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A Historical Geography of the Bayswater Wetlands

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A HISTORICAL GEOGRAPHY OF THE BAYSWATER WETLANDS

A thesis submitted as a partial requirement for the award of

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In the Faculty of Arts
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Abstract

This study examines the loss of 80-90% of wetlands in the City of Bayswater within the Perth Metropolitan Region. As a geographical study of wetlands it is largely concerned with the value of those wetlands to the local community, as well as to the flora and fauna species diversity of the City of Bayswater.

The City of Bayswater is a sub-catchment of the Swan-Avon River system. It is approximately 5 kilometres from the Perth Central Business District. In its pristine state the Bayswater catchment would have been a landscape of swamps and lakes that supported prolific birdlife, frogs, native fishes, tortoises as well as wetland vegetation and microscopic animals. Prior to European settlement the Bayswater wetlands were part of a wetland system used by the Nyoongar people for food and water during the dry summer months. These Aboriginal people also valued this wetland system as a source of special religious rites and mythology, an important part of their "Dreamtime" beliefs.

Early European settlers used the Bayswater wetlands as a source of water and summer pastures, a feature that was common practice to the Swan River wetlands. Unfortunately, the early settler's appreciation of the wetlands was short-lived as winter flooding caused the early town planners to drain and fill most of the Swan River wetlands. The former wetlands of the City of Bayswater are a perfect vehicle to examine past attitudes to environment, as they clearly demonstrate the inherent lack of understanding of the complicated correlation between the hydrology of the wetlands, water table and the self-sustaining ecosystems they supported.

The conservation of the remaining wetlands of the City of Bayswater is vital for the survival of species diversity in the area, as well as in the Perth region as a whole. This study describes the history of the Bayswater wetlands and their modification over time to fill an important knowledge gap as well as providing an important local perspective.

Currently all of the elements required for the conservation of Bayswater's remaining wetlands are in place, or under development, but an ongoing community involvement is essential to the restoration and conservation of the Bayswater catchment area.

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

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Acknowledgments

Firstly my thanks must go to my husband Anthony and children Bernadette and Sal and their partners Vlado and Danielle for their unlimited support and patience during my absences while undertaking study and research.

I would also like to express my sincerest appreciation to Dr Hugo Bekle for his encouragement, expertise and guidance throughout the entire duration of my Arts degree and Honours year. I would not have been able to undertake Honours without the inspiration, support and encouragement that he provided.

Special thanks also go to:

- Bayswater residents for their valuable comments and interesting stories relating to the Bayswater wetlands including Laurie and Daphne Batters, Doris and Eric Fairs, Ms Roma Trainer, Len and Doreen Craddock, Ms Jean Trew and Mr David Hall.
- The Bayswater Historical Society.
- Ms Sarah Dawson, Environmental Coordinator, The City of Bayswater.
- Ms Cherie Edwards, Coordinator, Bayswater Integrated Catchment Management.
- Ms Catherine May, Author of "Changes they've seen".
- Ms Cathy Day, Consultant, Heritage Australia.
- Mr Eric Singleton, Honorary Warden, Eric Singleton Bird Sanctuary.
- Mr Harry Bastow, President, Friends of Baigup Wetlands.
- Mrs Joan Sidebottom, President, and Mr William Sidebottom, Friends of Gobba Lake.
- Mrs Joan Payne, Environmental consultant.
- Ms Linda Tamon, Environment Liaison Activity Group, Bayswater.
- Ms Doolan-Leisha Eatts, granddaughter of Yuraleen of the Bibelman Tribe, Kings Park and Mr Walter Eatts – Aboriginal/Nyungah [2] Elders.
- Mrs Marina Thompson, for her original artwork.
- Mr Pat O'Hara, former Secretary, Morley Progress Association and former City of Bayswater Councillor.
- Ms Maureen Robinson, Councillor, City of Bayswater.

These individuals helped to reawaken the cherished memories the author of this study has of the City of Bayswater's swamps and wetlands.

[2] Nyungah is the spelling preferred by Doolan-Leisha Eatts, however, equally valid alternative spellings are: Nyoongar, Nyungar, Nyoongah, Nyunga and Noongar.

Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

i. Incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education;
ii. Contain any material previously published or written by another person except where due reference is made in the text; or
iii. Contain any defamatory material.

Signature

Anna Ciuppa

Date

21st March 2003

CHAPTER 1 INTRODUCTION AND OBJECTIVES

1.1 Significance of the study

According to the Environmental Protection Authority (2001):

> *Wetlands are widely recognised as important wildlife habitats and among the most biologically productive and biologically diverse habitats on the planet. Wetlands directly and indirectly supply food to a broad range of animals including micro-organisms, invertebrates, fish, birds, mammals and reptiles. Wetlands also serve to purify water by filtering out suspended matter and utilising dissolved nitrogen and phosphorus for plant growth. They also provide flood control by storing and detaining storm water.* (p.1)

This study is concerned with the wetlands of the City of Bayswater, within the Perth Metropolitan Region. The City of Bayswater is located approximately 5 kilometres from Perth's Central Business District and represents a large catchment basin that in its pristine state would have contained numerous wetlands. Significant losses and changes to Bayswater's wetland areas have occurred as a result of the sequence of physical and social events since early European settlement. The changes brought about by the draining and filling of the Bayswater wetland system has reduced its ability to be a self-sustaining ecosystem (Bayswater Integrated Catchment Management (BICM), 1994).

The task of reconstructing the extent of Bayswater's early wetlands is particularly challenging as few written records were kept of the wetlands that once existed. It is a difficult but meaningful task that is particularly significant to senior Bayswater residents such as Len Craddock:

> Looking back on the former wetlands it is very sad how the drainage of them effected the area's natural bushland and bird population. I remember as a local Scoutmaster my Scouts used to map the plants, trees and animals to learn bush skills. Nothing remains of that natural bushland now.

It is also important to record the memories of senior Bayswater residents as the reconstruction of the past landscape may help to highlight the future consequences of present day developments.

Other broad based studies already conducted on the wetlands of the Swan Coastal Plain have confirmed that 200,000 hectares of land had been filled or drained by 1964, and that 40% of the remaining 65,000 hectares of wetlands are reclaimable with existing techniques (Riggert, 1966). Moreover, information provided by BICM (2002) approximates that between 80-90% of Bayswater's wetlands has been lost and the wetlands that remain have been drastically modified.

It is clear that the attitudes of the early European settlers towards the local environment were a major and significant reason for the loss of wetlands that they considered were not worthy of preservation. Their attitudes or indifference towards their new environment attributed to a lack of a "sense of place" [3]. Head (2000) emphasised that a sense of place can only be developed through long-term, intimate interaction between people and the natural landscape. This phenomena was also recognised by the Swan River Trust (1997):

> *The continual influence of people whose values were formed in different environments, and the inability to recognise the intrinsic value of the unfamiliar landscape, have resulted in the dramatically modified landscape of the present day Swan River system.* (p. 8)

An 1841 map (SROWA/Cons 3848, Swan 2) showing the "Right Bank of Swan River" includes information on prime Bayswater ribbon land grants which were selected (Figure 1.0) from the catchment area around the Swan River.

The interactions between the human social system and the natural ecosystem are depicted in Figure 1.1, emphasising that both systems depend on one another in a sustainable environment. This study serves to demonstrate that the results of interactions between the human social system and the natural ecosystem are not always successful as the population growth around Bayswater's wetlands resulted in the drainage and clearing of the wetland habitats. Contemporary maps of the development of the Bayswater catchment area testify to the loss of most of those wetlands (Figure 1.2).

