup River (2)**
Ferguson River	Susannah Brook
Gingin Brook	Swamp Oak Brook
Harris River	Thirty-four Mile Brook
Harvey River (4)**	Thomson Brook
Helena River*	Wooroloo Brook
Helena River east	Wungong Brook*
Honor Brook	Yarragil Brook

* denotes existing dam in 1976

Bracketed number indicates number of sites

TABLE 6: Wetlands in the Darling System which may be affected by Groundwater extraction schemes.

Jandakot Scheme	Wanneroo Scheme	Gwelup Scheme
Balmanup Lake	Adams Lake	Big Carine Swamp
Banganup Lake	Badgerup Lake	Careniup Swamp
Banjup Lake	Barragoon Lake	Gwelup Lake
Bibra Lake	Beenyup Swamp	Herdsman Lake
Jandakot Lake	Beonaddy Swamp	Jackadder Lake
Kogolup Lake	Carabooda Lake	Karrinyup Lake
Thompson Lake	Coogee Swamp	Little Carine Swamp
Yangebup Lake	Emu Swamp	
	Goollelal Lake	
	Jandabup Lake	
	Joondalup Lake	
	Little Badgerup Swamp	
	Little Coogee Swamp	
	Little Dundarbar Swamp	
	Little Mariginiup Lake	
	Loch McNess	
	Mariginiup Lake	
	Melaleuca Park Swamps	
	Neerabup Lake	
	Nowergup Lake	
	Pipidinny Swamp	
	Snake Swamp	
	Wallubuenup Swamp	
	Wilgarup Lake	
	Yeal Swamp	
	Yonderup Lake	

TABLE 7: Wetlands in The Darling System directly affected by drainage

(a) Lentic	
Name	Drainage Map Location
Banjup Lake	46150-24-8
Beenyup Swamp	46150-24-8
† Benger Swamp	46150-16-7
Bibra Lake	Metro. area - south
Big Carine Swamp	Metro. area - north
Blue Gum Swamp	
Bollard Bulrush Swamp	46150-24-8
† Bushmead Lakes	Metro. area - north
Careniup Lake	Metro. area - north
Chandala Lake	
† Coogee Lake	Metro. area - south
Coollelal Lake	Metro. area - north
† Emu Swamp	Metro. area - north
Forrestdale (Jandakot) Lake	
† Gnangara Lake	Metro. area - north
Gwelup Lake	Metro. area - north
Herdsman	Metro. area - north
Hyde Park	Metro. area - north
Jackadder Lake	Metro. area - north
Karrinyup Lake	Metro. area - north
† Kogolup Lake	Metro. area - south
† Little Carine	Metro. area - north
† Little Rush Lake	Metro. area - south
Magenup Lake	46150-24-8
Mealup Lake	46150-20-7
Monger Lake	Metro. area - north
† North Lake	Metro. area - south
Open Lake	46150-17-7
Perry Lakes	Metro. area - north
Red Lake	46150-17-7
Richmond Lake	Metro. area - south
Shenton Park Lake	Metro. area - north
† Star Swamp	Metro. area - north
† Thompson Lake	Metro. area - south
† Wallubuenup Swamp	Metro. area - north
Yangebup Lake	Metro. area - south
(b) Lotic	
Austin Bay (Peel Inlet)	46150-20-7
Bancell Brook	46150-18-7
Beenyup Brook	46150-24-8
Bennet Brook	Metro. area - north
Bickley Brook	Metro. area - north
† Blackadder Creek	Metro. area - north
Brunswick River	46150-15-6 and -16-7
Canning River	Metro. area - south and north
Cardup Brook	46150-24-8
Clarke Brook	46150-18-7
Collie River	46150-15-6
Dirk Brook	46150-22-8
Duck Pool (Serpentine R.)	46150-23-8

TABLE 7 (cont'd) : Wetlands in The Darling System directly affected by drainage

Name	Drainage Map Location
Elvira Gully	46150-15-6
Ferguson River	46150-14-6
Flaherty Brook	46150-15-7
Folly Pool (Serpentine R.)	46150-23-8
Gavins Gully	46150-14-6
Hardeys Creek	46150-23-8
Harvey Estuary	46150-20-6 and -15-6
Harvey River	46150-17-7
Henty Brook	46150-15-6
Loque Brook	46150-18-7
Kojajanup River	46150-17-7
Maramanup Pool (Serpentine R.)	46150-23-8
Millars Creek	46150-15-6
Mornington River	46150-16-7
Murray River	46150-20-7
Neerigen Brook	Metro. area - south
Norah Brook	46150-16-7
Paradise Creek	46150-14-6
Preston River	46150-14-6
Robert Bay (Peel Inlet)	46150-20-7
Samson Brook	46150-18-7
Serpentine River	46150-22-8
South Dandalup River	46150-21-7
Southern River	Metro. area - south
Swan River	Metro. area - north (23 drain outlets)
Weekes Brook	46150-17-7
Wellesley River	46150-16-7
Wokalup River	46150-17-7
† Woodbridge Creek	Metro. area - north
Woodlupine Brook	Metro. area - north
Wungong Brook and south branch	46150-24-8 and Metro. area - south
Yalup Brook	46150-18-7
Yule Brook	Metro. area - north

* Information from Drainage Maps supplied by the Public Works Department and the Metropolitan Water Supply, Sewerage and Drainage Board. (1976)5

† Proposed drain

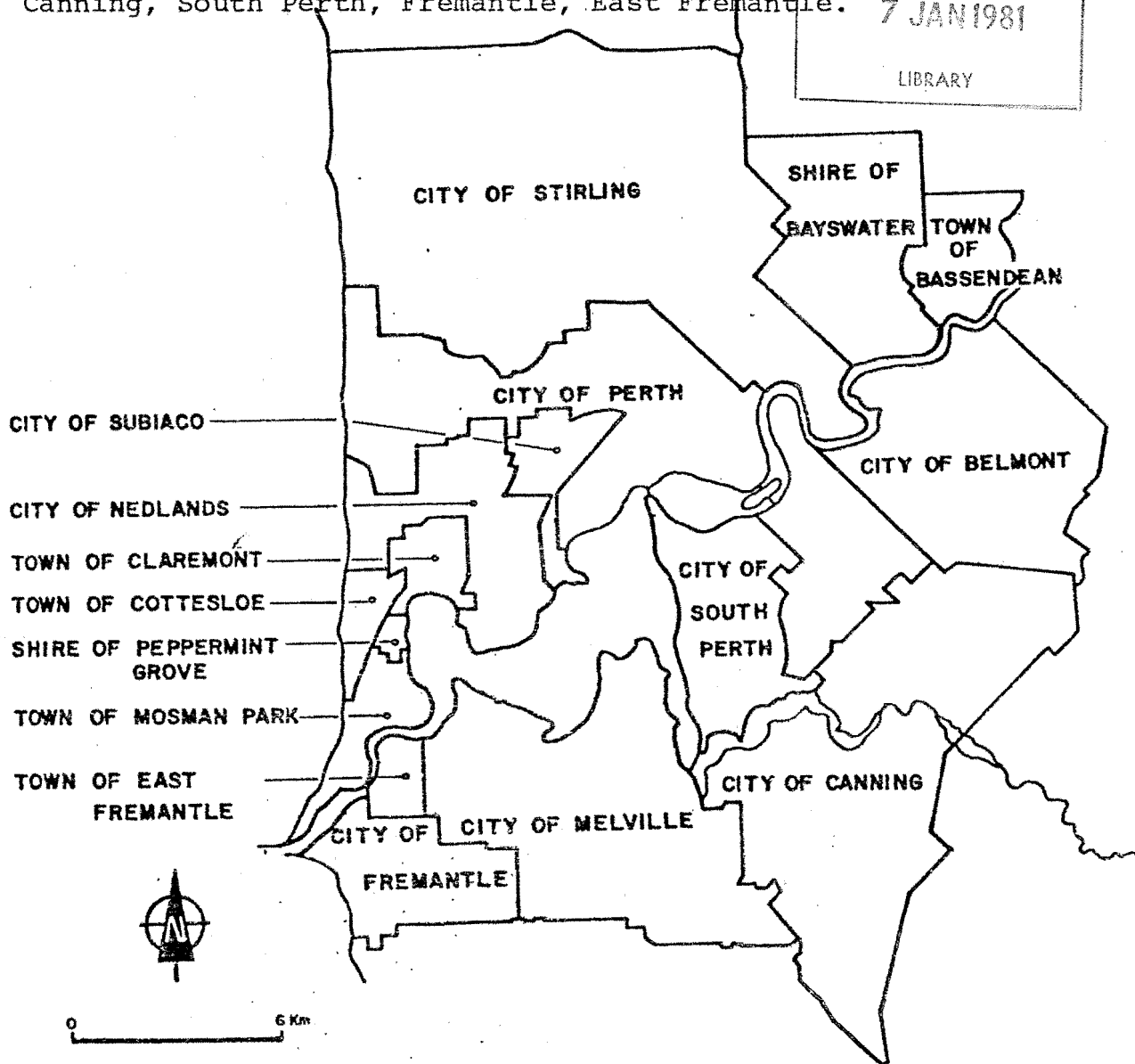
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APPENDIX 1:

WETLAND RESERVES IN PERTH* I

LOCAL AUTHORITY AREAS OF Perth, Subiaco, Nedlands, Claremont, Cottesloe, Mosman Park, Peppermint Grove, Stirling, Bassendean, Bayswater, Belmont, Melville, Canning, South Perth, Fremantle, East Fremantle.

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*Listings compiled before July 1977.

Abbreviations: ha = hectare; m² = square metre;
CG = Crown Grant; WSSD = Water Supply, Sewerage
and Drainage.

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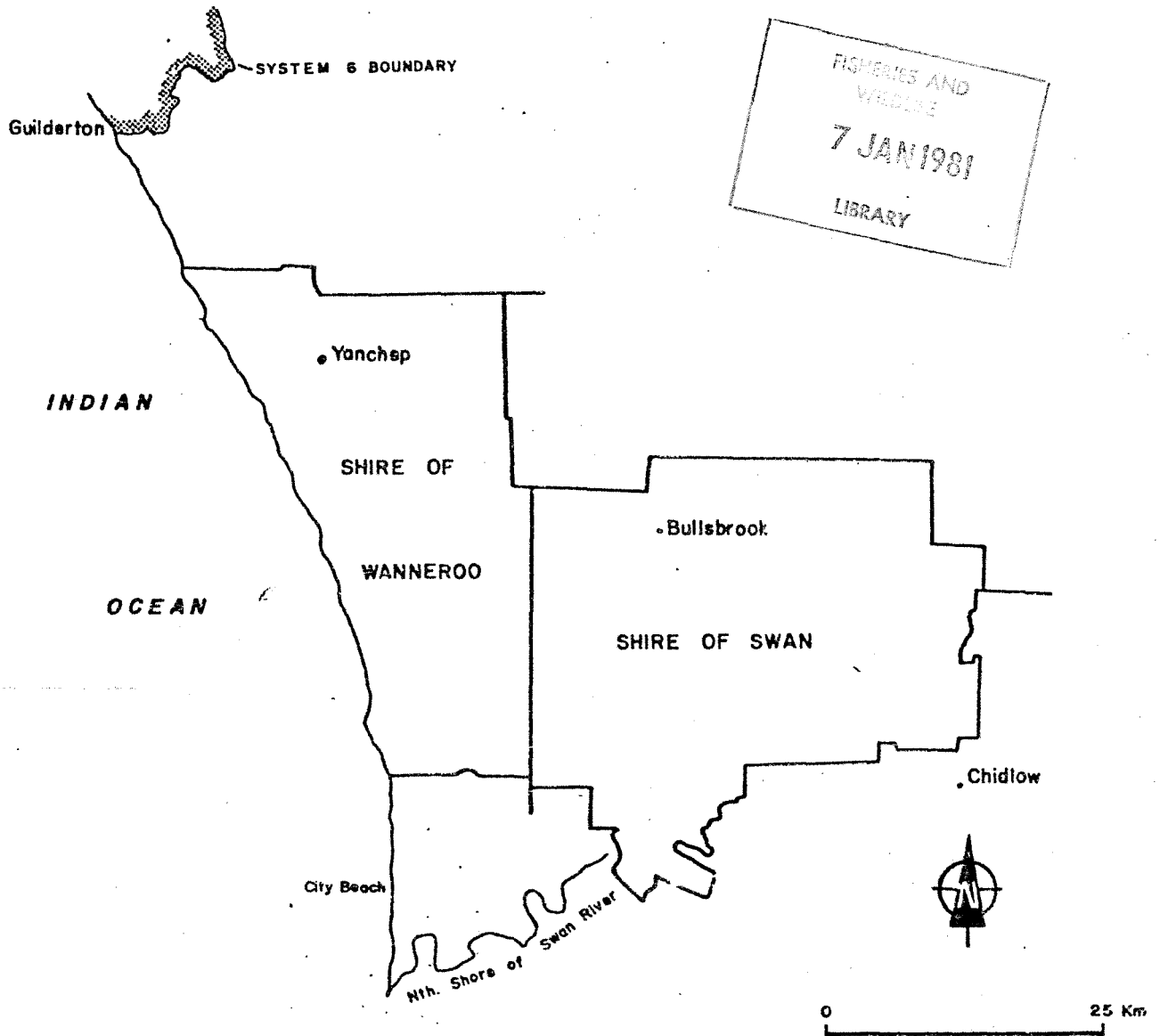
LOCAL AUTHORITY	RESERVE NUMBER	AREA	PURPOSE	VESTING	WETLAND
Bassendean	'A'18091	1.9197 ha	Park & Recreation	Bassendean	Swan River foreshore
	'A'18092	6981 m ²	Park & Recreation	Bassendean	Swan River foreshore
	'A'9099	2151 m ²	Recreation	Bassendean	?
	'A'9100	6526 m ²	Recreation	Bassendean	Swan River foreshore
Bayswater	No gazetted reserves on wetlands				
BELMONT	28420	3675 m ²	Recreation	Unvested	Swan River foreshore
	27130	4.7646 ha	Racecourse	C G (WA Turf Club)	Swan River foreshore
	29467	2352 m ²	Recreation	Unvested	Swan River foreshore
	'A'12237	3.1110 ha	Recreation	Belmont	Swan River foreshore
	26219	1083 m ²	Recreation	Unvested	Swan River foreshore
	30680	9510 m ²	Drainage	WSSD	Drains into Swan River
CANNING	29130	5.4018 ha	Public Recreation	Canning	Canning River foreshore
	26292	18.7571 ha	Park & Recreation	Canning	Canning River foreshore
	26104	3592 m ²	Recreation	Unvested	Canning River foreshore
	29689	3541 m ²	Public Recreation	Canning	Canning River foreshore
	'B'7773	9.6042 ha	Govt Requirements	Unvested	Canning River foreshore
	20265	4.5147 ha	Govt Requirements	Unvested	Canning River foreshore
	1455	9.9148 ha	Landing Place	Canning	Canning River foreshore
	27604	1.5136 ha	Recreation	Canning	Canning River foreshore
	1289	1.0117 ha	Landing Place	Canning	Canning River foreshore
20968	2023 m ²	Recreation	Unvested	Canning River foreshore	
CLAREMONT	No gazetted reserves on wetlands				
COTTESLOE	No gazetted reserves on wetlands				

LOCAL AUTHORITY	RESERVE NUMBER	AREA	PURPOSE	VESTING	WETLAND
EAST FREMANTLE	'A'7800	7.5669 ha	Recreation	East Fremantle	Swan River foreshore
	26589	3738 m ²	Rowing Club Premises	CG-Fremantle Rowing Club	Swan River foreshore
	26590	961 m ²	Use & Req of Rowing Club	Leased to Fremantle Rowing Club	Swan River foreshore
	27376	1.0294 ha	Yacht Club Premises	East Fremantle	Swan River foreshore
	27377	1768 m ²	Use & Req of Yacht Club	East Fremantle	Swan River foreshore
	'A'22365	7.3983 ha	Recreation	East Fremantle	Swan River foreshore
FREMANTLE	4720	2.4020 ha	Municipal Purposes	Fremantle	Swan River foreshore
	7708) 3048)cancelled 2022)				Swan River foreshore
MELVILLE	'A'25562	8.3289 ha	Recreation & Conservation of Fauna	Melville	Blue Gum Lake
	'A'4813	67.5825 ha	Recreation & Immigrants home	Minister for Education & Melville	Swan River (Point Walter) foreshore
	'A'24063	28.5152 ha	Recreation	Melville	Swan River (Melville water) foreshore
	25561	1095 m ²	Drain	Unvested	Swan River foreshore
MOSMAN PARK	'A'3346	4.8562 ha	Recreation	Mosman Park	Swan River (Chidley Point foreshore)
	8369	5.1420 ha	Recreation	Mosman Park	Swan River foreshore
	'A'1631	5691 m ²	Recreation	Mosman Park	Swan River foreshore
	'A'1666	2.1903 ha	Recreation	Mosman Park	Swan River foreshore
NEDLANDS	'A'29174	2.1170 ha	Public Recreation	Nedlands	Swan River foreshore
	24457	1841 m ²	Recreation	Not vested	Swan River foreshore
	'A'23209	2532 m ²	Recreation	Nedlands	Swan River foreshore
	24959	1237 m ²	Recreation	Not vested	Swan River foreshore
	29105	40 m ²	Public Recreation	Not vested	Swan River foreshore
	24721	420 m ²	Recreation	Not vested	Swan River foreshore

LOCAL AUTHORITY	RESERVE NUMBER	AREA	PURPOSE	VESTING	WETLAND
NEDLANDS	1668	14.1411 ha	Recreation	Not vested	Swan River foreshore
	'A'1627	6804 m ²	Picnic Ground	Nedlands	Swan River foreshore
	31183	334 m ²	Recreation	Not vested	Swan River foreshore
	29264	169 m ²	Public Recreation	Not vested	Swan River foreshore
	'A'1624	3.5107 ha	Recreation	Nedlands	Swan River foreshore
	'A'22527	3.6422 ha	Recreation	Nedlands	Swan River foreshore
	'A'17391	22.1692 ha	Recreation	Nedlands	Swan River foreshore
	2711	1568 m ²	Historic Building	Nedlands	Swan River foreshore
PEPPERMINT GROVE	'A'7802	3.5208 ha	Recreation	Peppermint Grove	Swan River (Freshwater Bay) foreshore
	'A'17060	2.2839 ha	Recreation & Purposes Incidental	National Parks Authority	Swan River (Freshwater Bay) foreshore
	'A'17113	3.2476 ha	Recreation	Peppermint Grove	Swan River (Freshwater Bay) foreshore
	'A'22156	9110 m ²	Park & Recreation	Peppermint Grove	Swan River foreshore
PERTH	'A'8731	96.5567 ha	Public Park & Recreation	CG	Lake Monger
	'A'1720	400.8487 ha	Kings Park	Kings Park Board	Ornamental Lakes
	'A'17375	23.0534 ha	Recreation	National Parks Authority	Swan River foreshore
	18392	1.0800 ha	Public Building Supreme Court	Minister for Lands	Ornamental Lake
	19168	963 m ²	Recreation - Hyde Park	CG	Ornamental Lake
	27743	7.6459 ha	Recreation & Riverside Improvements	Perth	Swan River foreshore
SOUTH PERTH	28747	3065 m ²	Recreation	South Perth	Canning River foreshore
SUBIACO	34322	1.4893 ha	Recreation	Subiaco	Swan River foreshore
	'A'17375	23.0534 ha	Recreation	National Park Authority	Swan River foreshore

APPENDIX 2: WETLAND RESERVES IN PERTH* II

LOCAL AUTHORITY AREAS OF Swan and Wanneroo.



*Listings compiled before July 1977.

Abbreviations: ha = hectare; m² = square metre;
wpl = with power to lease; WAWA = Western Australian
Wildlife Authority; WSSD = Water Supply, Sewerage and
Drainage.

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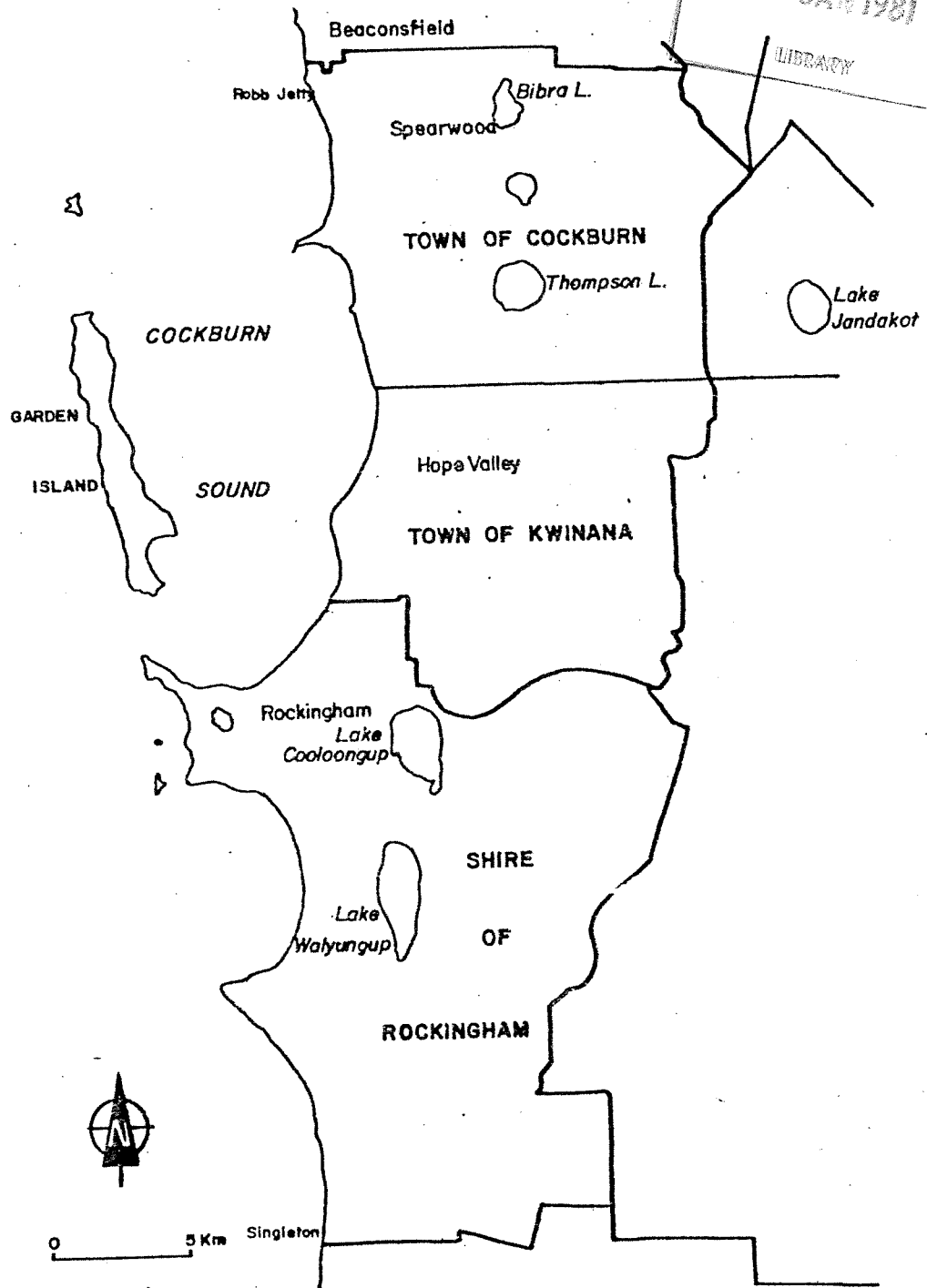
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LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
SWAN	10299	28/80 (Swan 4.4)	-	Drain	Not vested	Bulls Brook
	27814	28/80 (Swan 4.4)	2570 m ²	Drainage	Not vested	Unnamed Wetlands
	27583	28/80 (Swan 5.4)	95.0558 ha	Recreation	Swan Shire wpl	Unnamed creeks tribs of Ellen Brk
	29334	28/80 (Swan 5.4)	1.1761 ha	Drainage	Not vested	Unnamed creeks
	1654	28/80 (Swan 5.5 & 5.4)	132.3626 ha	Travellers & stock	Not vested	Unnamed creek
	7428	28/80 (Toodyay 40.1)	2.7392 ha	Recreation	Swan Shire	Tributary of Brockman River
	'A'30191	28/80 (Toodyay 40.1)	1991.0534 ha	Conservation of Flora & Fauna	WAWA	Numerous creeks
	'A'30192	28/80 (Toodyay 40.1, 40.2 & 40.3)	4430.4860 ha	National Park	National Parks Authority	Avon River & creeks
	'A'30193	28/80 (Toodyay 40.1, 40.2 & 40.3)	5143.5550 ha	Timber	Conservator of Forests	Avon River & Tributaries of Brockman River
	2065	28/80 (Toodyay 40.3&1/80)	172.0863 ha	National Park	National Parks Authority	Avon River
	22981	28/80 (Toodyay 40.3)	8094 m ²	Government requirements	Not vested	Brockman River
	25919	28/80 (Toodyay 40.3)	5.4127 ha	Recreation	Not vested	Unnamed creek
	777	1B/40	16.8974 ha	Recreation	Swan	Woorooloo Brook
	2145	1B/40	40.4686 ha	Recreation	Swan	Unnamed creek
	'A'2146	1B/40	39.8818 ha	Recreation	Swan	Woorooloo Brook
	2148	1B/40	1507 m ²	Watering Place	Not vested	Roland Spring
	3020	28/80	139.6165 ha	Water	WSSD	Unnamed creek
	27620	1B/40	67.1500 ha	Preservation of fauna (short necked tortoise)	WAWA	Ellen Brk & swamps
	27621	1B/40	154.2779 ha	Preservation of Fauna (short necked tortoise)	WAWA	Twin Swamps
	28574	1B/40	7360 m ²	Rec & Drainage	Not vested	Trib of Swan River
	-	-	-	National Park	Not vested	Avon River

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
WANNEROO	'A'313	-	-	Camping Boy Scouts	Boy Scouts Association	Lake Joondalup
	834	1A/40 (Yanchep 40 Sheet 4)	28.7858 ha	Camping & Recreation	Wanneroo wpl 21 years	Lake Joondalup
	7349	1A/40 Yanchep 40 Sheet 2)	232.2896 ha	Conservation of Fauna	Minister for Fisheries & Wildlife	Lake Jandabup
	8162	1A/40 (Perth 40, Sheets 1 & 2)	1.8413 ha	Water	Wanneroo	Little Badgerup Swamp
	8398	1A/40 (Yanchep 40 Sheet 3)	1.8210 ha	Access to Lake	Not vested	Nowergup Lake
	8399	1A/40 (Perth 40 Sheets 1&2)	33.9936 ha	Recreation	Wanneroo	Gnangara Lake
	'A'9868	28/80 (Yanchep 40,Sheet 1)	2789.9559 ha	Protection & Preservation of caves & flora & for Health & Pleasure Resort	National Parks Authority	Lock McNess Yonderup Lake Wilgarup Lake
	11598	28/80 (Yanchep 40 Sheet 4)	60.70 ha	Recreation	Not vested	Lake Pinjar
	21176	-	12.2721 ha	Forestry purposes	Conservator of Forests	Lake Joondalup
	21490	28/80 (Yanchep 40 Sheet 4)	4.0469 ha	Water	Not vested	Little Coogee Flat
	'A'21708	1A/40 (Yanchep 40 Sheet 4)	4.047 ha	Protection of Flora & Fauna	Not vested	Malap Is Lake Joondalup
	'A'24581	28/80 (Yanchep 40 Sheet 3)	116.5495 ha	Sanctuary for Fauna	National Parks Authority	Nowergup Lake
	27278	1A/40 (Perth 40 Sheets 1&2)	2.2257 ha	Recreation	Wanneroo wpl 21 years	Gnangara Lake
	27279	1A/40 (Perth 40 Sheets 1&2)	108.4558 ha	Recreation	Wanneroo	Gnangara Lake
	'A'31048	1A/40 (Yanchep 40 Sheet 4)	465.4 ha	Recreation & Conservation of Flora & Fauna	Not vested Control: Wanneroo & WAWA	Lake Joondalup
	32768	1A/40 (Yanchep 40 Sheet 4)	6.3417 ha	Public Recreation	Wanneroo	Lake Joondalup
	33193	1A/40 (Yanchep 40 Sheet 4)	26.3729 ha	Public Recreation	Wanneroo	Lake Jandabup
	33206	1A.40 (Yanchep 40 Sheet 4)	22.2372 ha	Public Recreation	Wanneroo	Lake Joondalup

APPENDIX 3: WETLAND RESERVES IN PERTH* III

LOCAL AUTHORITY AREAS OF Cockburn, Kwinana and Rockingham.



*Listings compiled before July 1977.

Abbreviations: ha = hectare; m² = square metre;
WAWA = Western Australian Wildlife Authority.

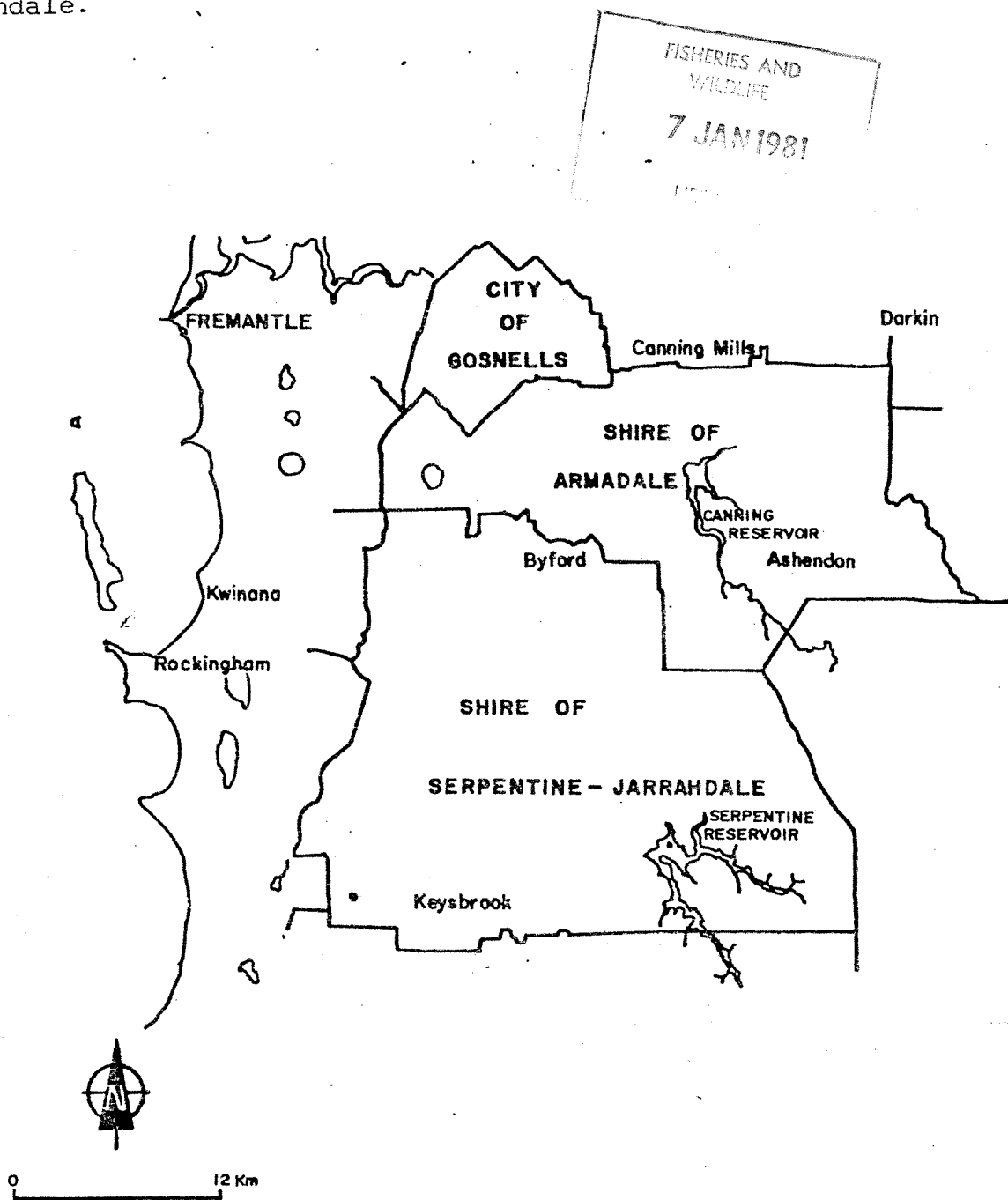
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LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
COCKBURN	'A'6208	-	103.1948 ha	Recreation	Cockburn	Bibra Lake
	'A'15556	-	508.6899 ha	Fauna, Conservation, Research & Drainage	WAWA	Thompson Lake
	30861	-	63.1512 ha	Recreation	Cockburn	Coogee (Munster) Lake
	29241	-	253.7379 ha	Conservation of Fauna - University Marsupial Research	Fisheries Dept	Lake Banganup & others
	1821	-	45.7497 ha	Public Purposes	Cockburn	Balannup Lake
KWINANA	33581	341D/40	217.6652 ha	Parks & Recreation	Not vested	Unnamed swamp
	23914	341D/40	49.1795 ha	Townsite	Not vested	Unnamed swamp
ROCKINGHAM	'A'9025	341D/40 (R23-4)	2.8378 ha	Park & Picnic Ground	Not vested	Unnamed swamp
	9458	341D/40 (R39-4)	40.4686 ha	Recreation	Rockingham	Lake Richmond foreshore
	'A'24411	341D/40 (R41-4 R57-4)	424.9200 ha	National Park	Rockingham	Lake Cooloongup (White Lake)
	27008	341D/40 (R74-4)	20.5960 ha	Govt Reqs	Not vested	Unnamed swamps
	'A'23780	341D/40 (R89-4, R90-4, R106-4, R74-4, R73-4, R105-4, R121-4)	297.0697 ha	National Park	Rockingham	Lake Walyungup (Salt Lake)

APPENDIX 4: WETLAND RESERVES IN PERTH* IV

LOCAL AUTHORITY AREAS OF Armadale, Gosnells and Serpentine-Jarrahdale.