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[3] "Sense of place", a concept discussed by Professor George Seddon in his publication entitled *Sense of Place: A Response to an Environment* (1971). According to The Dictionary of Human Geography (1994) a sense of place is 1. The character intrinsic to a PLACE itself. 2. The attachments that people themselves have to a place. In the first sense, certain places are regarded as distinctive or memorable through their unique physical characteristics or 'imagability', or through their association with significant events, real or mythical. In the second sense, in everyday life individuals and communities develop deep attachments to places through experience, memory and intention.

Note:

The land contained in ribbon grants marked X, W & V make up the main part of the Bayswater Catchment area.

Figure 1.0
Map circa 1841 – Right Bank of Swan River

Source: SROWA/Cons3848/ Swan2
Dept. of Land & Surveys

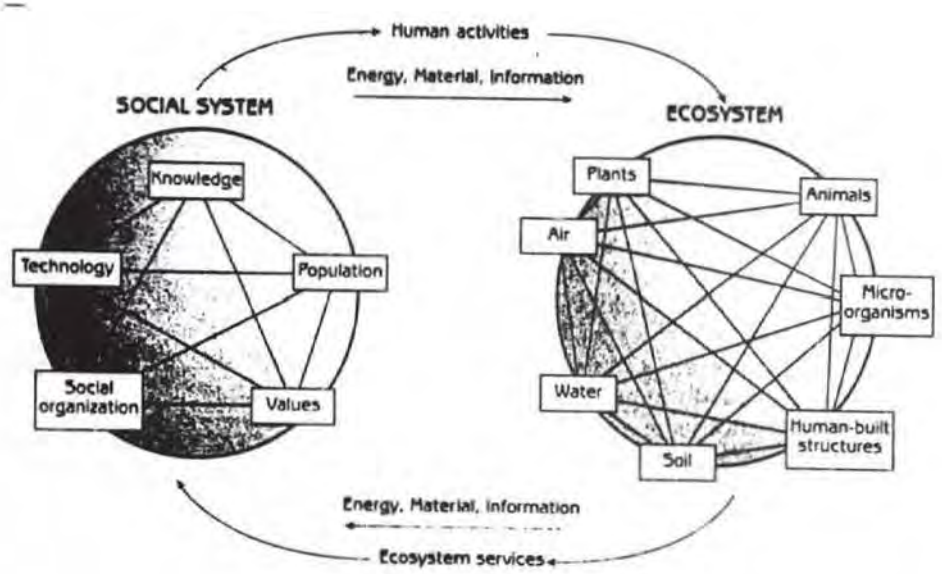

Figure 1.1: **Diagrammatic representation of the interaction between the natural ecosystem and the social system of people.**
Source: **Marten, G. G. (2001). *Human Ecology: Basic Concepts for Sustainable Development*. Earthscan Publications Ltd. London. (p. 97).**

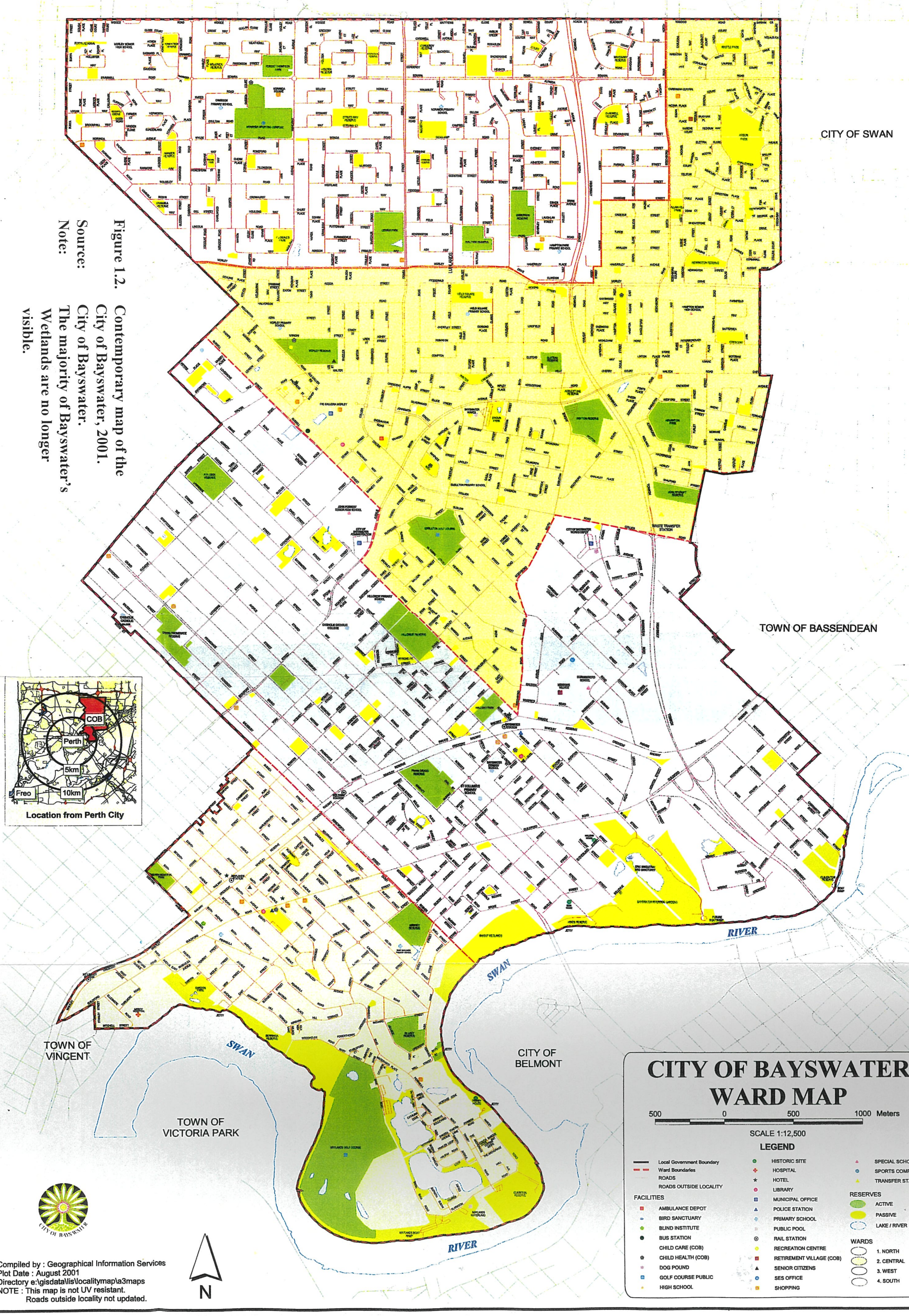

Figure 1.2. Contemporary map of the City of Bayswater, 2001.

Source: City of Bayswater.

Note: The majority of Bayswater's Wetlands are no longer visible.

The objectives of the study were:

- To outline the historical geography of Bayswater's wetlands;
- To acknowledge the significance of the Bayswater wetlands to the Aboriginal community;
- To discuss the importance of Bayswater's remaining wetlands to the whole catchment;
- To establish that there are still threats of human encroachment and modification to Bayswater's remaining wetlands, including dependent life and plant populations; and
- To provide a local perspective on the consequences of development on urban wetlands, so that past mistakes are not repeated in future planning.

With the above objectives in mind, the following theoretical framework was adopted to assist to identify and link the attitudes of the early settlers with the loss of the wetlands.