*Listings compiled before July 1977.

Abbreviations: ha = hectare; m² = square metre.
SWWD = Water Supply, Sewerage & Drainage;
WAWA = Western Australian Wildlife Authority;
MRD = Main Roads Department; c/- = Control of

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LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
ARMADALE-KELMSCOTT	5913	342A/40 342D/40	- -	Canning Reservoir Watershed	WSSD	Numerous creeks
	527	341B/40	40.4686 ha	Water	Not vested	Tributary of Canning
	1821	341A/40	6.7026 ha	Water	Not vested	?
	27165	Forrestdale Townsite	138.4430 ha	Recreation	Armadale-Kelmscott	Lake Jandakot
	'A'24781	-	243.6208 ha	Flora, Fauna & Recreation	WAWA	Lake Jandakot
	5704	341B/40	252.5238 ha	Timber	Not vested	Unnamed creek (Tributary of Wungong Brk)
	24843	341B/40	12.4466 ha	Gravel	MRD	Beenyup Brook
	18341	341B/40	39.7958 ha	Water Supply	WSSD	?
	23229	341B/40	1025.1395 ha	Water Supply	WSSD	East Branch Canning River
	30246	-	607 m ³	Water Supply	WSSD	?
	28367	341B/40	2859 m ²	Drainage	Not vested	Into Neerigen Brook
	28742	341B/40	4429 m ²	Drainage	WSSD	Into Neerigen Brook
	27073	341B/40	1462 m ²	Recreation	Armadale-Kelmscott	Canning River foreshore
	'A'6468	341B/40	17.7177 ha	Parklands	Armadale-Kelmscott	Tributary of Canning River
	'A'4561	341B/40	461.3270 ha	Parklands	Armadale-Kelmscott	Neerigen Brook
	28353	341B/40	3526 m ²	Recreation	Not vested	Canning River foreshore
	28293	341B/40	9485 m ²	Recreation	Not vested	Canning River foreshore
	28577	341B/40	1.3304 ha	Recreation	Not vested	Canning River foreshore
	33124	-	3845 m ²	Recreation	Armadale-Kelmscott	Southern River
	21569	-	20.2429 ha	Recreation	National Parks Authority	Canning Dam Araluen
GOSNELLS	'A'24862	-	51.8124 ha	Recreation-golf links	Gosnells	Unnamed swamp
	26272	-	3.2704 ha	Parklands	Gosnells	Unnamed swamp
	24981	-	14.2095 ha	Recreation	Gosnells	Unnamed swamp
	33649	-	6883 m ²	Public Recreation	Gosnells	Unnamed swamp
	'A'26227	-	6.5106 ha	Community Centre & Park	Gosnells	Canning River foreshore
	'A'31993	-	8.6488 ha	Bird Sanctuary & Park	Gosnells	Swamp
	29919	-	9133 m ²	Public Recreation	Gosnells	Swamp connected to B1993

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
GOSNELLS	28361	--	1.9073 ha	Public Recreation	Gosnells	Unnamed swamp connected to 29919
	'A'11681	-	178.0617 ha	Parklands	Gosnells	Creek & Waterfall
	32677	-	2.2985 ha	Public Recreation	Gosnells	Canning River foreshore
	28247	-	6141 m ²	Recreation	Not vested	Canning River foreshore
	31946	-	4.9700 ha	Public Recreation	Gosnells	Unnamed creek
	'A'11681	-	178.0617 ha	Parklands	Gosnells	Ellis Brook
	30574	-	4244 m ²	Public Recreation	Not vested	Canning River foreshore
	30692	-	2491 m ²	Recreation	Not vested	Canning River foreshore
	28739	-	1.1842 ha	Recreation	Not vested	Canning River foreshore
	27505	-	1.0472 ha	Recreation	Not vested	Canning River foreshore
	32093	-	3.9735 ha	Public Recreation	Gosnells	Canning River foreshore
	33663	-	8012 m ²	Public Recreation	Gosnells	Southern River foreshore
	31129	-	5094 m ²	Recreation	Not vested	Unnamed creek
	33564	-	1822 m ²	Recreation	Not vested	Unnamed creek
	34273	-	8607 m ²	Public Recreation	Not vested	Southern River foreshore
	34476	-	4742 m ²	Public Recreation	Not vested	Canning River foreshore
	3771	-	3902 m ²	Public Recreation	Not vested	Canning River foreshore
SERPENTINE-JARRAHDALE	32202	341C/40	302.0000 ha	Conservation of Flora & Fauna	Not vested	Karnet Brook
	-(Loc 377)	341C/40	-	PWD Water Reserve	-	Unnamed swamp
	990	341C/40 (Jarrahdale)	32.4659 ha	Camping	Serpentine Jarrahdale	Gooralong Brook
	11509	341C/40 (Jarrahdale)	88.1138 ha	Rifle Range	Not vested	Gooralong Brook
	7257	341C/40 (Mundijong)	4.4515 ha	Water	Serpentine-Jarrahdale	?
	23100	341C/40 (Mundijong)	2023 m ²	Water Supply	Not vested	?
	23541	341C/40 (Serpentine)	233 m ²	Drainage	Not vested	?
	6080	341C/40 (Wellard NE)	2.7089 ha	Schoolsite	Not vested	Serpentine River

APPENDIX 4:

WETLAND RESERVES IN PERTH IV

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
SERPENTINE JARRAHDALE	16634	342D/40	-	Catchment area	-	?
	23778	380B/40 (Keysbrook Townsite)	2.3269 ha	Water & Stopping Place	Not vested	Myara Brook
	23012	341D/40 Mundijong Townsite	28.5631 ha	Flora	Not vested	Unnamed swamp
	29540	341D/40 341C/40	4.1228 ha	Public Recreation	Serpentine-Jarrahdale	Serpentine River
	335	341C/40	40.4686 ha	Watering & stopping place for teams	c/- Wandering	Unnamed creek
	904	341C/40	40.4812 ha	Stopping Place	Not vested	Unnamed creek
	988	341C/40	32.3749 ha	Rockingham Jarrah Timber Co	Not vested	Gooralong Brook
	7125	341C/40	474.1848 ha	Mental Health Purposes	Minister for Health wpl	Manjedal Brook
	28862	341C/40	635.0976 ha	National Park	c/- National Parks Board	Serpentine River, Gooralong Brook & others

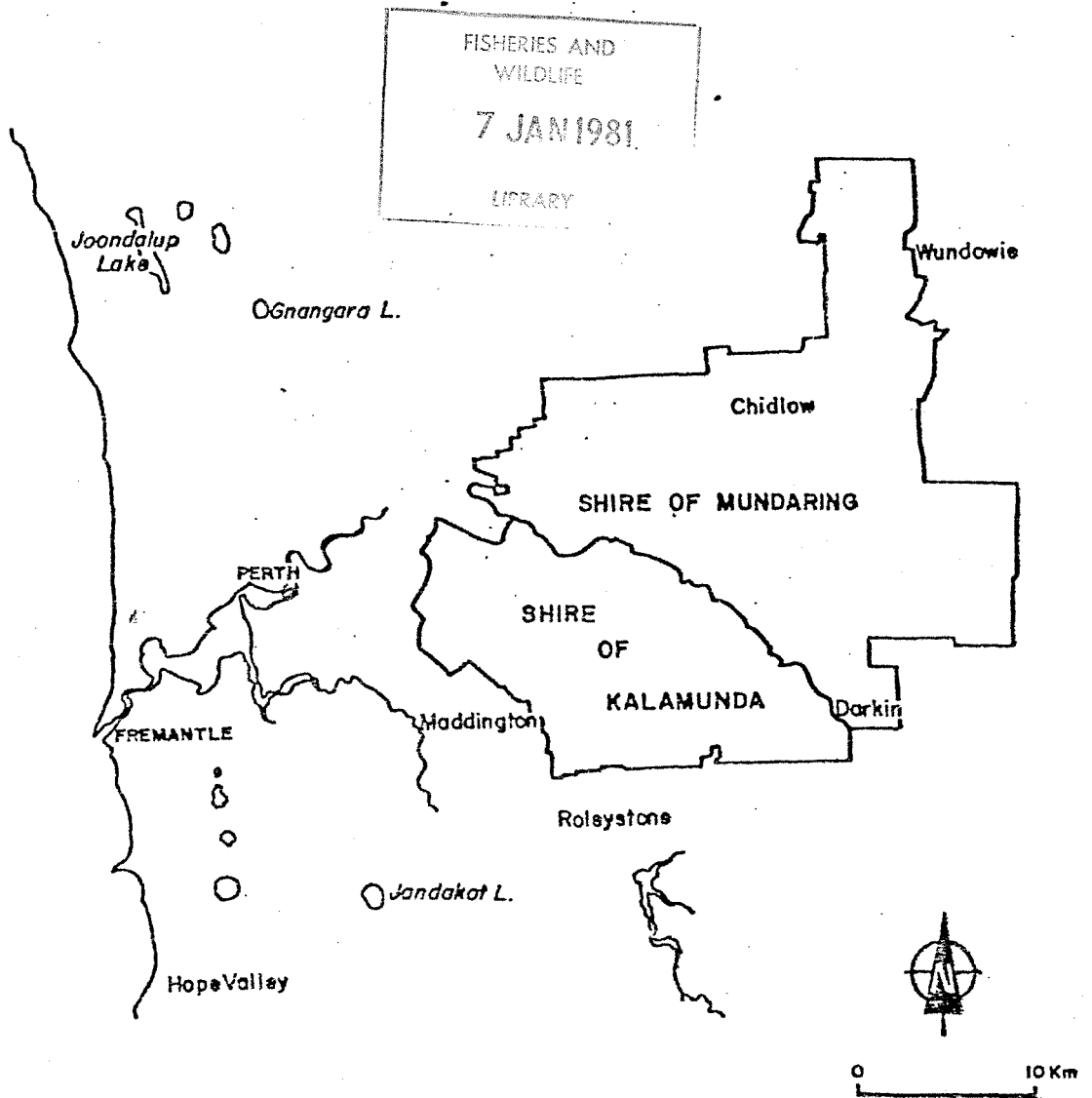
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WETLAND RESERVES IN THE SOUTH-WEST IV

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
COLLIE	30480	411C/40 (Collie 30.27)	3430 m ²	Water Supply	Minister for WSSD	?
	'A'18806	411C/40 (Collie 32.28, Collie 31.28)	1.7047 ha	Recreation & Bathing	Not vested	Collie River
	6770	411C/40 (Collie 32.29)	-	Government reqs	Not vested	Collie River
	8278	411C/40 (Collie 32.29)	2.4281 ha	Recreation	Not vested	Collie River
	12941	411C/40 (Collie 32.29)	1.2141 ha	Railway Water Supply	Not vested	Collie River
	23606	411C/40 (Collie 32.29)	-	Recreation & Park	Collie	Collie River
	30927	411C/40 (Collie 32.29)	1012 m ²	Water Supply	Not vested	?
	17561	411C/40 (Mungalup)	1189.2952 ha	Water	Not vested	Numerous creeks
	19171	411C/40 (Mungalup)	6.0374 ha	Government reqs, Forests	Not vested	Unnamed creek
	22804	411C/40 (Mungalup)	1.4822 ha	Government reqs	Not vested	Unnamed creek
	16067	411C/40 (31.28)	1.5724 ha	Water	Minister for WSSD	-
	21395	411C/40 (31.28)	1.6288	Water	Minister for WSSD	Collie River
	22407	411C/40 (31.28)	6.7919 ha	Recreation	Collie wpl	Collie River
	7818	411C/40 (31.29)	3743 m ²	Recreation	Collie	Collie River
	15195	411C/40 (31.29, 32.29)	10.2617 ha	Recreation & Parking	Collie	Collie River
	16108	411C/40 (31.29)	8094 m ²	Water	Minister for WSSD	?
	16462	411C/40 (31.29)	2630 m ²	Drainage	Collie	?
	29718	411C/40 (31.30)	374 m ²	Drainage	Not vested	?
	15783	411C/40 (32.28)	17.4015 ha	Flora & Fauna Sanctuary	Collie	Collie River
	21082	411C/40 (32.28, 32.29)	1.4234 ha	Municipal purposes	Collie	Collie River
	15322	411C/40 (33.30)	1.2419 ha	Gravel	Collie	Unnamed creek

APPENDIX 5: WETLAND RESERVES IN PERTH* V

LOCAL AUTHORITY AREAS OF Kalamunda and Mundaring.



*Listings compiled before July 1977.

Abbreviations: ha = hectare; m² = square metre;
WSSD = Water Supply, Sewerage and Drainage.

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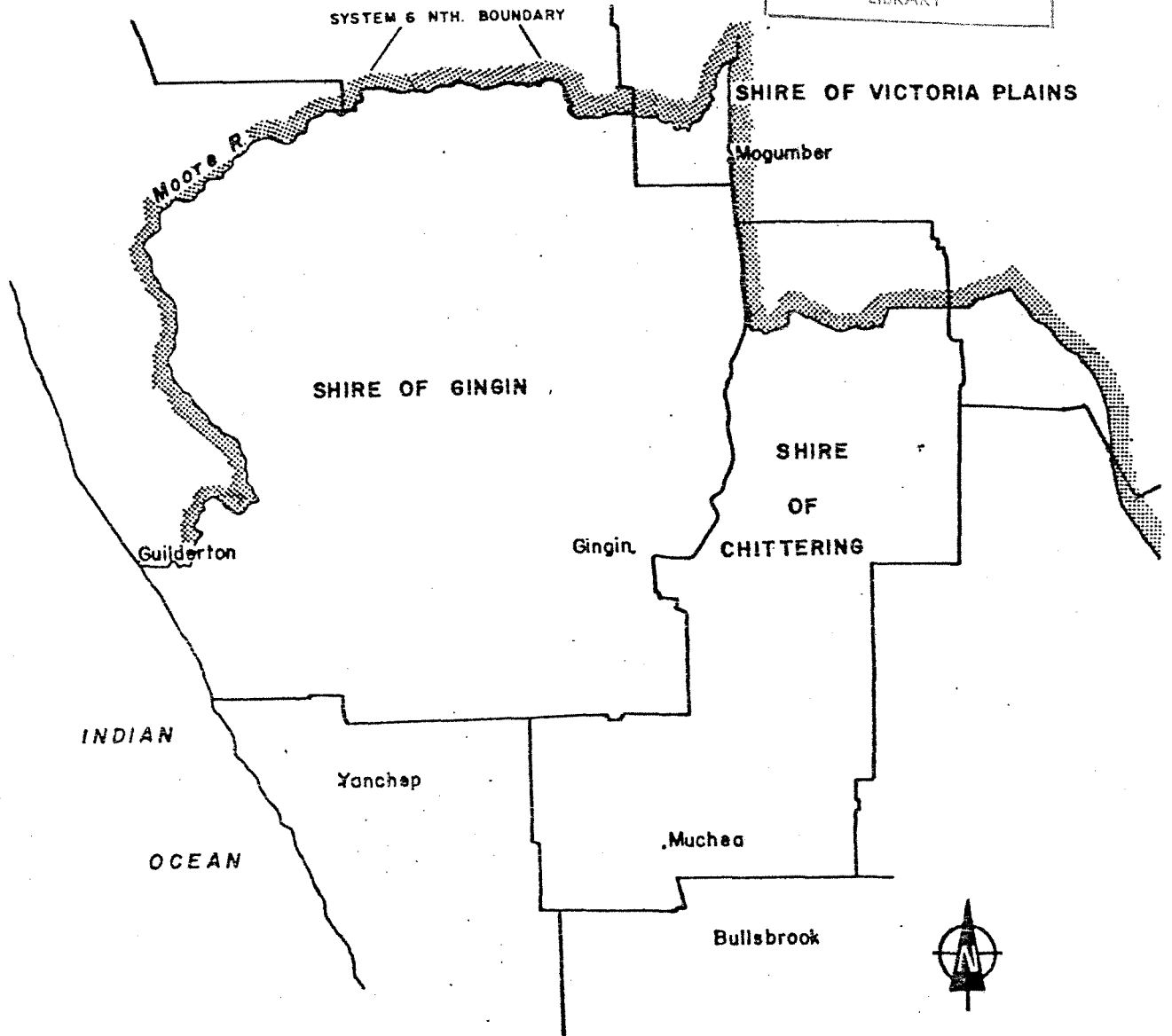
LOCAL AUTHORITY	RESERVE NUMBER	AREA	PURPOSE	VESTING	WETLAND
KALAMUNDA	1774	-	Perth Water Supply	Minister for Works	Munday Brook & others
	5913	-	Canning Reservoir	Minister for WSSD	Numerous creeks
	6203	90,745.1000 ha	Reservoir & catchment area	Minister for Works	Pickering Brook Little Darkin R, Helena R reservoir (Mundaring Weir)
	9093	13.0511 ha	Parklands & Recreation	Kalamunda	Poison Gully
	17343	8.0937 ha	Govt Reqs	Kalamunda	Tributary of Helena River
	17359	1854 m ²	Water	Not vested	?
	21172	40.4686 ha	Water	Minister for WSSD	Munday Brook
	'A'21314	373.9425 ha	National Park	National Parks Authority	Tributaries of Helena R
	'A'22515	35.0100 ha	National Park	National Parks Authority	Lesmurdie Brook (Falls)
	23383	4.2973 ha	Civic Centre	Kalamunda	Lesmurdie Brook
'A'26247	20.5131 ha	National Park	National Parks Authority	Lesmurdie Brook	
MUNDARING	5342	133.2737 ha	Camping	Minister for Works	Helena River
	20765	3.9735 ha	Recreation & Bird Sanctuary	Mundaring	Helena River
	'A'2994	7.7472 ha	Parklands	National Parks Authority	Unnamed creek
	'A'2995	60.9061 ha	Park	National Parks Authority	Unnamed creek
	'A'7537	1505.1329 ha	National Park & Native Game	National Parks Authority	Jane Brook
	6203	90.745 ha	Reservoir & Catchment Area	Minister for Works	Pickering Brook, Little Darkin R, Helena R, Mundaring Weir
	'A'8164	4.5173 ha	National Park	National Parks Authority	Unnamed creeks
	14073	982.1392 ha	Prison	Chief Secretary	Woorooloo Brook & other creek
	15955	21.2460 ha	Timber	Not vested	Unnamed creeks
	15810	1012 m ²	Water	Not vested	Manarin Lake
	20990	20.5631 ha	Gravel	Mundaring	Unnamed creeks
	23165	167.9390 ha	Recreation	Mundaring	Lake Leschenaultia
	29269	106.4323 ha	Parkland	Mundaring	Unnamed creeks

APPENDIX 6:

WETLAND RESERVES IN THE NORTH
AGRICULTURAL AREAS*+

LOCAL AUTHORITY AREAS OF Chittering, Gingin and
Victoria Plains.

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+Parts of some of the Local Authority Areas fall outside the Darling System. Only those reserves within the Darling System are listed.

Abbreviations: ha = hectare; m² = square metre; WAWA = Western Australian Wildlife Authority; wpl = with power to lease.

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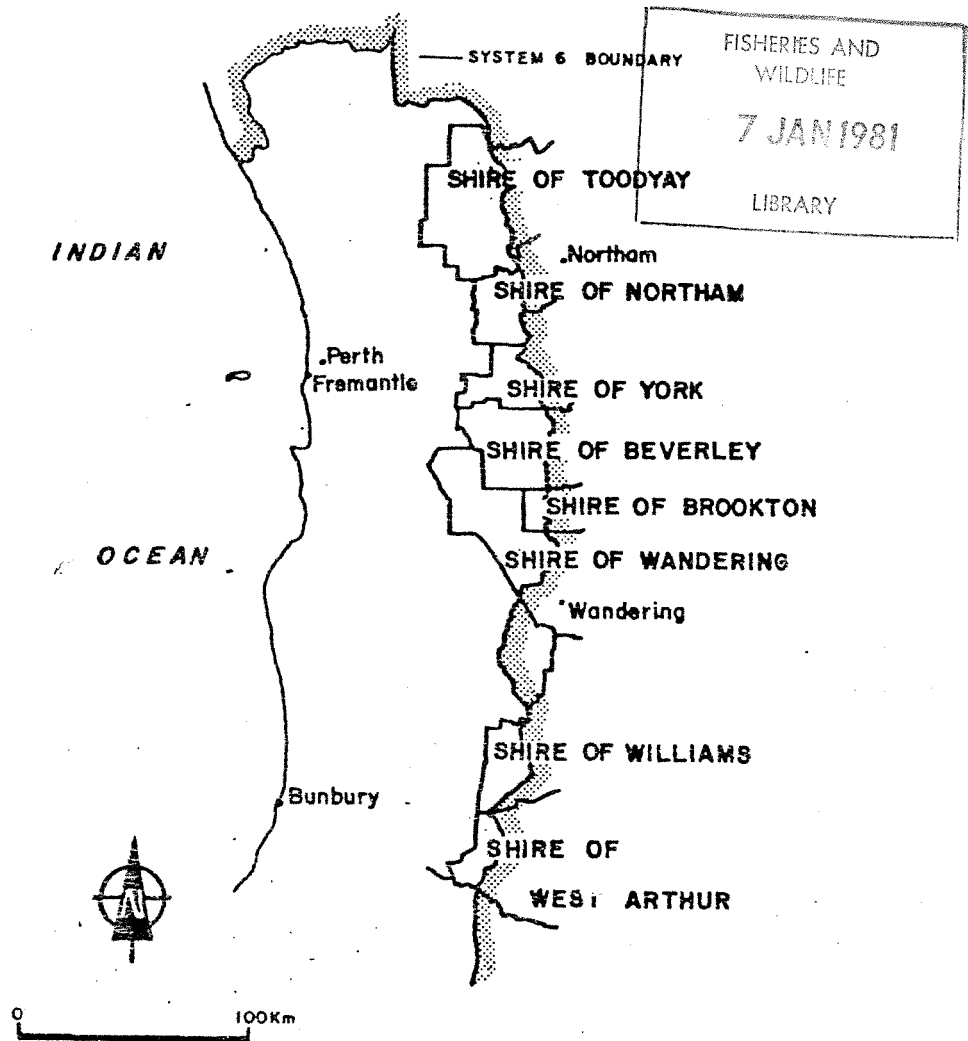
LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
CHITTERING	29538	28/80	230.5089 ha	Conservation of Fauna	WAWA	Lake Chittering & Lake Needonga
	4069	28/80 (Gingin 40-4)	6.8696 ha	Camping	Chittering	Lennards Brook
	4070	28/80 (Toodyay 40-1)	18.2109 ha	Camping	Not vested	Unnamed creek
	23546	28/80 (Toodyay 40-1)	2.5166 ha	Recreation	Chittering	Brockman R
	209	28/80 (Yanchep 40-2)	38.3820 ha	Watering Place	Not vested	Barracca Sp. & swamps
	965	31/80	163.2072 ha	Recreation	Chittering	Udumung Brook
GINGIN	26783	28/80 (Gingin Townsite)	6.1701 ha	Schoolsite	Not vested	Gingin Brook
	28617	28/80 (Gingin Townsite)	3475 m ²	Park & Recreation	Gingin	Gingin Brook
	32519	28/80 (Gingin Townsite)	2469 m ²	Recreation	Not vested	Gingin Brook
	20366	28/80 (Gingin 40-2) & 31/80	54.6326 ha	Recreation	Gingin	Lake Muckenburra
	25431	28/80 (Gingin 40-2) & 31/80	120.8948	Government Reqs	Not vested	Unnamed swamp
	24257	28/80 (Gingin 40-4)	81.7465 ha	Conservation of Fauna	Not vested	Bambun, Nambun & Mungala Lakes
	26756	28/80 (Gingin 40-4)	19.2681 ha	Conservation of Flora & Fauna	WAWA	Wallering
	31241	28/80 (Gingin 40-4)	337.0400 ha	Conservation of Flora & Fauna	WAWA	Unnamed swamp
	33784	28/80 (Gingin 40-4)	113.8018 ha	Government requirements	Not vested	Unnamed swamp
	117896	29/80 (Gingin 40-3)	885 m ²	Water	Not vested	?
	11949	29/80 (Guilder-ton)	19.7841 ha	Camping	Gingin	Moore R & Indian Ocean
	21473	29/80 (Guilder-ton)	19.0202 ha	Recreation	Gingin	Moore R & Indian Ocean

Cont...

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
GINGIN (Cont.)	257	30/80	23.2694 ha	Government requirements	Gingin	Junction Bridge (Gingin Brook & Moore R)
	3534	30/80	2.1549 ha	Government requirements	Gingin	Moore R
	7028	30/80	4047 m ²	Agric Hall	Minister for Works	Moore R
	21164	30/80	39.6263 ha	Stock Route	Gingin	Moore R
	23324	30/80	40.4737 ha	Water	Not vested	?
	28462	30/80 & 31/80	17542.5944 ha	National Park	National Parks Authority	Unnamed swamp + near Moore R
	30808	30/80	6500 m ²	River foreshore	Not vested	Moore R
	31410	30/80 (Gingin 40-1)	9763 m ²	Picnic Ground	Not vested	Moore R
	1224	31/80	116.8075 ha	Camping	Gingin	Bartletts Well
	9193	31/80	40.4686 ha	Water	Gingin	?
	9676	31/80	29.6939 ha	Conservation of Flora & Fauna	WAWA	Yurine Swamp
	12047	31/80	4.4515 ha	Water	Not vested	Moore R
	15816	31/80	35.5112 ha	Water	Gingin	Moore R
	15928	31/80	20.2343 ha	Water	Gingin	Sand Spring Well
	16833	31/80 & 58/80	5069.4969 ha	Use & benefit of Aborigines	Aboriginal Land Trust wpl	Moore R
	22223	31/80	101.1714 ha	Recreation	Gingin	Beermullah Lake (Lake only, no foreshore)
	22602	31/80 & Gingin 40-2	404.6856 ha	Water	Not vested	?
	539	31/80 (Gingin 40-2)	109.2651 ha	Watering & stopping place	Gingin	Boonarring Brook
	11697	31/80 (Gingin 40-2)	16.1874 ha	Water	Gingin	Unnamed creek
	24581	31/80	116.5495 ha	Conservation of Flora & Fauna	WAWA	Wannamal Lake
VICTORIA PLAINS	3345	31/80	258.9988 ha	Preservation of Flora	Not vested	Moore R

APPENDIX 7: WETLAND RESERVES IN THE CENTRAL AND SOUTHERN AGRICULTURAL AREAS*+

LOCAL AUTHORITY AREAS OF Toodyay, Northam, York, Beverley, Brookton, Wandering, Williams and West Arthur.



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A P P E N D I X 7: WETLAND RESERVES IN THE CENTRAL & SOUTHERN AGRICULTURAL AREAS

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
BEVERLEY	6203	2D/40 342A/40	abt 9.0745 ha	Reservoirs, Aqueducts, Water Courses & Catchment Areas	PWD	Helena River Darkin Swamp Goonaping Swamp
	13139	342D/40	40.4686	Water	Not vested	Flint Gully
	S913	342A/40 342D/40	-	Canning Reservoir watershed	WSSD	Numerous creeks
BROOKTON						
No gazetted reserves on wetlands						
NORTHAM	14276	2A/40	618.6329 ha	Timber	Not vested	Small part of Coates Gully
	33050	2A/40	3002 m ²	Public Recreation	Not vested	Woorooloo Brook
	1494	2A/40 (Clackline)	4.1928 ha	Railway	Commissioner for Railways	Clackline Brook
	12540	2A/40 (Bakers Hill)	-	Railway (Discontinued)	Not vested	Clackline Brook
	8518	2A/40 (Clackline)	8650 m ²	Railway	Not vested	Clackline Brook
	12541	2A/40 (Clackline)	-	Railway	Not vested	Clackline Brook
	6203	2D/40 342A/40	abt 9,0745 ha	Reservoirs, Aqueducts, Watercourses & Catchments Areas	PWD	Helena River Darkin River Darkin Swamp Goonaping Swamp
	32400	27D/40 (Toodyay 40-4) & 2A/40	458.9000 ha	Conservation of Flora & Fauna	WAWA	Tributaries of Jimperding Brook
	29315	27A/40 (Bakers Hill)	4047 m ²	Water	Minister for WSSD	?
	26497	27A/40 (Clackline)	4001 m ²	Water Supply	Minister for WSSD	?
3307	27D/40 (Toodyay 40-4)	6.0703 ha	Water	Not vested	?	
TOODYAY	4669	27A/40	5.7137 ha	Water	Not vested	Toodyay Brook
	19900	27A/40	87.2097 ha	Conservation of Flora	Not vested	Unnamed creek
	19904	27A/40	93.0903 ha	Timber	Not vested	Unnamed creek
	22096	27A/40	386.0701 ha	Conservation of Flora & Fauna	WAWA	Unnamed creek
	5273	27A/40 (Toodyay 40-2) & 28A/40	59.5892 ha	Camping	Toodyay	Unnamed Creek
	21429	27A/40 (Toodyay 40-2)	252.0484 ha	Timber	Not vested	Unnamed creek

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
TOODYAY	3014	27A/40 (West Toodyay & 27D/40 (Toodyay 08.31)	7.1554 ha	Sanitary Depot	Toodyay	Avon River
	3749	27A/40 (West Toodyay)	4224 m ²	Bridge approach	Not vested	Avon River
	5610	27A/40 (West Toodyay)	9181 m ²	Water & Government reqs	Toodyay	Avon River
	6170	27A/40 (West Toodyay)	4.0469 ha	Government reqs	Not vested	Avon River
	5193	27A/40	1619 m ²	Water	Toodyay	?
	7341	27A/40 (West Toodyay)	228 m ²	Government reqs	Not vested	Avon River
	779	27D/40 (Toodyay 40-2)	3673 m ²	Water	Not vested	?
	529	27D/40 (Toodyay 40-4)	38.8767 ha	Conservation of Flora & Fauna	WAWA	Belaring Spring
	7678	27D/40 (Toodyay 40-2)	9.9401 ha	Water	Not vested	?
	659	27D/40 (Toodyay 40-4)	52.6040 ha	Conservation of Flora & Fauna	WAWA	Goonaring Spring
	16599	27D/40 (Toodyay 08.30)	2777 m ²	Use & benefit of Aborigines	Aboriginal Land Trust wpl	Avon River
	27015	27D/40 (Toodyay 08.30)	8879 m ²	Recreation	Toodyay	Avon River
	8657	27D/40 (Toodyay 09.29)	2.8379 ha	Water	Minister for Works	?
	9861	27D/40 (Toodyay 09.29)	1922 m ²	Water	Not vested	?
	27698	27D/40 (Toodyay 09.29)	2.4382 ha	Water	Minister for WSSD	?
	24865	27D/40 (West Toodyay)	3.1894 ha	Water	Toodyay	Avon River
	13971	28/80	23.8765 ha	Water	Not vested	?
	20210	28/80	64.7497 ha	Water & Government reqs	Not vested	Unnamed creek
	'A'30191	28/80 (Toodyay 40.1)	1991.0534 ha	Conservation of Flora & Fauna	WAWA	Numerous creeks
	'A'30192	28/80 (Toodyay 40.1 40.2, 40.3)	44430.4860 ha	National Park	National Parks Authority	Avon River & creeks
	'A'30193	28/80 (Toodyay 40.1, 40.2, 40.3)	5143.5550 ha	Timber	Conservator of Forests	Avon River Tributaries of Brockman River.
	33789	28/80 (Toodyay 40-2)	12.8873 ha	Public Recreation	Not vested	Unnamed creek
	30306	32/80	39.2039 ha	Conservation of Flora & Fauna	WAWA	Anvil Gully