1.2 Theoretical framework

It was essential to underpin this study with a framework that explains how and why Bayswater's early residents and settlers allowed their wetlands to be drained and modified. The central notion behind this study claims that the early settlers and later residents brought with them a sense of place that was derived from their European homelands. Following is an astonished account given by an early visitor to the colony, which demonstrates early European attitudes towards local lakes and wetlands:

> *At home, a lake is known only as a sheet of water which seldom or ever is dried up, and it is naturally associated in one's mind with pleasant and picturesque scenery, but here it is quite different there is an air of desolation about these lakes which strikes the spectator at once. It is complete still life without one point of interest in it, as far as striking scenery goes, and totally different from anything I ever saw outside Australia.* (*The Swan River News*, August 11, 1847, p. 161).

In contrast to these early European attitudes, Chapter 4 of the study notes how the local Aboriginal people appreciated the country and cared for it accordingly. Even though Australia has a relatively recent settlement history, its Aboriginal heritage established a 40,000 year old sense of place (Australian Heritage Commission, 1989, p. iii Foreword).

By 1883, the early settlers in the City of Perth had drained or filled in the swamps and lakes shown in Figure 1.3 to make way for development. The primary focus of this study elucidates that the characteristics attributable to a sense of place can be linked to the loss of Bayswater's wetlands. It is hoped that by this study of the fate of Bayswater's wetlands it will be possible to identify lessons that could be learnt from these past mistakes. Newly developed areas, such as Ellen Brook, Bennet Brook, and Lilac Park adjacent to the City of Bayswater, are undergoing a similar rate of development that resulted in the gradual disappearance of the City of Bayswater's wetlands.

1.3 Review of relevant literature

According to Riggert (1966, p. 1): "The destruction of thousands of acres of wetlands has had drastic effects on the wildlife occurring on the Swan Coastal Plain". As land in the Perth metropolitan area and other urban centres on the Swan Coastal Plain was subdivided, wetlands were either filled and reclaimed for development, drained, or modified and set aside as stormwater basins (Bekle, 1982). Any wetlands that were not filled were used as public open spaces such as parks and recreation reserves.

George Seddon's (1972, 1986) work corroborates the attitudes of the early European settlers and their sense of place. Other literature (e.g. Suzuki 1997, Bekle 1979, Giblett & Webb, 1996) testifies to the value of wetlands as a continuing source of genetic stock for species diversity, valuable habitats for bird life, and essential ecosystems which sustain a multitude of other aquatic organisms, as well as plant life. It is a well known fact that the other past and present uses of wetlands include science and education, conservation, wildlife refuge, mining, irrigation, water supply, urban drainage, disposal of waste removal, recreation (picnicking, bushwalking, bird watching) and food production (Dept. of Conservation and Environment, 1977).

The main difficulty for this study was to locate literary sources that estimated the actual extent of Bayswater's wetlands. Early maps (Figure 1.0) were difficult to interpret as they featured European terminology such as mahogany (jarrah) and tea tree (paperbark) and were commissioned to demonstrate the economic aspects of land use (eg. fertile soil) rather than the areal extent of wetlands. The wide range of maps (Figure 1.4) located in State historical archives were focussed mainly on Water Board drainage programs.

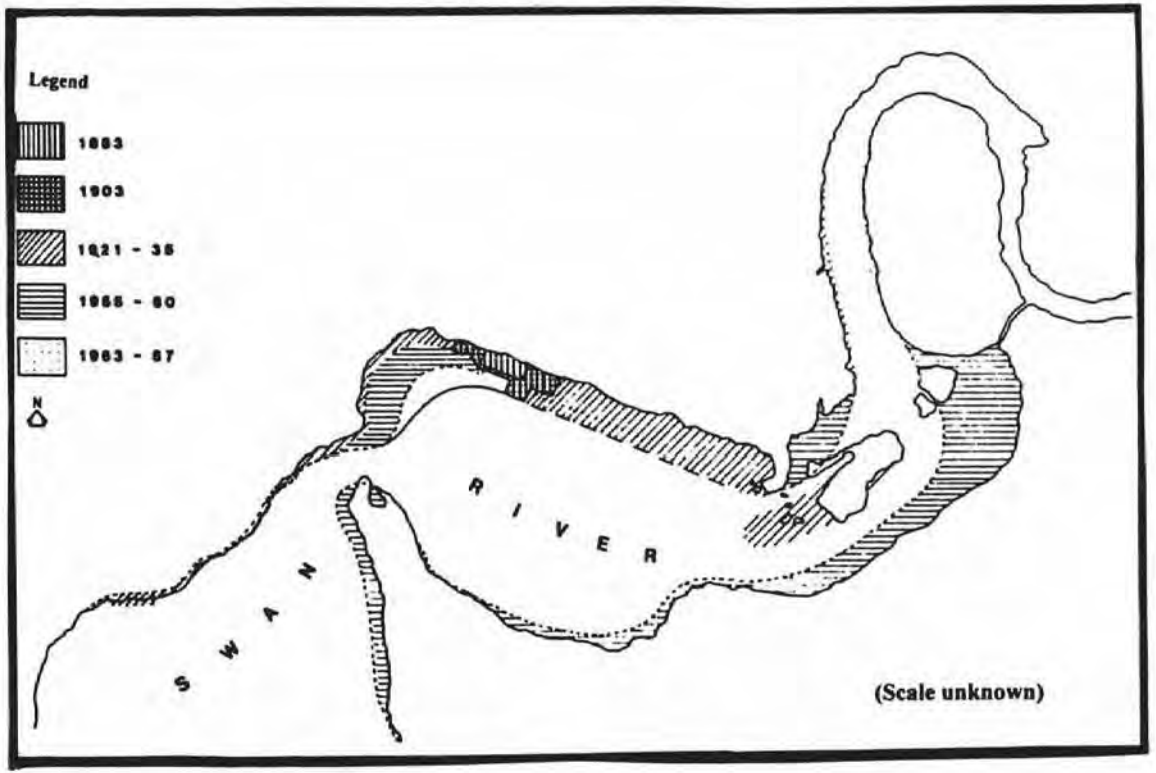

Figure 1.3: **Draining and filling of City of Perth Water from 1883 to 1967.**
Source: **Seddon, G. & Ravine, D. (1986). *A City and its Setting, Images of Perth*. Fremantle Art Centre. Fremantle. (p. 79).**