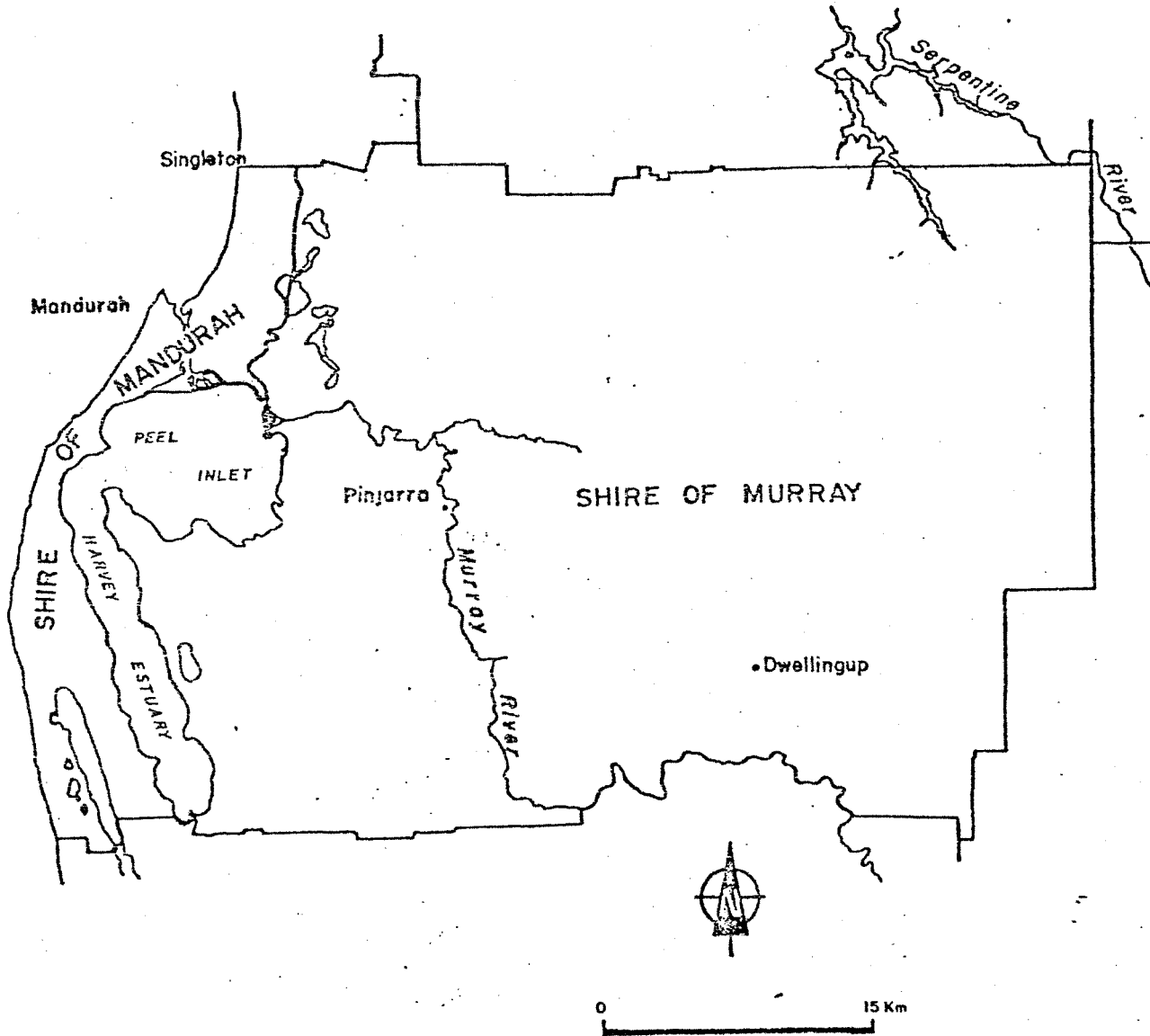
A P P E N D I X 7: WETLAND RESERVES IN THE CENTRAL & SOUTHERN AGRICULTURAL AREAS

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
WANDERING	335	341C/40	40.4686 ha	Watering & Stopping Place for Teams	C/- Wandering	Unnamed creek
	5913	342A/40 342D/40	-	Canning Reservoir Watershed	WSSD	Numerous creeks
	16634	342D/40	-	Catchment Area	-	?
	334	379A/40	40.4686 ha	Watering & Stopping Place for Teams	C/- Wandering	Unnamed creek
	910	379A/40	15.4034 ha	Parklands & Recreation	Not vested	Gnowing Spring
	13345	379A/40	4.0469 ha	Water	Not vested	Soak
WEST ARTHUR	'A'21009	410D/40	2.0158 ha	Camping & Water	West Arthur	?
	10690	410D/40 (Muja SW)	40.4737 ha	Water	Not vested	?
WILLIAMS	'A'4555	410A/40	404.6856 ha	Resting Place for Travellers & Stock	Not vested	Bingham River
	7675	410A/40	194.2491 ha	Resting Place for Travellers & Stock	Not vested	Bingham River
YORK	424	2D/40	3.6503 ha	Stopping & Watering Place for Travellers & Stock	Not vested	Spring & unnamed creek
	6203	2D/40 342A/40	abt 90745 ha	Reservoirs, Aqueducts, Watercourses & Catchment Areas	PWD	Helena River Darkin River Darkin Swamp Goonaping Swamp

APPENDIX 8: WETLAND RESERVES IN THE SOUTH-WEST* I

LOCAL AUTHORITY AREAS OF Mandurah and Murray

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*Listings compiled before July 1977.

Abbreviations: ha = hectare; m² = square metre; wpl = with power to lease; CG = Crown Grant; WSSD = Water Supply, Sewerage and Drainage; WAWA = Western Australian Wildlife Authority.

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LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
MANDURAH	860	380D/40	34.2122 ha	Water	Not vested	Harvey Estuary
	2990	380D/40	72.0340 ha	Recreation & Camping	Mandurah	Harvey Estuary
	'A'11710	380D/40 383A/40 381C/40	8917.4711 ha	National Park	National Parks Authority	Lake Clifton, Boundary Lake Duck Pond
	'A'12189	380D/40 381C/40	1384.8090 ha	National Park	National Parks Authority	Lake Clifton & Harvey Estuary
	33066	380D/40	4603 m ²	Public Recreation	Not vested	Harvey Estuary
	34177	380D/40	2105 m ²	Public Recreation	Not vested	Harvey Estuary
	34293	380D/40 (Pi101-4)	3913 m ²	Recreation	Mandurah wpl	Harvey Estuary & Peel Inlet
	30701	380D/40 (Pi133-4), 381C/40	1.6061 ha	Recreation	Not vested	Harvey Estuary
	33128	380D/40 (Pi133-4)	620 m ²	Drainage	Not vested	?
	33129	380D/40 (Pi133-4)	1085 m ²	Drainage	-	?
	25360	380A/40 (Pi9-4)	28.8060 ha	Recreation	Not vested	Geogrup Lake
	'A'9633	380A/40 (Pi23-4)	5.8982 ha	Recreation	Mandurah	Peel Inlet
	14004	380A/40 (Pi23-4, 39-4)	1.4493 ha	Recreation	Mandurah	Peel Inlet
	19322	380A/40 (Pi23-4)	1.4569 ha	Camping	Mandurah	Peel Inlet
	19323	380A/40 (Pi23-4)	1.8767 ha	River Improvements & Camping	Mandurah	Peel Inlet
	27513	380A/40 (R216-4)	809 m ²	Drainage	Mandurah	?
	'A'21231	380A/40 (Pi23-4)	6.8443 ha	Recreation	Mandurah	Peel Inlet
	27582	380A/40 (Pi23-4, Pi39-4)	3.4520 ha	Caravan Park	Mandurah	Peel Inlet
	28472	380A/40 (Pi23-4)	4930 m ²	Administrative & Civic Centre	CG	Peel Inlet
	28870	380A/40 (Pi23-4)	261 m ²	Effluent Disposal	Mandurah	Peel Inlet
	30438	380A/40 (Pi23-4)	2.0234 ha	Porpoise Pool, Acquarium & Ass. Development	Mandurah	Peel Inlet
	30987	380A/40 (Pi23-4)	3.9963 ha	Camping & Caravan Park	Mandurah	Peel Inlet

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
MANDURAH (Cont.)	32476	380A/40 (Pi23-4)	8075 m ²	Health Services Centre	Minister for Public Health	Peel Inlet
	32703	380A/40 (Pi23-4)	2.3104 ha	Caravan Park & Camping	Mandurah	Entrance to Peel Inlet
	27809	380A/40 (Pi24-4)	1740 m ²	Drainage	Mandurah	?
	26535	380A/40 (Pi25-4)	9073 m ²	Recreation	Not vested	Part of Serpentine R foreshore
	27816	380A/40 (Pi8-4)	911 m ²	Drainage	Mandurah	?
	4412	380A/40 (Pi39-4)	880 m ²	Access to Mandurah Jetty	Mandurah	Entrance to Peel Inlet
	16221	380A/40 (Pi39-4)	1770 m ²	Baths Site	Mandurah	Entrance to Peel Inlet
	22283	380A/40 (Pi39-4)	1821 m ²	Parks & Recreation	Mandurah	Entrance to Peel Inlet
	10332	380A/40 (Pi39-4)	159 m ²	Landing Stage	Mandurah	Entrance to Peel Inlet
	28008	380A/40 (R232-4)	711 m ²	Drainage	Not vested	?
	'A'27581	380A/40 (Pi39-4)	7.0535 ha	Recreation	Mandurah	Entrance to Peel Inlet
	27622	380A/40 (Pi39-4)	670 m ²	Recreation	Not vested	Entrance to Peel Inlet
	25476	380A/40 (Pi40-4)	678 m ²	Drainage Sump	Mandurah	?
	28470	380A/40 (Pi40-4)	1711 m ²	Drainage	Mandurah	?
	29262	380A/40 (Pi40-4)	809 m ²	Drainage	Mandurah	?
	29485	380A/40 (Pi40-4)	6588 m ²	Public Recreation	Mandurah	Soldiers Cave, Peel Inlet
	32985	380A/40 (Pi40-4)	1000 m ²	Water Supply Purposes	Minister for Works	Soldiers Cave, Peel Inlet
	25120	380A/40 (Pi41-4)	7016 m ²	Recreation	Not vested	Serpentine R foreshore
	8185	380A/40 (Pi55-4, Pi71-4, Pi72-4, Pi56-4)	-	Recreation	Mandurah	Channel & Creery Is., Peel Inlet
	26105	380A/40 (Pi57-4)	9839 m ²	Recreation	Not vested	Serpentine R foreshore
	'A'24729	380A/40 (Pi69 & 70-4)	5453 m ²	Recreation	Not vested	Peel Inlet
25414	380A/40 (Pi69 & 70-4)	2911 m ²	Recreation	Mandurah	Peel Inlet	

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
MANDURAH (Cont.)	28065	380A/40 (Pi69 & 70-4)	855 m ²	Drainage Purposes	Mandurah	?
	28243	380A/40 (Pi69 & 70-4)	3490 m ²	Recreation	Mandurah	Peel Inlet
	28458	380A/40 (Pi69 & 70-4)	3326 m ²	Recreation	Mandurah	Peel Inlet
	28579	380A/40 (Pi69 & 70-4)	827 m ²	Drainage	Not vested	?
	32221	380A/40 (Pi69 & 70-4)	862 m ²	Drainage	Not vested	?
	32083	380A/40 (Pi41-4)	101 m ²	Water Supply	Minister for WSSD	?
	27999	380A/40 (Pi86-4)	5162 m ²	Recreation excluding camping & caravan parking	Mandurah	Peel Inlet
	28349	380A/40 (Pi101-4)	3.5056 ha	Recreation	Not vested	Peel Inlet
	33008	380A/40 (Pi101-4)	1012 m ²	Drain	Not vested	?
	31545	380A/40 (P24-4)	1.7806 ha	Water Supply	Not vested	?
	31989	380A/40 (Pi39-4)	4834 m ²	Water Supply	Minister for WSSD	?
	MURRAY	16634	342D/40	-	Catchment area	Not vested
21038		380B/40	61.3883 ha	Parklands & Recreation	Not vested	North Dandalup R
32433		380B/40 (North Dandalup 20.03)	1157 m ²	Water Supply	Minister for WSSD	?
3585		380C/40 (380C/20)	40.4686 ha	Water & stopping place	Murray Shire	Tributary of Murray R
'A'5101		380C/40 (380C/20)	64.7497 ha	Recreation & Parklands	Conservator of Forests	Murray R
18759		380C/40 (380C/20)	5.0589 ha	Quarry - Gravel	Not vested	Davies Brook
19269		380C/40 (380C/20)	5.3520 ha	Water	Not vested	Unnamed swamp
30799		380C/40 (380C/20)	12.1406 ha	Water Supply	Not vested	Unnamed swamp
31392		380C/40 (380C/20)	9.5405 ha	Water Supply	WSSD	Within South Dandalup Dam
'A'5099		380C/40	64.7497 ha	Recreation & Parklands	Conservator of Forests	Murray R
'A'5100		380C/40	80.9371 ha	Recreation & Parklands	Conservator of Forests	Murray R

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
MURRAY (Cont.)	'A'5102	380C/40 380C/20	220.9584 ha	Recreation & Parklands	Conservator of Forests	Murray R
	8756	380C/40	36.4217 ha	Water	Not vested	Unnamed creek
	18066	380C/40	1.4164 ha	Railway Water Supply	Not vested	Davies Brook
	23642	380C/40	4.3327 ha	Camping & Recreation	Not vested	Murray R
	22867	380C/40 (Dwelling-up)	1.7629 ha	Water	Not vested	?
	29374	380C/40 (Dwelling-up)	202 m ²	Water Supply	Minister for Works	?
	30486	380C/40 (Dwelling-up)	268 m ²	Water Supply	Minister for WSSD	?
	32989	380C/40 (Dwelling-up)	2.2854 ha	Drainage	Murray Shire	?
	2707	380D/40	98.3386 ha	Govt Reqs & Conservation of Flora & Fauna	Not vested	Peel Inlet
	2738	380D/40	34.3983 ha	Recreation	Not vested	Harvey Estuary
	3556	380D/40	2.0234 ha	Water	Not vested	?
	'B'4990	380D/40 & 380A/40	139.2119 ha	Conservation of Flora & Fauna	WAWA	Peel Inlet
	6627	380D/40	17.6494 ha	Watering Place for stock	Not vested	Lake Mealup
	7502	380D/40	145.6868 ha	Water	Not vested	Unnamed swamps near Peel Inlet margin
	8544	380D/40	9080 m ²	Drainage	Not vested	Drain through swamp system
	9413	380D/40	1.0168 ha	Drainage	Not vested	Unnamed swamps
	10150	380D/40	-	Drainage	Not vested	Unnamed swamps
	11718	380D/40	4.0469 ha	Recreation	Not vested	Harvey Estuary
	15028	380D/40	-	Drainage	Not vested	Coolup Main Drain
	16907	380D/40	67.6172 ha	Water	Not vested	9 Mile Lake
	22475	380D/40	1.6405 ha	Drain	Not vested	Unnamed swamps
	22476	380D/40	3313 m ²	Drain	Not vested	Unnamed swamps
	22751	380D/40	9712 m ²	Drainage	Not vested	Coolup Main Drain

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
MURRAY (Cont.)	23333	380D/40	1.6061 ha	Drainage	Not vested	Drain through unnamed swamps
	'A'23756	380D/40	1019.0000 ha	Conservation of Flora & Fauna	WAWA	Harvey Estuary
	'B'24036	380D/40	343.4643 ha	Conservation of Flora & Fauna	WAWA	Austin Bay
	'A'24739	380D/40	40.4686 ha	Flora & Fauna	Not vested	Harvey Estuary, unnamed swamp & Lake McLarty
	25391	380D/40	41.7610 ha	Drain	Not vested	Drains into Harvey R through 23756
	27528	380D/40	34.1959 ha	Recreation	Not vested	Harvey Estuary
	28087	380D/40	891.4522 ha	Conservation of Fauna	WAWA	Peel Inlet (Nerimba Cay)
	28796	380D/40	5688 m ²	Public Recreation	Not vested	Lake Clifton
	33039	380D/40	1.9516 ha	Recreation	Murray Shire	Peel Inlet
	33541	380D/40	1.4161 ha	Drain	Not vested	Unnamed swamps
	31656	380D/40 (Pinjarra 13.31)	2.1342 ha	Drainage	Not vested	?
	31032	380D/40 (Pinjarra 14.28)	1.2369 ha	Recreation & River Improvements	Murray Shire	Murray R
	33281	380D/40 (Pinjarra 14.28)	4.5831 ha	Public Recreation	Murray Shire	Murray R
	24788	380D/40 (Pinjarra 14.29)	9.0119 ha	Schoolsite	Not vested	Murray R
	31550	380D/40 (Pinjarra 14.29)	984 m ²	Drain	Not vested	?
	31568	380D/40 (Pinjarra 14.29)	1.4670 ha	Public Recreation	Murray Shire	Murray R
	32614	380D/40 (Pinjarra 14.29)	693 m ²	Drain	Murray Shire	?
	33446	380D/40 (Pinjarra 14.29)	1.2368 ha	Public Recreation	Murray Shire	Murray R
	31951	380D/40 (Pinjarra 15.29)	4962 m ²	Recreation	Not vested	Murray R
	25662	380D/40 (Pinjarra 15.30)	1401 m ²	Water Supply	Not vested	?
	29516	380D/40 (Pinjarra 15.30)	5749 m ²	Memorial Park	Murray Shire	Murray R
	32583	380D/40 (Pinjarra 15.30)	683 m ²	Drain	Murray Shire	?

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
MURRAY (Cont.)	25391	383A/40	41.7610 ha	Drain	Not vested	?
	30342	380A/40	4.6134 ha	Recreation	Murray	Murray R
	33749	380A/40	1.5602 ha	Recreation & Conservation of Fauna	WAWA	Boodalin Island in Peel Inlet
	25846	380A/40 (Pi9-4)	9105 m ²	Recreation	Not vested	Lake Goegrup
	26351	380A/40 (Pi9-4, Pi10-4, Pi25-4, Pi26-4)	187.1042 ha	Public Recreation	Not vested	Lake Goegrup
	27704	380A/40 (Pi57-4 Pi73-4)	6.8797 ha	Recreation	Murray	Serpentine R foreshore
	27819	380A/40 (Pi57-4)	1.8742 ha	Recreation	Not vested	Serpentine R foreshore
	32726	380A/40 (Pi58-4)	4.4614 ha	Public Recreation	Murray	Unnamed swamp
	5613	380A/40 (Pi73-4)	4047 m ²	Field Station, (WA Naturalists Club)		Murray R Delta
	5616	380A/40 (Pi73-4 Pi89-4)	5160 m ²	Water Supply	Not vested	Jeegarnyeejip Branch of Murray R
	'A'20215	380A/40 (Pi73-4 Pi89-4)	78.5090 ha	National Park	Murray	Murray R Delta
	23015	380A/40 (Pi73-4)	2.0234 ha	Recreation & Camping	Murray	Murray R & Peel Inlet
	23016	380A/40 (Pi73-4 Pi89-4)	4.0469 ha	Recreation & Camping	Murray	Wargoorloop Branch of Murray R
	33768	380A/40 (Pi73-4)	7286 m ²	Public Recreation	Not vested	Serpentine R
	26735	380A/40 (Pi74-4 Pi90-4)	7.5232 ha	Recreation	Murray	Murray R foreshore
	31936	380A/40 (Pi74-4)	220 m ²	Drain	Not vested	Drains into Wilgie Creek
	5618	380A/40 (Pi89-4)	2428 m ²	Government requirements	Not vested	Wargoorloop Branch of Murray R
	5621	380A/40 (Pi89-4)	5.0168 ha	Recreation	Not vested	Murray R
	5622	380A/40 (Pi89-4)	1973 m ²	Government requirements	Not vested	Minjoogup branch of Murray R
	5623	380A/40 (Pi89-4)	1.3734 ha	Recreation	Murray	Murray R
	5625	380A/40 (Pi89-4)	1.2343 ha	Recreation	Not vested	Murray R
	32034	380A/40 (Pi89-4)	10.0062 ha	Recreation	Murray	Yunderup canals
	30715	380A/40 (Pi90-4)	1.0649 ha	Recreation	Murray	Murray R foreshore
8900	380A/40 (Murray 12.34)	1138 m ²	Recreation	Murray	Murray R	

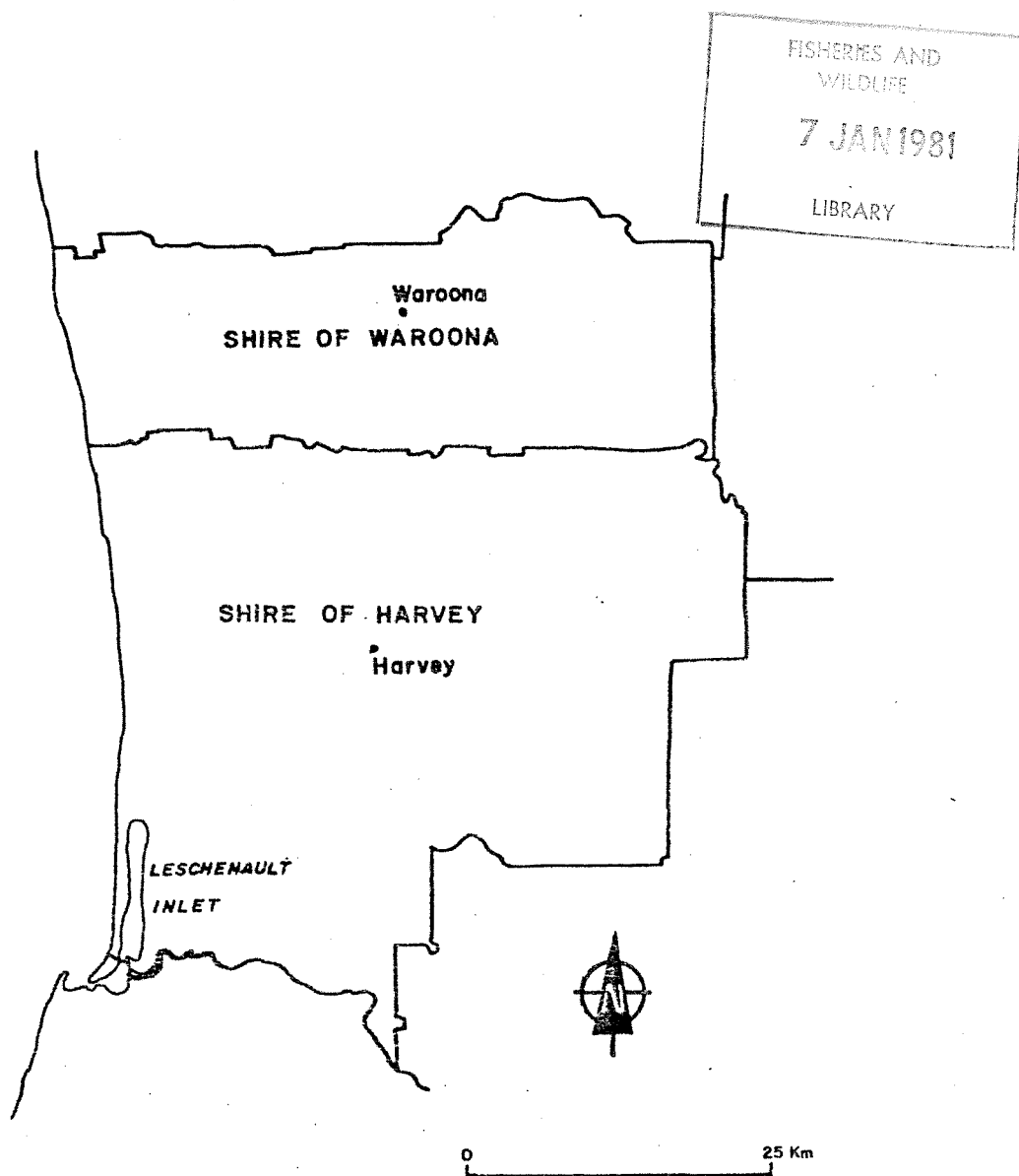
APPENDIX 8:

WETLAND RESERVES IN THE SOUTH-WEST I

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
MURRAY (Cont.)	33836	380A/40 (Murray 12.34)	1973 m ²	Public Recreation	Not vested	Winter Brook
	34148	380A/40 (Murray 12.34)	5547 m ²	Drain	Not vested	Murray R
	28955	380A/40 (Pi90-4)	3642 m ²	Water Supply	Not vested	?

APPENDIX 9: WETLAND RESERVES IN THE SOUTH-WEST* II

LOCAL AUTHORITY AREAS OF Harvey and Waroona.



*Listings compiled before July 1977.

Abbreviations: ha = hectare; m² = square metre; WSSD = Water Supply, Sewerage and Drainage; PWD = Public Works Department; c/- = Control of; wpl = with power to lease; WAWA = Western Australian Wildlife Authority.

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LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
HARVEY	10745	383C/40	2.4281 ha	Preservation of Beauty Spot	Not vested	Falls Brook Waterfall
	13233	383C/40	1.1129 ha	Water	Not vested	Pool on Harris River
	14564	383C/40	60.7028 ha	Timber for settlers	Not vested	Tributaries of Harvey R
	15515	383C/40	272.7581 ha	Water Supply	WSSD	Unnamed creek
	22797	383C/40	300.7547 ha	Conservation of Flora & Fauna	Not vested	Falls Brook & other tributaries of Harvey R
	22958	383C/40	10.3523 ha	Government reqs	Not vested	Tributaries of Harvey R
	25727	383C/40	307.5611 ha	Water Supply	WSSD	Stirling Dam (Harvey River)
	31935	383C/40	22.5410 ha	Sand & Gravel	Harvey Shire	Logue Brook
	33488	383C/40	39.1706 ha	Water Supply	PWD	Saddle Dam
	7322	384D/40	129.4994 ha	Government reqs	Not vested	Nalyerin Lake & swamps
	2517	383D/40	64.5069 ha	Government reqs	Not vested	Wellesley River Flats
	12632	383D/40	40.4686 ha	Water & Conservation of Flora & Aquatic Life	Not vested	Unnamed swamp
	15515	383D/40 383C/40	272.7581 ha	Water Supply	Minister for WSSD	Harvey River
	16030	383D/40	113.1273 ha	Rifle Range	Not vested	Unnamed creek
	'A'17456	383D/40	3.1464 ha	Preservation of Indigenous Timber	Harvey Shire	Clarke Brook
	17482	383D/40	31.4238 ha	Recreation	c/- Harvey Shire	Unnamed creek
	17805	383D/40	82.2068 ha	Timber for Settlers	Not vested	Unnamed creek
	20331	383D/40	8.3626 ha	Drainage	Not vested	?
	22672	383D/40	71.0780 ha	Recreation	Harvey wpl	Tributary of Harvey River
	22977	383D/40	360.5242 ha	Common	Harvey	Tributary of Harvey River
	23041	383D/40	2.0436 ha	Drain	Not vested	?
	23931	383D/40	918.1052 ha	Agriculture Research Station	Not vested	Wokalup Creek
	24002	383D/40	112.2649 ha	Harvey Agri High School	Not vested	Harvey River
	25760	383D/40	3280 m ²	Drain	Minister for WSSD	?
	25916	383D/40	4.6918 ha	Water Supply	-	?
	26999	383D/40	2.6709 ha	Drainage	Minister for Works	Wellesley River
	27328	383D/40	1.6339 ha	Drainage	Not vested	?

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
HARVEY	27500	383D/40	7211 m ²	Irrigation channel	Not vested	Unnamed creek
	27610	383D/40	2.2814 ha	Parking & Picnic	Harvey Shire	Harvey Reservoir
	28614	383D/40	2.9694 ha	Drainage	Minister for Works	Clarke Brook
	29684	383D/40	10.0590 ha	Drainage	Harvey Shire	Unnamed Creek
	30241	383D/40 & Harvey Townsite	1.3026 ha	Drainage	Not vested	Irrigation Channel off Harvey River
	30616	383D/40	1.2141 ha	Reservoir site	Not vested	?
	30754	383D/40	599 m ²	Drain	Not vested	Wellesley R
	26230	383D/40	7740 m ²	Irrigation Channel	Not vested	?
	26253	383D/40	1.6996 ha	Irrigation	Not vested	?
	32828	383D/40	7060 m ²	Irrigation channel	Not vested	?
	32982	383D/40	835 m ²	Drain	Conservator of Forests	Drains into Harvey River
	33148	383D/40	3799 m ²	Irrigation purposes	Minister for WSSD	?
	33424	383D/40	5.1784 ha	Drain	Not vested	Wellesley R Flats
	1086	383D/40 (Lake Preston NE, 1:25000)	47.8149 ha	Drainage	Not vested	Long Swamp
	10416	383D/40 (Lake Preston NE, 1:25000)	2.0234 ha	Church, C of E	Not vested	Long Swamp
	24472	383D/40 (Lake Preston NE, 1:25000)	36.9276 ha	Flora & Fauna	WAWA	Unnamed swamp, north of Long Swamp
	27458	383D/40 (Lake Preston NE, 1:25000)	10.1171 ha	Recreation	Not vested	Lake Preston foreshore
	16783	383D/40 (Harvey)	1.7553 ha	Water Supply	Not vested	Harvey River
	26528	383D/40 (Harvey)	519 m ²	Drainage	Not vested	?
	27812	383D/40 (Harvey)	607 m ²	Drainage	Not vested	?
	29002	383D/40 (Harvey)	1.3801 ha	Drainage	Minister for WSSD	Connects into Diversion Drain
	32665	383D/40 (Harvey)	4047 m ²	Drain	Not vested	?
	6902	410A/40	3237 m ²	Water	Not vested	Creek entering Yourdamung Lake