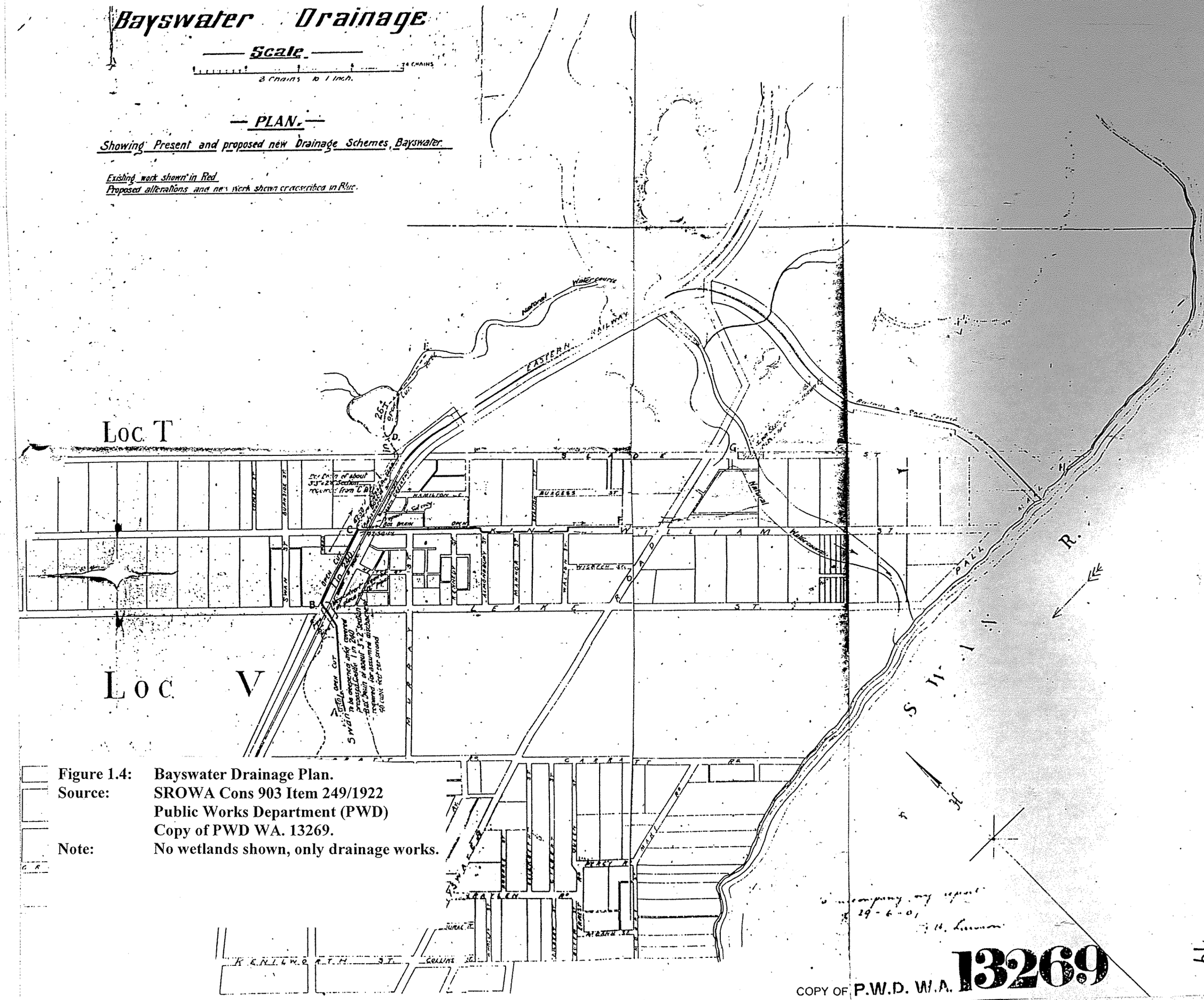

Figure 1.4: Bayswater Drainage Plan.
Source: SROWA Cons 903 Item 249/1922
Public Works Department (PWD)
Copy of PWD WA. 13269.
Note: No wetlands shown, only drainage works.

Only one map, prepared by Field Geologist A Esson in 1925, is more comprehensive and depicts the features of the physical environment of the City of Bayswater, including the wetlands (Figure 1.5). More recently, the Bayswater Integrated Catchment Steering Committee Report (1994) confirmed that most of the early wetlands were lost or developed, or converted into compensating basins as part of the modern drainage system, but neglected to provide numerical estimates.

This study is a historical geography of Bayswater's wetlands primarily concerned with the personal recollections of Bayswater's residents as they sought to describe the areal extent of wetlands that once existed. Bayswater's residents were interviewed to answer specific research questions.

1.4. Statement of the problems and research questions

The purpose of this study is to reconstruct the gradual disappearance of wetland habitats in a local area (Bayswater) as a result of development. In this reconstruction of the disappearance of the wetlands in Bayswater some insights will be provided to the following research questions:

1. What was the former extent of wetland habitat in Bayswater?
2. What is the present areal extent of wetlands?
3. Why has the area of wetland habitat been diminished, and what are the processes that caused such a disappearance of wetlands?
4. Is this phenomenon unique to Bayswater?
5. What can be learnt from past mistakes to ensure that future planning does not lead to further reductions in wetland area and quality?

The following chapter will outline the methodology.

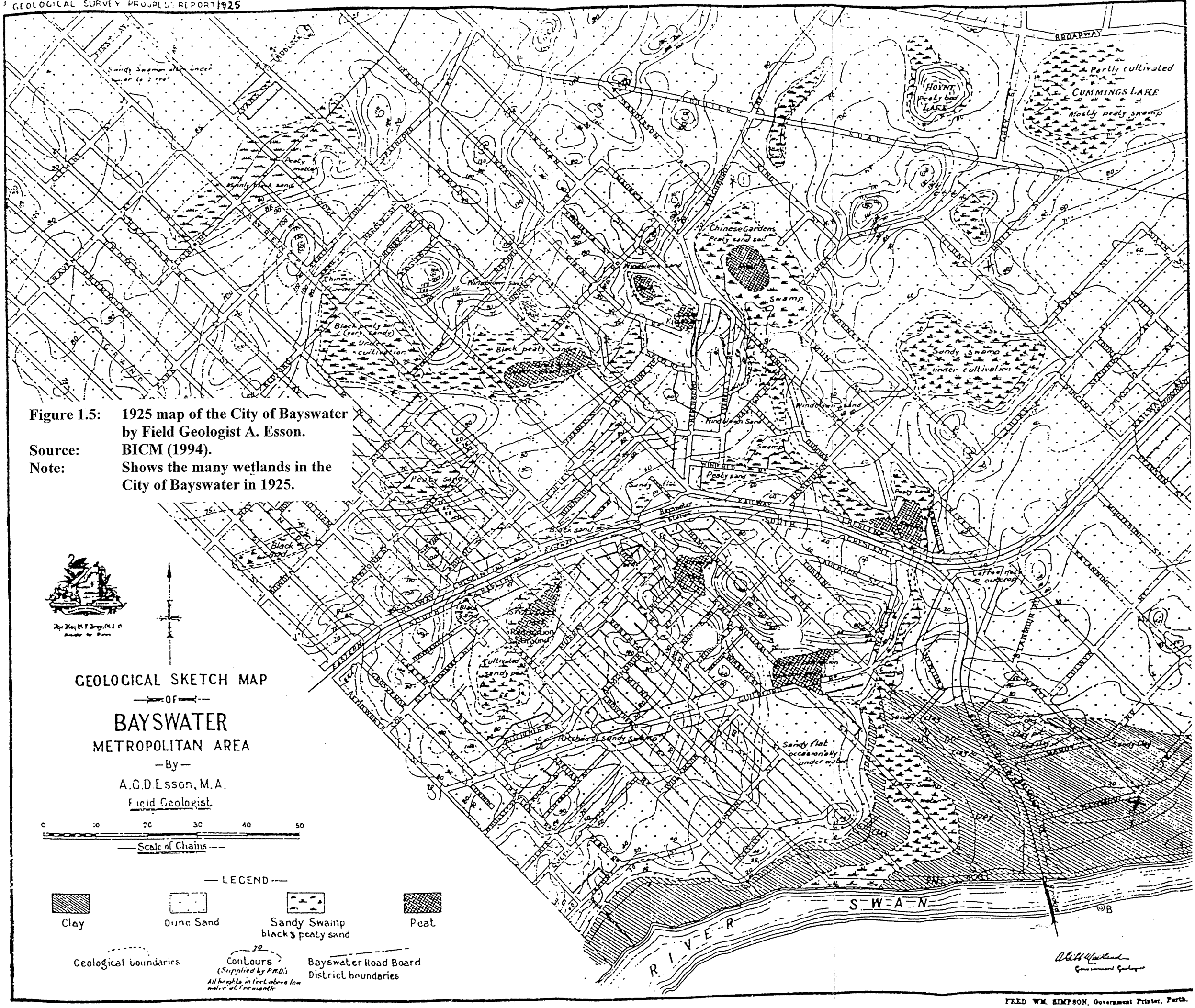

Figure 1.5: 1925 map of the City of Bayswater by Field Geologist A. Esson.
Source: BICM (1994).
Note: Shows the many wetlands in the City of Bayswater in 1925.