A P P E N D I X 9: WETLAND RESERVES IN SOUTH-WEST II

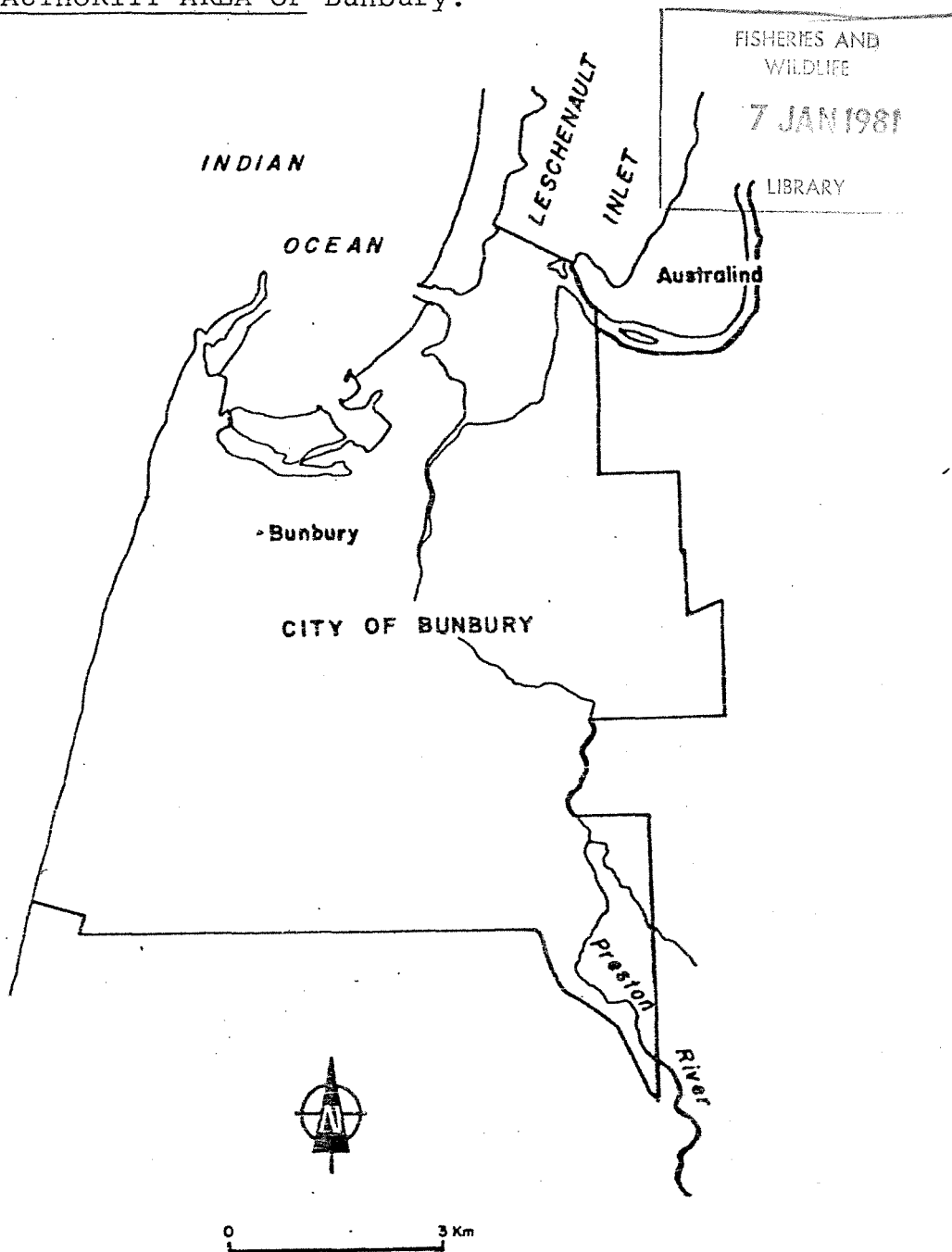
LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
HARVEY	'A'8118	411A/40 (Bunbury NE & NW)	7436 m ²	Stopping Place	Harvey Shire	Brunswick R
	5876	411A/40	4.9776 ha	Drain	Not vested	Elvira Gully
	5877	411A/40	2.1802 ha	Drain	Not vested	Elvira Gully
	5878	411A/40	7765 m ²	Drain	Not vested	Treendale Gully
	5881	411A/40	1.7123 ha	Drain	Not vested	?
	10839	411A/40	4.0469 ha	Water	Not vested	Wellesley R
	10837 10838	411A/40	?	Drain	Not vested	Into Wellesley R
	22762	411A/40	4.4440 ha	Drainage	Not vested	?
	22846	411A/40	4.1455 ha	Drain	Not vested	Wellesley R
	22985	411A/40	36.4571 ha	Drain	Not vested	Mornington River
	25973	411A/40	5736 m ²	Recreation	Not vested	Collie River
	26224	411A/40	2.1084 ha	Drainage	Minister for WSSD	?
	29679	411A/40	1.8995 ha	Drainage	Not vested	?
	30354	411A/40	19.3238 ha	Quarry	Not vested	Flaherty Brk
	31588	411A/40	1.0841 ha	Drainage	Not vested	Drains into Mornington Ck
	33331	411A/40	7.0491 ha	Drain	Not vested	Brunswick R
	29429	411A/40 (Australind)	2825 m ²	Water	Not vested	?
	29554	411A/40 (Australind)	1768 m ²	Drainage	Not vested	?
	33247	411A/40 (Australind)	4.5527 ha	Public Recreation	Not vested	Collie River
	24030	411A/40 (Brunswick Junction)	5868 m ²	Water Supply	Not vested	?
	'A'24364	411A/40 (Binningup 04.11)	6227 m ²	Water Supply	Harvey Shire	?
	26858	411A/40 (B55-4)	7.7750 ha	Recreation	Not vested	Samphire Bay Leschenault Inlet
	31576	411A/40 (B55-4)	4.3555 ha	Recreation	Harvey Shire	Collie River
	12049	383A/40 383D/40	29.4196 ha	Water, Conservation of Flora & Aquatic Life	Not vested	Unnamed Swamp
WAROONA	'A'5101	380C/40 380C/20	64.7497 ha	Recreation & Parklands	Conservator of Forests	Murray River
	'A'5099	380C/40	64.7497 ha	Recreation & Parklands	Conservator of Forests	Murray River
	'A'5100	380C/40	80.9371 ha	Recreation & Parklands	Conservator of Forests	Murray River

A P P E N D I X 9: WETLAND RESERVES IN THE SOUTH-WEST II

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
WAROONA	'A'5102	380C/40 380C/20	220.9584 ha	Recreation and & Parklands	Conservator of Forests	Murray River
	'A'5098	380D/40 380C/40	121.4057 ha	Recreation and Parklands	-	Murray River
	'A'11710	380D/40 383A/40 381C/40	8917.4711 ha	National Park	National Parks Authority	Lake Clifton Boundary Lake Duck Pond
	33285	380D/40	1.9855 ha	Public Recreation	Not vested	Lake Clifton
	30723	383B/40	37.2842 ha	Water Supply	Not vested	Drakes Brook
	31319	383B/40	6.7380 ha	Water Supply	Not vested	Tributary of Drakes Brook
	11160	383A/40	10.1171 ha	Timber/Gravel	Waroona	Tributary of Barrell Brook
	12408	383A/40	-	Camping	Waroona	Harvey River
	13987	383A/40	20.2343 ha	Camping	Not vested	Harvey River
	20312	383A/40	14.3663 ha	Drainage	Not vested	?
	'A'22057	383A/40	359.7655 ha	National Park	National Parks Authority	Lake Preston
	'A'22091	383A/40	161.8743 ha	Recreation & Camping	Waroona	Lake Preston & Coast
	22199	383A/40	331.5741 ha	Timber for Settlers	Not vested	Unnamed Swamp
	22215	383A/40	4.0469 ha	Drainage & Camping	Not vested	Unnamed Creek
	22545	383A/40	16.3973 ha	Water and Camping	Not vested	?
	'A'23172	383A/40	58.6794 ha	Camping	Waroona	Harvey River
	28566	383A/40	7.0315 ha	Drainage	Not vested	?
	29428	383A/40	2443 m ²	Drainage	Not vested	?
	25660	383A/40 (Yalgorup 01.01)	675 m ²	Recreation & Drainage	Not vested	?
	15102	383A/40 (Yalup Brook Townsite)	784 m ²	Drainage	Not vested	?
	22199	383A/40	331.5741 ha	Timber for settlers	Not vested	Unnamed Swamp
	22215	383A/40	4.0469 ha	Drainage & Camping	Not vested	Unnamed Swamp
	22545	383A/40	16.3973 ha	Water & Camping	Not vested	?
	'A'23172	383A/40	58.6894 ha	Camping	Waroona	Harvey River
	28566	383A/40	7.0315 ha	Drainage	Not vested	?
	29428	383A/40	2443 m ²	Drainage	Not vested	?

APPENDIX 10: WETLAND RESERVES IN THE SOUTH-WEST* III

LOCAL AUTHORITY AREA OF Bunbury.



*Listings compiled before July 1977.

Abbreviations: ha = hectare; m² = square metre;
wpl = with power to lease; WSSD = Water Supply,
Sewerage and Drainage.

Appendix to DCE Bulletin No 62.

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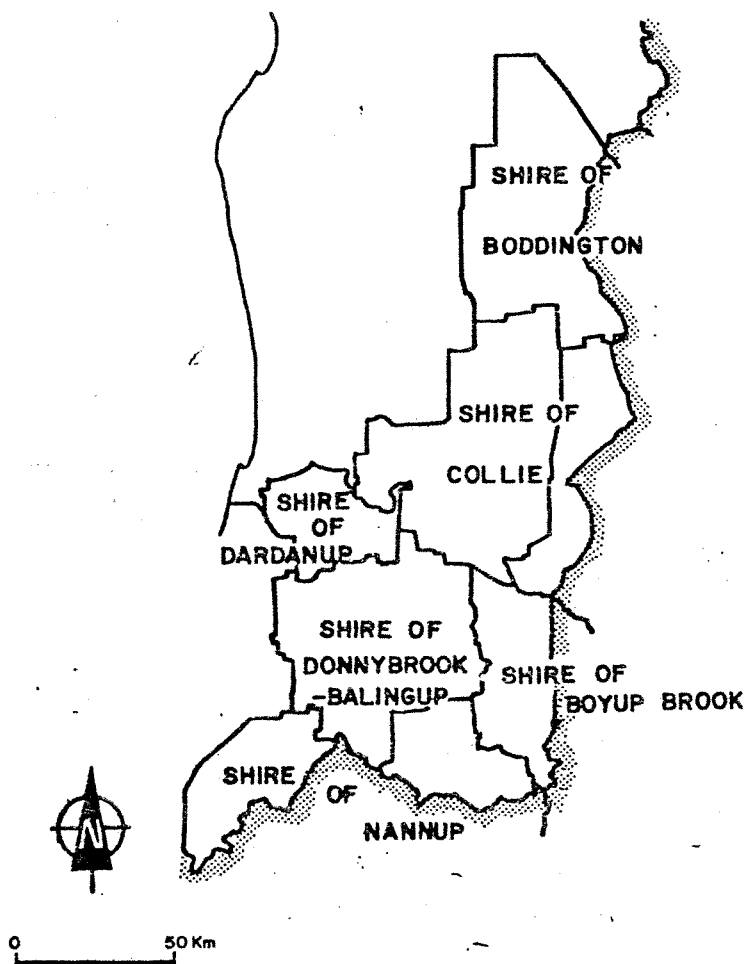
The Information Centre
Department of Conservation
and Environment
1 Mount Street, Perth 6000

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
BUNBURY	'A'9997	411A/40 (Bunbury Central)	5.1175 ha	Parklands and Recreation	Bunbury wpl	Rocky Point
	13531	411A/40 (B54-4)	-	Camping & Picnic Ground	Bunbury	Bar Island in Leschenault Inlet
	34030	411A/40 (B54-4)	19.4574 ha	Recreation	Bunbury	Turkey Point Leschenault Inlet
	'A'6962	411A/40 (B59-4)	4874 m ²	Parklands and Recreation	Not vested	Leschenault Inlet
	8661	411A/40 (B69-4)	1095 m ²	Recreation	Bunbury	Leschenault Inlet
	8674	411A/40 (B69-4)	261 m ²	Recreation	Not vested	Leschenault Inlet
	'A'12636	411A/40 (B69-4)	5.5998 ha	Recreation	Bunbury	Anglesea Island Leschenault Inlet
	'A'15927	411A/40 (B69-4)	8.2987 ha	Parking and Recreation	Bunbury wpl	"Queens Gardens" Leschenault Inlet
	27519	411A/40 (B69-4)	311 m ²	Boat Shed Fisheries Dept	Minister for Fisheries	Leschenault Inlet
	27961	411A/40 (B69-4)	3521 m ²	Recreation	Not vested	Leschenault Inlet
	28032	411A/40 (B69-4)	4.3681 ha	Caravan Park Camping, Beach Resort, Recreation and Aquatic Sports	Bunbury wpl	Leschenault Inlet
	28033	411A/40 (B69-4)	7.5094 ha	"	Bunbury wpl	Leschenault Inlet
	28034	411A/40 (B69-4)	13.7593 ha	Recreation	Bunbury wpl	Leschenault Inlet
	32203	411A/40 (B69-4)	17.3240 ha	Port Purpose	Bunbury Port Authority wpl	Leschenault Inlet
	33620	411A/40 (B69-4)	1.3250 ha	Recreation, Launching, Ramp & Parking	Bunbury wpl	Leschenault Inlet
	13532	411A/40 (B70-4)	-	Government reqts	Not vested	Gerrard Is Leschenault Inlet
	32868	411A/40 (B70-4)	2.2308 ha	Public Recreation	Not vested	Bunbury Harbour & Preston River
	33245	411A/40 (B70-4)	2829 m ²	Irrigation & Drainage Purposes	Minister for WSSD	Preston River
	31866	411D/40	40.0612 ha	Recreation	Not vested	Preston River
	28306	411D/40	94 m ²	Drainage	Not vested	?
	31574	411D/40 (B85-4)	463 m ²	Drain	Not vested	?
	32106	411D/40 (B85-4)	443 m ²	Drain	Not vested	?

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
BUNBURY	33750	411D/40 (B85-4)	799 m ²	Drainage Sump	Bunbury	?
	34153	411D/40 (B85-4)	55 m ²	Drain	Not vested	?
	29721	411D/40 (B86-4)	5782 m ²	Drainage River training	Not vested	River
	31278	411D/40 (B100-4)	849 m ²	Drain	Not vested	?
	31373	411D/40 (B100-4)	3.0200 ha	Water Supply	Bunbury	?
	31520	411D/40 (B100-4)	1.1964 ha	Water Supply	Bunbury	?
	25346	411D/40 (B101-4)	2876 m ²	Recreation & Drainage	Bunbury	?
	28962	411D/40 (B101-4)	599 m ²	Drainage	Not vested	?
	30176	411D/40 (B101-4)	121 m ²	Drainage	Not vested	?
	30956	411D/40 (B101-4)	68 m ²	Drain	Not vested	?
	32721	411D/40 (B101-4)	243 m ²	Drain	Not vested	?
	33003	411D/40 (B101-4)	68 m ²	Drain	Not vested	?
	33182	411D/40 (B101-4)	311 m ²	Drain	Not vested	?
	33333	411D/40 (B101-4)	162 m ²	Drain	Not vested	?
	33334	411D/40 (B101-4)	354 m ²	Drain	Not vested	?
	33407	411D/40 (B101-4)	713 m ²	Drain	Not vested	?
	33470	411D/40 (B101-4)	147 m ²	Drain	Not vested	?
	33471	411D/40 (B101-4)	407 m ²	Drain	Not vested	?
	34234	411D/40 (B101-4)	76 m ²	Drain	Not vested	?
	28776	411D/40 (B102-4)	8081 m ²	Water Supply	Bunbury	?
	29891	411D/40 (B102-4)	1.4797 ha	Drainage	Not vested	Unnamed swamp
	30166	411D/40 (B102-4)	5442 m ²	Drainage	Not vested	?
	32110	411D/40 (B102-4)	761 m ²	Drain	Not vested	?
	32152	411D/40 (B117-4)	3.2173 ha	Water Supply purposes	Bunbury	?

APPENDIX 11: WETLAND RESERVES IN THE SOUTH-WEST*

LOCAL AUTHORITY AREAS OF Boddington, Collie, Nannup,
Dardanup, Boyup Brook, Bridgetown, Greenbushes,
Donnybrook-Balingup.



*Listings compiled before July 1977.

Abbreviations: ha = hectare; m² = square metre; C/- = Control of; CG = Crown Grant; WSSD = Water Supply, Sewerage and Drainage; wpl = with power to lease; WAWA = Western Australian Wildlife Authority.

Appendix to DCE Bulletin No. 62.