FRED WM. SIMPSON, Government Printer, Perth.

CHAPTER 2 METHODOLOGY AND RESEARCH TECHNIQUES

A contemporary map of the City of Bayswater is located at Figure 1.2. This map illustrates that very few wetlands survived in the City of Bayswater due to the drainage and development that took place from early settlement to the post war growth.

The task of reconstructing the extent of Bayswater's wetlands was particularly difficult, as few records were kept of the numerous wetlands that existed. For the purposes of this reconstruction the following sources were investigated:

- literary sources;
- maps, photographs, artwork;
- early newspapers; and
- oral histories.

Information was gathered at the State and Battye libraries, as well as from the Environmental Protection Authority, Water and Rivers Commission and Conservation and Land Management libraries. The Bayswater Historical Society provided historical records such as old maps, photographs and oral history sources. To examine historical information relating to areas surrounding the City of Bayswater the Midland and Guildford libraries were also visited.

Other important sources/organisations that provided information of value include the Western Australian Historical Society, Catherine May's (1997) book on the social history of Bayswater, entitled "Changes they've seen", and the Bayswater Integrated Catchment Management Group.

The Department of Land Administration provided aerial photographs of the Bayswater catchment area. The author also photographed Bayswater's remaining wetlands.

Helpful discussions with local experts, consultants and government departments were undertaken to substantiate the findings of the study (e.g. Ms Joan Payne, Environmental Consultant; Professor George Seddon, Environmental Planner and Author; Professor Phillip Jennings, Wetlands Conservation Society; and Ms Sarah Dawson, Environmental Coordinator, City of Bayswater).

However, the most informative of these data sources proved to be the oral histories conducted with Bayswater residents, including an Indigenous elder. As this study is primarily concerned with the extent of Bayswater's past wetlands, the personal recollections of local Bayswater residents were of major importance. The following sections discuss in greater detail the literary sources, maps, photographs, early newspapers, and oral histories used extensively throughout this study.

2.1 Literary Sources

Before examining literary sources for information on early settlement land use, drainage, and early environmental attitudes, it is important to remind ourselves of the importance of wetlands to the environment. There are numerous studies on wetlands (e.g. Suzuki 1997, Bekle 1979, Giblett & Webb 1996) that extol them as valuable habitats for bird life and species diversity, sustenance for living organisms, as well as plant life. Also wetlands are essential as a continuing source of genetic stock for species diversity. The Department of Conservation and Environment (1977) confirm that the past uses of wetlands include recreation, leisure and as an urban amenity.

In 1972, Professor George Seddon wrote *A Sense of Place*. In this work Seddon recognised that "a sense of place shows most clearly in the way the community feels about and uses the landscape." (p. 262). He went on to explain that if the community felt strongly about a place they patronised it and valued it accordingly. He also expressed the fact that our gardening preferences are still English and "good Western Australian bush" was dug up to plant roses (p. 262). This notion of a sense of place can also be used to explain the way in which lakes and swamps were drained to make way for a more Europeanised landscape both in the localities of Bayswater and the wider Perth region.

Seddon's publication also contained a chapter on the wetlands and their value to fish and waterbirds, and also stated that "of all the resources of the coastal plain, the rivers, estuaries, lakes and swamps have been the most effected by European occupation" (p. 226). Seddon confirms that most of Perth's lakes such as Kingsford, Irwin, Sutherland and Henderson were eventually drained to make way for the City of Perth, a phenomenon that was repeated in the City of Bayswater.

A strategy report by BICM, mentioned an 1925 account by Field Geologist A Esson in which he reported the catchment area of Bayswater was drained by numerous creeks and swamps with a natural flow towards the Swan River. These drainage channels linked with a main drainage channel emptying into a swamp lying between King William Street and Slade Street. The report goes on to say that the first drainage works were carried out prior to 1925, and in 1935 the predecessor of the Water Authority of WA took over the King William Street drainage and commenced extending it to the piped section it is today. Similar to the City of Perth, the City of Bayswater's swamps and wetlands were drained before their true value was understood.

The Department of Conservation and Environment (1977) and the Swan River Trust (1997) have conducted other studies on loss of wetlands in the Swan Coastal Plain. These studies testify that the Swan Coastal Plain lost 200,000 hectares of land which had been filled or drained by 1964 (Riggert, 1966). More recently, the Bayswater Integrated Catchment Steering Committee Report (1994) has estimated that most of the early wetlands were lost or developed, or converted into compensating basins as part of the modern drainage system.

The main difficulty in this study was to locate literary sources that estimated the actual extent of Bayswater's wetlands. Early maps (Figure 1.0) were difficult to interpret as they featured European terminology such as mahogany (jarrah) and tea tree (paperbark). Later maps (Figure 1.4) showed plans for extensive Water Board drainage programs and the economic aspects of land use, rather than focussing on the extent of Bayswater's wetlands. Only one map prepared by Field Geologist A Esson in 1925 was more comprehensive, as it depicted the features of the physical environment of the City of Bayswater (Figure 1.5).

This study is a historical geography of Bayswater's wetlands primarily concerned with the personal recollections of Bayswater's residents as they described the extent of wetlands that once existed. The following sections deal with the maps, photos, artworks, early newspapers, and oral histories used to substantiate the findings of the study.

2.2 Maps/Photographs/Artwork

MAPS

As outlined previously very few written records were kept of the early Bayswater wetlands. Several early maps depicting Bayswater's wetlands were located in the archives of State Records of WA (SROWA). These maps were difficult to interpret because they:

- Did not show the areal extent of the wetlands;
- Recorded the vegetation with European terminology for example tea tree (paperbark) and mahogany (jarrah); or
- Were drawn with schematic intentions rather than being a physical survey.

Following is a register of maps relevant to the Bayswater wetlands:

Table 1. Register of Historical maps of the Bayswater wetlands

Date	Subject	Source
1840	Bayswater's drainage patterns (Figure 1.0).	SROWA/Acc/Cons3848/ Swan2 PWD.
1901	Bayswater's drainage (Figure 1.4).	SROWA, PWD WA 13269.
1917	Drawing of Swamp A & Swamp B between May and Laurence Street, North West Bayswater (Figure 2.0).	SROWA, Acc/Cons No. 903/Folio 58, WBWA
1925	Geological sketch map overlaid with current drain route - Bayswater Metropolitan Area (Figure 2.1).	BICM Strategy 1994.
1940	Natural watercourse prior to 1940, as recalled by R Hedley (Figure 2.2).	BICM Strategy 1994.
1942	Land use in the Bayswater catchment 1942 (Figure 2.3).	BICM Strategy 1994.
1940s to 1950s	Extent of swamps in Bayswater area as recalled by Laurie Batters (Figure 2.4).	Original artwork by Mrs Marina Thompson 2003.
1964	Land use in the Bayswater catchment 1964 (Figure 2.5).	BICM Strategy1994.
1988	Land use in the Bayswater catchment 1988 (Figure 2.6).	BICM Strategy1994.
1987	Wetlands in Belmont, Bayswater & Bassendean (Figure 2.7).	Sheet 2034, Water Authority of WA.
1996	Historical associations between European people and wetlands and rivers in the City of Bayswater (Figure 2.8).	Water and Rivers Commission 1996.

Individual comments relating to their value to this study are on each map.

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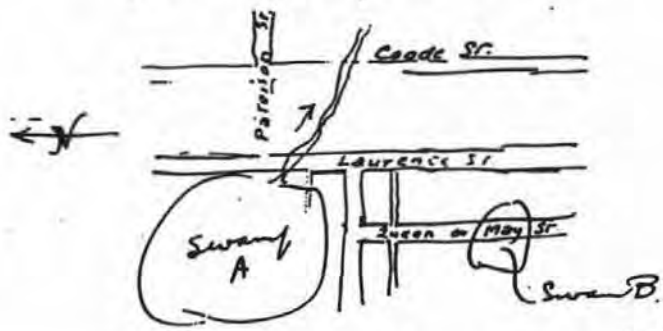
Bayswater.
Drainage.
Chrisdianson Chairman
J. C. Robinson Member of Bd.

Mr: Griffiths.

Mr: Christianson Chairman Bayswater Roads Bd. + Mr Robinson a member of the Board called to day & enquired as to the best direction for drainage for a low spot North West of Bayswater Rly. St=. between May (a Queen) St + Laurence St as shown on plan thus



Swamp A can be drained any S.W. as shown but the best way to drain B is as desired. Please get levels showing & show the elevation of Swamp B & the best direction to drain. Rough survey only required — it is not necessary to go to any material expense in the matter.

J. Cairns
acting

Figure 2.0: **Drainage of Swamp A and Swamp B.**
Source: **SROWA Acc/Cons Number 903**
Item number 249/1922/Folio 58.
Note: **Public Works Department (PWD)**
advice sought by Bayswater Road Board for
"best direction for drainage" (13/11/1917).

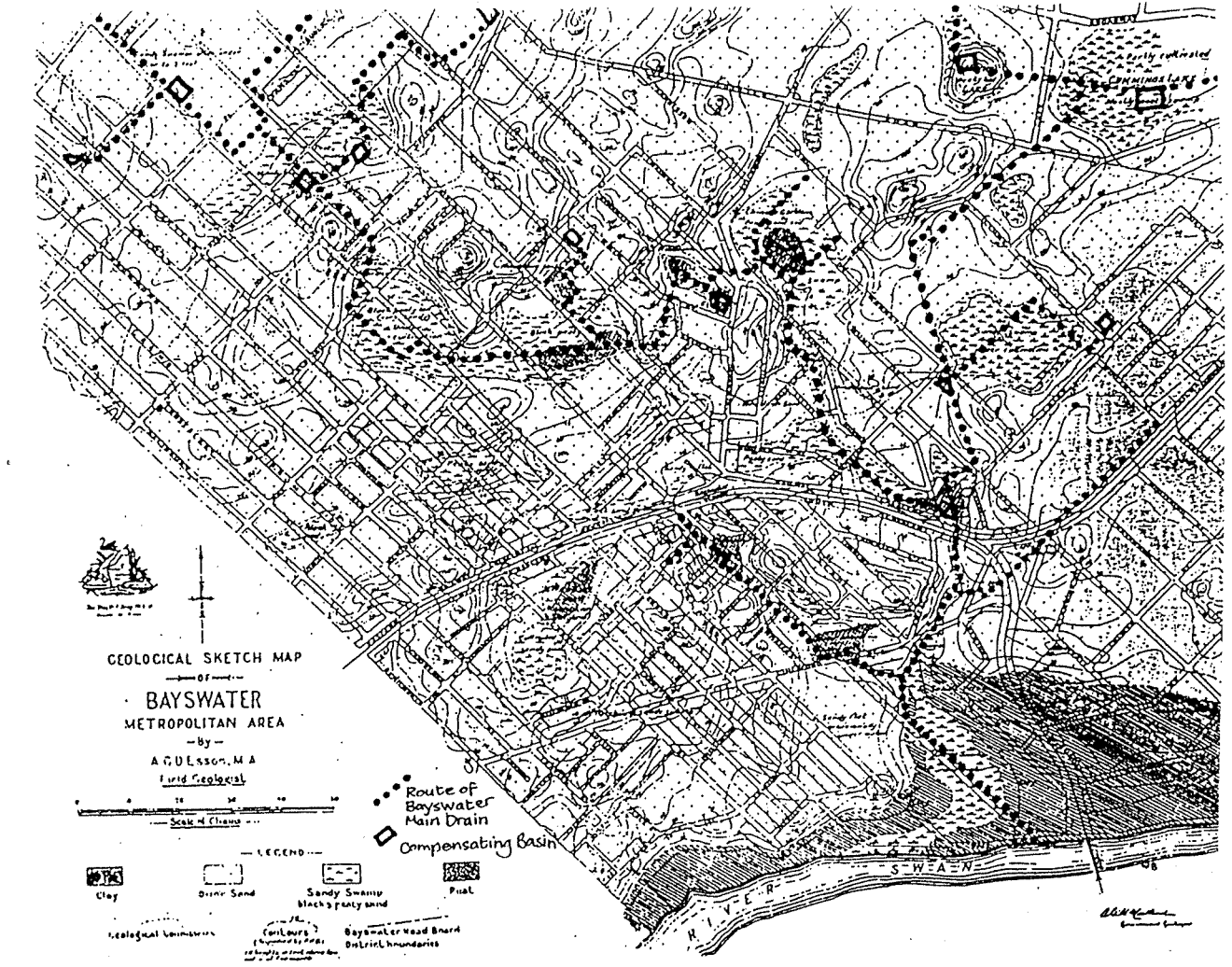


Figure 2.1: 1925 Esson sketch map overlaid with geological map of current City of Bayswater Main Drain route.
Source: BICM (1994).
Note: The Bayswater Main Drain has drained the original wetlands of the Bayswater Catchment area.