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LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
BODDINGTON	16634	342D/40	-	Catchment Area	?	?
	528	379A/40	39.3607 ha	Water	c/- Boddington	Unnamed creek
	'A'4596	380C/40	65.0279 ha	Timber & Parklands	Not vested	Spring & unnamed creek
	19780	383B/40	12 m ²	Water	Not vested	Unnamed creek
	23466	384A/40	4.8562 ha	Camping & Conservation of Flora	Not vested	Hotham River
	23467	384A/40	4.0469 ha	Camping	Not vested	Hotham River
	8178	384D/40	64.7497 ha	Racecourse & Recreation	Boddington Shire	Williams R
BOYUP BROOK	11172	414C/40	40.4686 ha	Water	Not vested	?
	11683	415A/40 (Evans NW 1:25,000)	40.4686 ha	Water	Not vested	Collie River
	'A'20757	415A/40 (Evans NW)	3.8808 ha	Recreation & Hallsite	Boyup Brook	Collie River
	'A'1454	415D/40 (Boyup Brook)	13.1998 ha	Recreation	Boyup Brook	Blackwood R
	2725	415D/40 (Boyup Brook NE)	21.1449 ha	Water	c/- Boyup Brook	Blackwood R
	'A'11497	415D/40 (Boyup Brook)	21.9511 ha	Recreation	Boyup Brook wpl 21 years	Boyup Brook
	16199	415D/40 (Boyup Brook)	46.6001 ha	Water Supply	Not vested	?
	18922	415D/40 (Boyup Brook NW)	4.0494 ha	Water	Not vested	Boyup Brook
	22670	415D/40 (Boyup Brook)	916 m ²	Railway Water Supply	Not vested	?
	'A'23783	415D/40 (Boyup Brook)	4.7601 ha	Picnic Ground	Boyup Brook	Boyup Brook & Blackwood R
	'A'23784	415D/40 (Boyup Brook)	5.2609 ha	Recreation	Boyup Brook	Boyup Brook
	'A'23807	415D/40 (Boyup Brook)	3.1363 ha	Recreation	Boyup Brook	Blackwood R
	24839	415D/40 (Boyup Brook)	121 m ²	Drain	Not vested	?
	24878	415D/40 (Boyup Brook)	7494 m ²	Water Supply	Not vested	?
	26099	415D/40 (Boyup Brook)	1.0117 ha	Recreation	Not vested	Boyup Brook

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
BRIDGETOWN GREENBUSHES	9510	439B/40	40.4686 ha	Government reqts	Not vested	Spring & unnamed creek
	24231	439B/40	8094 m ²	Recreation	Not vested	Blackwood R
	4151	439B/40 (Bridgetown)	3566 m ²	Repertory Club	CG Bridgetown Repertory Club	Geegelup Brook
	7116	439B/40 (Bridgetown)	4047 m ²	Pound	c/- Shire	Geegelup Brook
	9915	439B/40 (Bridgetown)	11.5841 ha	Cemetery	Not vested	Unnamed creek
	18447	439B/40 (Bridgetown)	46.6197 ha	Recreation & National Park	Not vested	Unnamed Tributaries of Blackwood
	'A'23513	439B/40 (Bridgetown)	?	Recreation	Not vested	Blackwood R foreshore
	'A'23514	439B/40 (Bridgetown)	2.9846 ha	Recreation	Not vested	Blackwood R
	'A'23515	439B/40 (Bridgetown)	5.6024 ha	Conservation of Flora	Bridgetown Greenbushes	Blackwood R
	25580	439B/40 (Bridgetown)	1.9703 ha	Water Supply	Minister for WSSD	?
	28454	439B/40 (Bridgetown)	1.6137 ha	Park	Bridgetown Greenbushes	Unnamed creek
	31332	439B/40 (Bridgetown)	736 m ²	Drain	Not vested	?
	3449	439B/40 (Bridgetown)	3.2081 ha	Recreation	Bridgetown Greenbushes	Unnamed creek
	30597	414C/40	4.9725 ha	Water Supply	Minister for WSSD	Unnamed creek
	6856	414C/40 (Greenbushes)	7770 m ²	Water	Minister for Works	?
	6857	414C/40 (Greenbushes)	2529 m ²	Water	Minister for Works	?
	8367	414C/40 (Greenbushes)	1442 m ²	Water	Not vested	Well
	10141	414C/40 (Greenbushes)	2820 m ²	Water	c/- Shire	?
	15807	414C/40 (Greenbushes)	228 m ²	Water Supply	Minister for WSSD	?
	29035	414C.40 (Greenbushes)	2071 m ²	Water	Minister for WSSD	?
	2722	438A/40 (Boyup Brook SW)	19.3743 ha	Access to Water	c/- Bridgetown Greenbushes	Blackwood R
	6018 6108	438A/40	9.2420 ha	Water	Bridgetown Greenbushes	?
	'A'680	414C/40	12.2367 ha	Stopping & Watering Place for Teams	c/- Shire	8 Mile Spring
1381	414C/40	2023 m ²	Water	Minister for WSSD	Unnamed Spring	
1382	414C/40	6475 m ²	Water	Not vested	?	

A P P E N D I X 11: WETLAND RESERVES IN THE SOUTH-WEST IV

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
BRIDGETOWN GREENBUSHES	1929	414C/40	6045 m ²	Well & Stopping Place for Travellers	Not vested	Dumpling Gully
	'A'22315	414C/40	4.8916 ha	Recreation-swimming pool	Bridgetown Greenbushes	Spring Gully
COLLIE	16077	410D/40 (Muja T)	1.6187 ha	Water	Minister for WSSD	Collie River East
	26231	410D/40 (Muja T & Muja SW)	28.2799 ha	Railway purposes	Not vested	Collie River East
	9124	410D/40 (Muja T)	48.5623 ha	Camping Place	Not vested	Unnamed creeks
	17723	410D/40 (Muja SW)	131.3808 ha	Recreation	Collie	Collie River
	23255	410D/40 (Muja SW)	5138 m ²	Hallsite	Collie	Collie River
	22700	411B/40 (Collie NE 1:25,000)	12.0172 ha	Forestry purposes	Not vested	Harris River
	6039	411C/40	40.4686 ha	Water	Not vested	Unnamed creeks & soak
	15074	411C/40	97.3269 ha	Rifle Range	Not vested	Tributaries of Collie River
	7945	411C/40 (Collie Regional Collie 30.27)	325.7513 ha	Parklands	Collie	Unnamed Creek & Collie River
	9104	411C/40 (Collie Regional)	19.1011 ha	Mining	Not vested	Collie R South
	21407	411C/40 (Collie Regional)	8094 m ²	Recreation	Collie	Collie River South
	22196	411C/40 (Collie Regional)	6.2473 ha	Recreation	Not vested	Collie River South
	22849	411C/40 (Collie Regional & Collie 30.27)	4.0469 ha	Quarry	Collie	Collie River Unnamed creek
	23561	411C/40 (Collie Regional)	2.2257 ha	Government reqs	Not vested	Collie River foreshore
	25214	411C/40 (Collie Regional)	6.0703 ha	Mining purposes	Not vested	Collie River South
34343	411C/40 (Collie Regional, Collie 30.27, 30.28, 31.27)	207.0000 ha	Parklands & Recreation	Collie wpl	Collie River	
23498	411C/40 (Collie 40-4)	6.8240 ha	Water	Not vested	Unnamed creek	

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
COLLIE	30480	411C/40 (Collie 30.27)	3430 m ²	Water Supply	Minister for WSSD	?
	'A'18806	411C/40 (Collie 32.28, Collie 31.28)	1.7047 ha	Recreation & Bathing	Not vested	Collie River
	6770	411C/40 (Collie 32.29)	-	Government reqs	Not vested	Collie River
	8278	411C/40 (Collie 32.29)	2.4281 ha	Recreation	Not vested	Collie River
	12941	411C/40 (Collie 32.29)	1.2141 ha	Railway Water Supply	Not vested	Collie River
	23606	411C/40 (Collie 32.29)	-	Recreation & Park	Collie	Collie River
	30927	411C/40 (Collie 32.29)	1012 m ²	Water Supply	Not vested	?
	17561	411C/40 (Mungalup)	1189.2952 ha	Water	Not vested	Numerous creeks
	19171	411C/40 (Mungalup)	6.0374 ha	Government reqs, Forests	Not vested	Unnamed creek
	22804	411C/40 (Mungalup)	1.4822 ha	Government reqs	Not vested	Unnamed creek
	16067	411C/40 (31.28)	1.5724 ha	Water	Minister for WSSD	-
	21395	411C/40 (31.28)	1.6288	Water	Minister for WSSD	Collie River
	22407	411C/40 (31.28)	6.7919 ha	Recreation	Collie wpl	Collie River
	7818	411C/40 (31.29)	3743 m ²	Recreation	Collie	Collie River
	15195	411C/40 (31.29, 32.29)	10.2617 ha	Recreation & Parking	Collie	Collie River
	16108	411C/40 (31.29)	8094 m ²	Water	Minister for WSSD	?
	16462	411C/40 (31.29)	2630 m ²	Drainage	Collie	?
	29718	411C/40 (31.30)	374 m ²	Drainage	Not vested	?
	15783	411C/40 (32.28)	17.4015 ha	Flora & Fauna Sanctuary	Collie	Collie River
	21082	411C/40 (32.28, 32.29)	1.4234 ha	Municipal purposes	Collie	Collie River
	15322	411C/40 (33.30)	1.2419 ha	Gravel	Collie	Unnamed creek

A P P E N D I X 11: WETLAND RESERVES IN THE SOUTH-WEST IV

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
DARDANUP	1083	411A/40	9991 m ²	Water	Not vested	Tributary of Collie River
	27685	411A/40	1.5404 ha	Drainage	Not vested	?
	31292	411A/40	5926 m ²	Drain	Not vested	Flaherty Brook
	31324	411A/40	2.9595 ha	Recreation	Not vested	Collie River
	31541	411A/40	5084 m ²	Drainage	Not vested	?
	24359	411A/40 (B55-4)	4.7424 ha	Recreation	Dardanup wpl	Collie River
	24728	411A/40 (B55-4)	6.4761 ha	Recreation	Dardanup wpl	Collie River
	24930	411A/40 (B55-4)	8347 m ²	Hall site	Dardanup wpl	Collie River
	25417	411A/40 (B55-4)	4.9068 ha	Recreation	Dardanup	Collie River
	33242	411A/40 (B55-4)	2872 m ²	Camping	Dardanup	Collie River
	27516	411A/40 (B71-4)	4.7708 ha	Recreation	Dardanup wpl	Collie River
	27517	411A/40 (B71-4)	1.1116 ha	Water Supply	Not vested	?
	31787	411A/40 (B71-4)	1543 m ²	Drain	Dardanup	?
	'A'295	411D/40	12.5453 ha	Recreation, camping & caravans	Not vested	Ferguson River
	32247	411D/40	4193 m ²	Water Supply	Minister for Works	?
	421	411D/40 (B103-4)	16.2531 ha	Industrial purposes - Government Reqs	Bunbury	Part on Tributary of Preston River
	31952	411D/40 (B103-4)	1.2520 ha	Drain	Not vested	Tributary of Preston River
	25726	411D/40 (B120-4)	5.4149 ha	Drainage & Irrigation	Minister for WSSD	Ferguson River
DONNYBROOK BALINGUP	21583	414A/40	23.4718 ha	Quarry & Water	Minister for Works wpl	Permanent Spring
	22860	414A/40	24.2862 ha	Recreation	Donnybrook Balingup	Unnamed creeks
	30032	414A/40	100.0990 ha	Water Supply	Minister for WSSD	Unnamed creeks
	32021	414A/40	1.0522 ha	Recreation	-	Preston River
	2720	414A/40	26.6739 ha	Quarry & Water	Minister for Works	?
	8815	414A/40 (Donnybrook Central)	4452 m ²	Pound	-	Preston River
	10459	414A/40 (Donnybrook Central)	5.6656 ha	Water & Camping	Donnybrook Balingup	Preston River
'A'18527	414A/40 (Donnybrook Central)	1.5581 ha	Recreation	Donnybrook Balingup	Preston River	

A P P E N D I X 11:

WETLAND RESERVES IN THE SOUTH-WEST IV

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
DONNYBROOK BALINGUP	32088	414A/40 (Donnybrook Central)	3642 m ²	Water Supply	Donnybrook Balingup	?
	'A'8979	414A/40 (Donnybrook Regional)	4.0257 ha	Parklands	Donnybrook Balingup	Preston River
	'A'15418	414A/40 (Donnybrook Regional)	3.5061 ha	Parklands & Recreation	Donnybrook Balingup	Preston River
	28756	414A/40 (Donnybrook Regional)	1.0945 ha	Water Supply	Minister for (WSSD)	?
	30186	414A/40 (Donnybrook Regional)	7120 m ²	Drainage	Not vested	
	31338	414A/40 (Donnybrook Regional)	2.9036 ha	Government reqs	Not vested	Unnamed creeks
	33927	414A/40 (Donnybrook Regional)	1.3718 ha	Caravan Park	Donnybrook Balingup	Preston River
	11796	414B/40 (Noggerup)	1.6566 ha	Water	Minister for WSSD	?
	17114	414B/40 (Noggerup)	283.1181 ha	Railway Water Supply	Not vested	?
	6956	414B/40 (Preston)	6.0703	Recreation	Donnybrook Balingup	Preston River
	23724	414B/40 (Preston)	4.8562 ha	Recreation	Not vested	Preston River
	10421	414B/40 (Wilga SE 1:25,000)	4.0469 ha	Water	Not vested	Little Camelup Swamp
	'A'765	414B/40 (Wilga SE &NE)	39.0724 ha	Public reqs	Not vested	Well & tributary stream of Preston River
	5261	414B/40 (Wilga NE)	35.8299 ha	Water	Not vested	Preston River
	12331	414B/40 (Wilga NE)	16.1874 ha	Water	Not vested	Unnamed creek
	17133	414B/40 (Wilga NE)	4477 m ²	Water & Access	Not vested	Preston River
	12553	414C/40	173.2055 ha	Reafforestation	Not vested	Unnamed Stream
	25479	414C/40	1.0004 ha	Water Supply	Minister for WSSD	?
	26186	414C/40	35.1318 ha	Timber	Not vested	Pool
	4255	414C/40 (Balingup)	7461 m ²	Showground	Not vested	Balingup Pool
	5837	414C/40 (Balingup)	1846 m ²	Shirc Office	Donnybrook Balingup	Unnamed Stream
	'A'20503	414C/40 (Balingup)	1176 m ²	Parklands	Donnybrook Balingup	Balingup Brook
	28082	414C/40	2400 m ²	Drainage purposes	Donnybrook Balingup	?
	32659	414C/40 (Balingup)	8013 m ²	Drain	Not vested	?

A P P E N D I X 11:

WETLAND RESERVES IN THE SOUTH-WEST IV

LOCAL AUTHORITY	RESERVE NUMBER	PLAN	AREA	PURPOSE	VESTING	WETLAND
DONNYBROOK BALINGUP	33491	414C/40 (Balingup)	4.7322 ha	Recreation	Not vested	Brooklands Pool
	7687	414C/40 (Mullalyup)	9207 m ²	Water	Minister for WSSD	Wottogurru Brook
	15703	414D/40 414C/40	5.0000 ha	Railway Water	Not vested	Unnamed creek
	20242	414D/40	6671 m ²	School site	Not vested	Capel River
	'A'25446	414D/40	67.1546 ha	Conservation of Flora & Fauna	WAWA	Blackwood River
	32998	414D/40	1.9538 ha	Public Recreation	Not vested	Tributary of Capel River
	7703	414E/40 (Kirup Townsite)	12.6260 ha	Watering Place Travellers & Stock	c/- Donnybrook Balingup	Capel River
NANNUP	615	414D/40	234.5836 ha	Resting Place for Travellers & Stock	Not vested	Unnamed creek
	10998	414D/40	8094 m ²	Water	Not vested	Unnamed creek
	11133	414D/40	4.0236 m ²	Water	Not vested	Blackwood River
	13290	414D/40 439A/40	8.6072 ha	Railway Water Supply	Not vested	St John's Brook
	1461	439A/40	24.2811 ha	Watering Place	Not vested	Unnamed creek
	12340	439A/40	72.3331 ha	Government reqs	Not vested	Unnamed creek
	12952	439A/40	19.9561 ha	Timber, Water & camping	Conservator for Forests	Blackwood River
	12970	439A/40	-	Railway	Minister for Railways	Rocky Gully
	13276	439A/40	1.5758 ha	Road approach- ford.	Not vested	St John's Brook

WETLANDS OF THE DARLING SYSTEM

Wetlands are areas of seasonally, intermittently or permanently waterlogged soils or inundated land, whether natural or otherwise, fresh or saline e.g. waterlogged soils, ponds, billabongs, lakes, swamps, tidal flats, estuaries, rivers and their tributaries.

Bulletins in this series:

Wetlands in Recreation Reserves (Bulletin No. 59)

The Purposes and Vestings of Wetland Reserves
(Bulletin No. 60)

Wetlands in Conservation Reserves and
National Parks (Bulletin No. 61)

Wetland Reserves and their Management
(Bulletin No. 62)