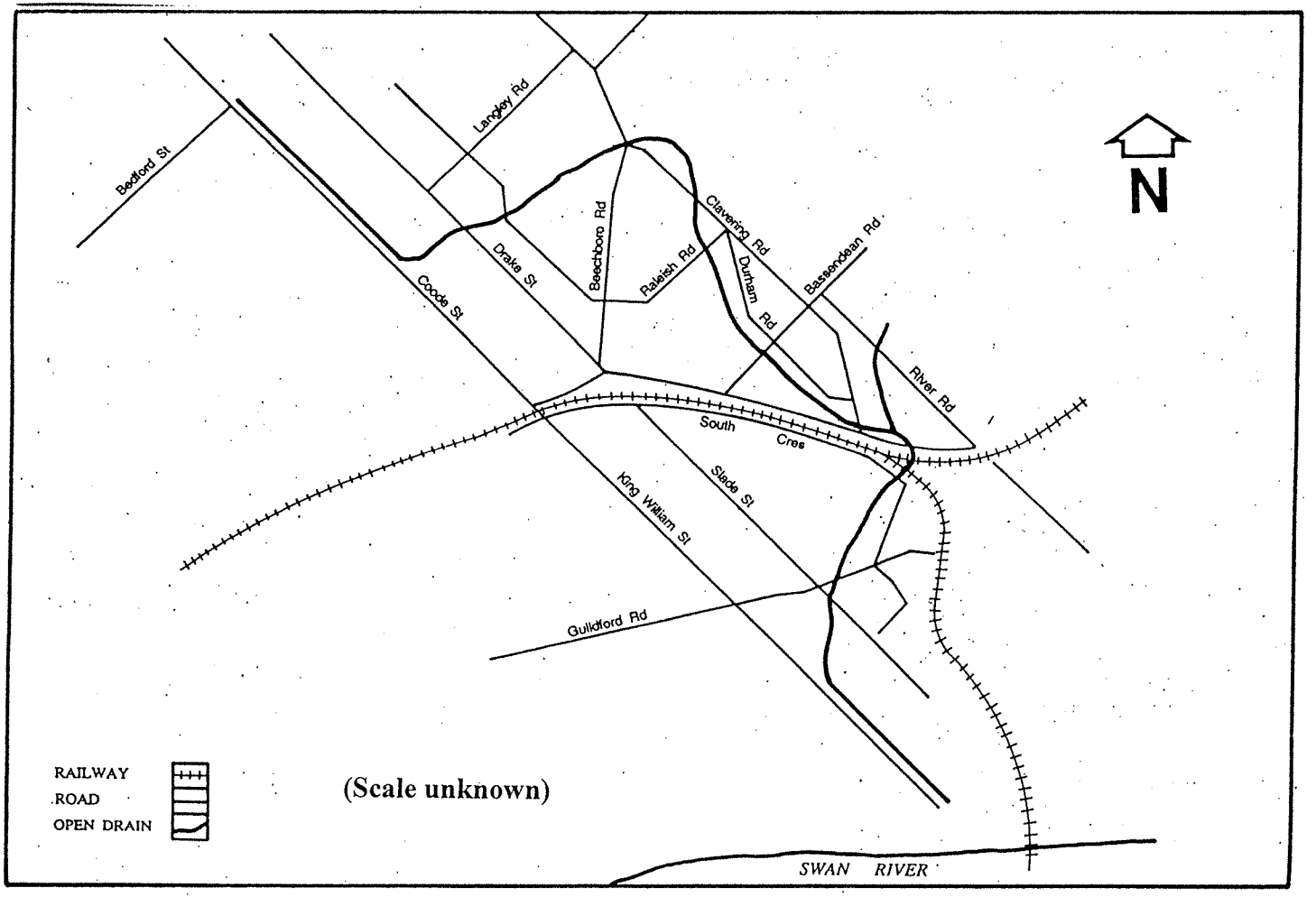


Figure 2.2: 1940 Watercourse.
Source: BICM (1994).
Note: Natural watercourse prior to 1940, as recalled by R. Hedley, showing open drainage works through main catchment area.

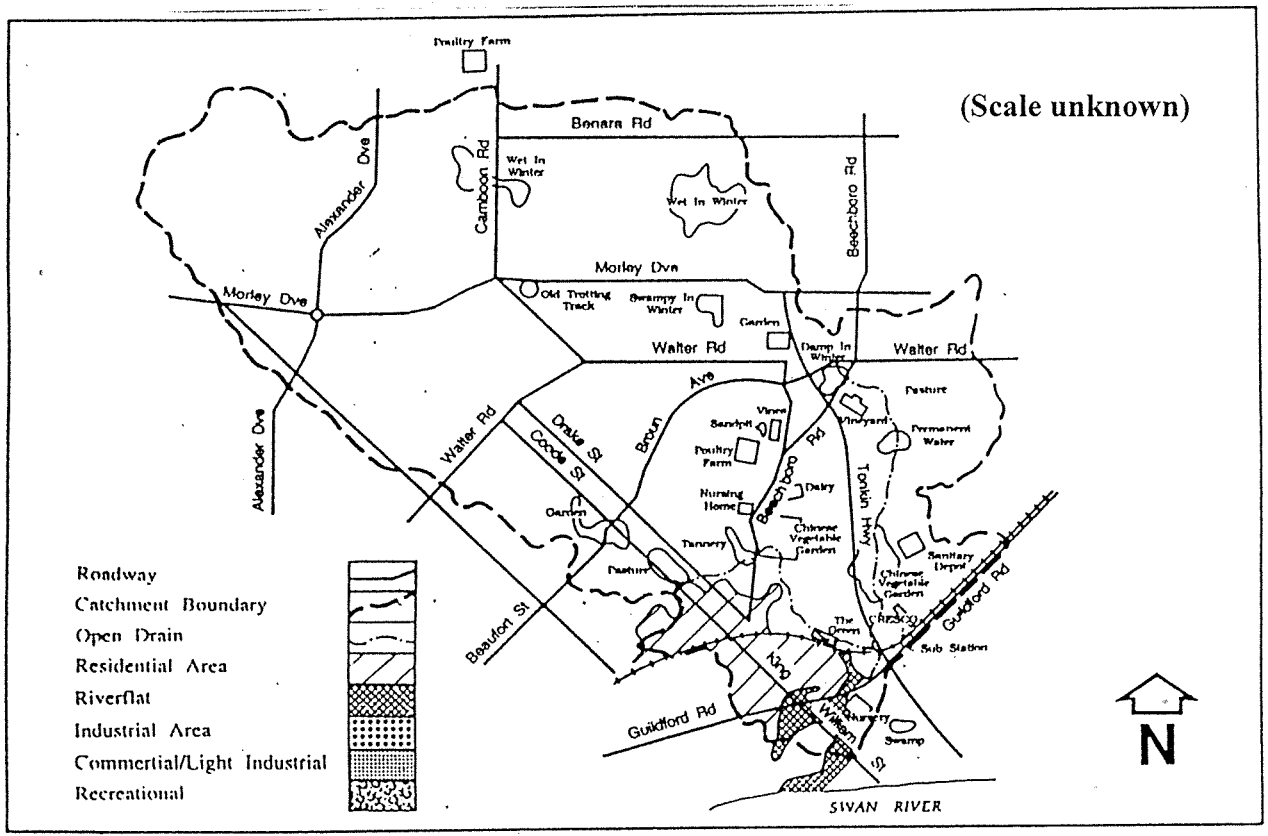


Figure 2.3: 1942 land use in the City of Bayswater catchment area, compiled by Trevor Friend.
Source: BICM (1994).
Note: Shows that some original City of Bayswater wetlands still existed in 1942.

STYLISED MAP (HISTORICAL) SHOWING POSITION OF BAYSWATER'S EARLY WETLANDS...

{Personal Recollections of Laurie Batters - 1940's}

BASSENDEAN STATION

N

Smith's Lake

Brown's Swamp

Doodson's Swamp

DAIRY

BROADWAY

COLLIER RD

KING ST

LANDFILL

CRESCO

BRADY

POUND

Brown's Swamp

GOBBA'S DAIRY

ANDREW'S DAIRY

RALEIGH ST

RAILWAY PDE

SMEED TCE

CODE ST

ROSE AVE

DRAKE ST

FOWLE RD

MAIN ST

BEECHBORO RD

BEECHBORO RD

BEECHBORO RD

BROADWAY

COLLIER RD

SANDERSON ST

MAURICE ST

LANGLEY ST

HILLCREST

TRIGG POINT

Drawn by:
M Thompson

Authorised by:
L Batters

Feb 2003

~Key~

- Roads
- Swamps
- Housing
- Bushland
- Sandpits
- Railway Line
- Chinese Market Gardens
- Subway
- Leather Track
- Blacksmith
- Aboriginal Sightings
- Underground Pipes
- H Hotel

Map is not to scale: Personal Recollections...

Figure 2.4. Extent of swamps in small section of Bayswater area.
Source: Laurie Batters (2003).
Artwork by: Mrs Marina Thompson.
Note: 8 swamps visible in this small section of Bayswater.

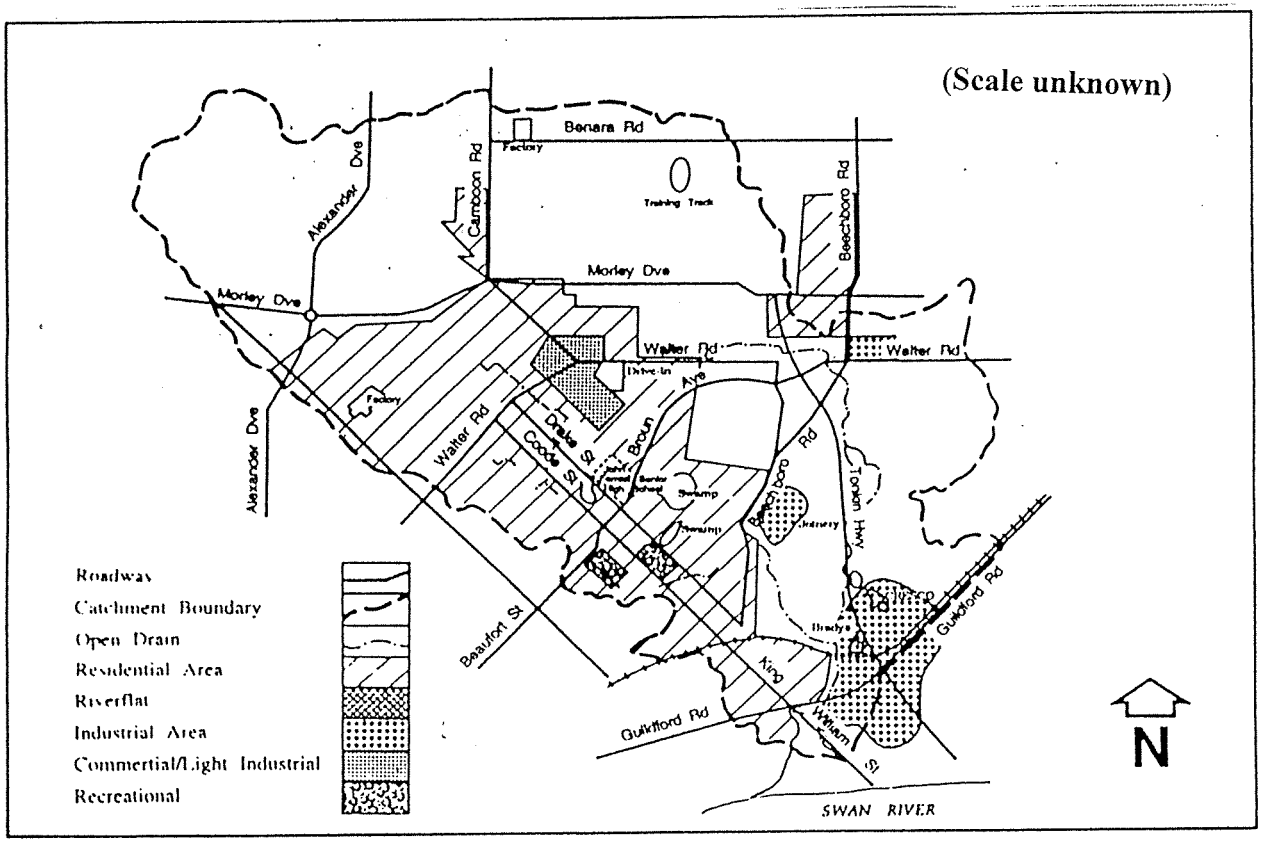


Figure 2.5: Land use in the City of Bayswater catchment area 1964.
Source: BICM (1994).
Note: Shows that residential and industrial areas are increasing and wetlands are decreasing.

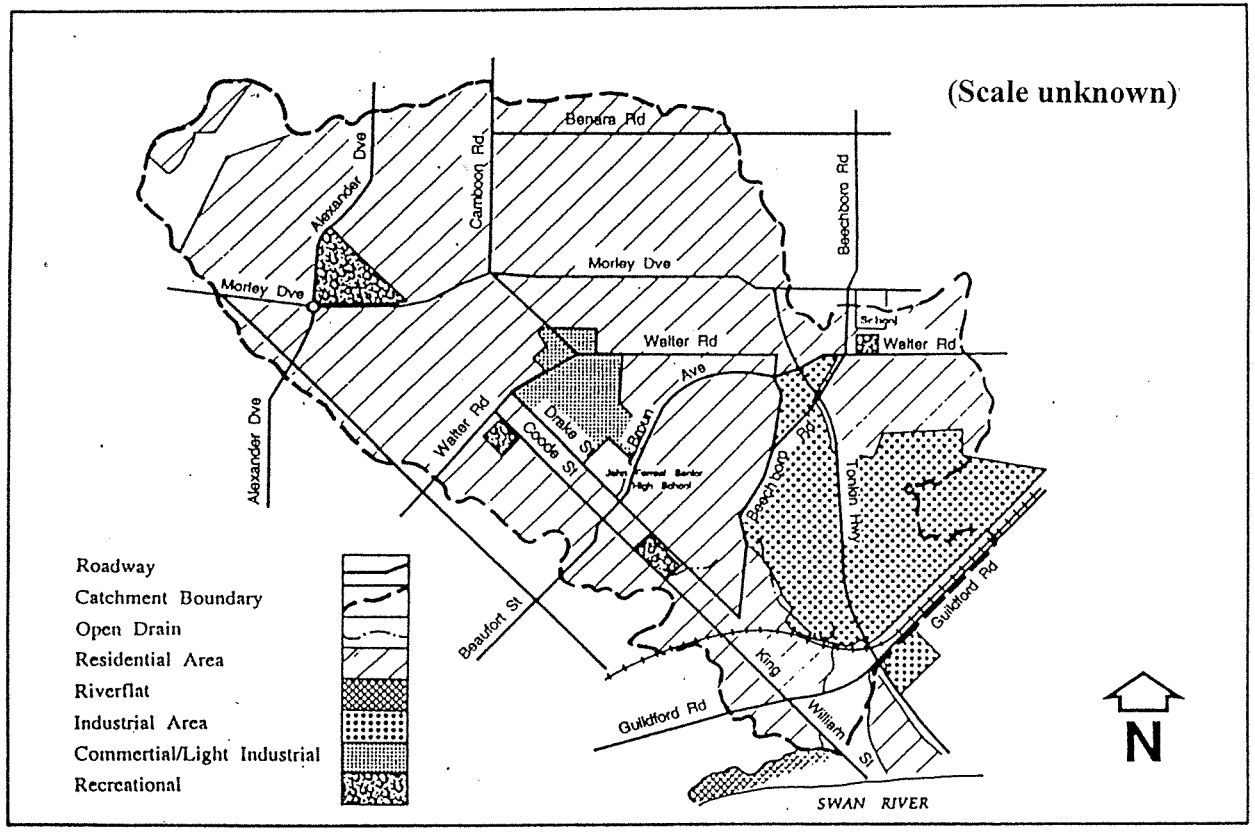


Figure 2.6: Land use in the City of Bayswater catchment area 1988.
Source: BICM (1994).
Note: The City of Bayswater has developed into a residential and industrial area, the wetlands are no longer visible.

MAP 1: WETLANDS IN BELMONT, BAYSWATER & BASSENDEAN

(MAP SHEET 2034 II SE)

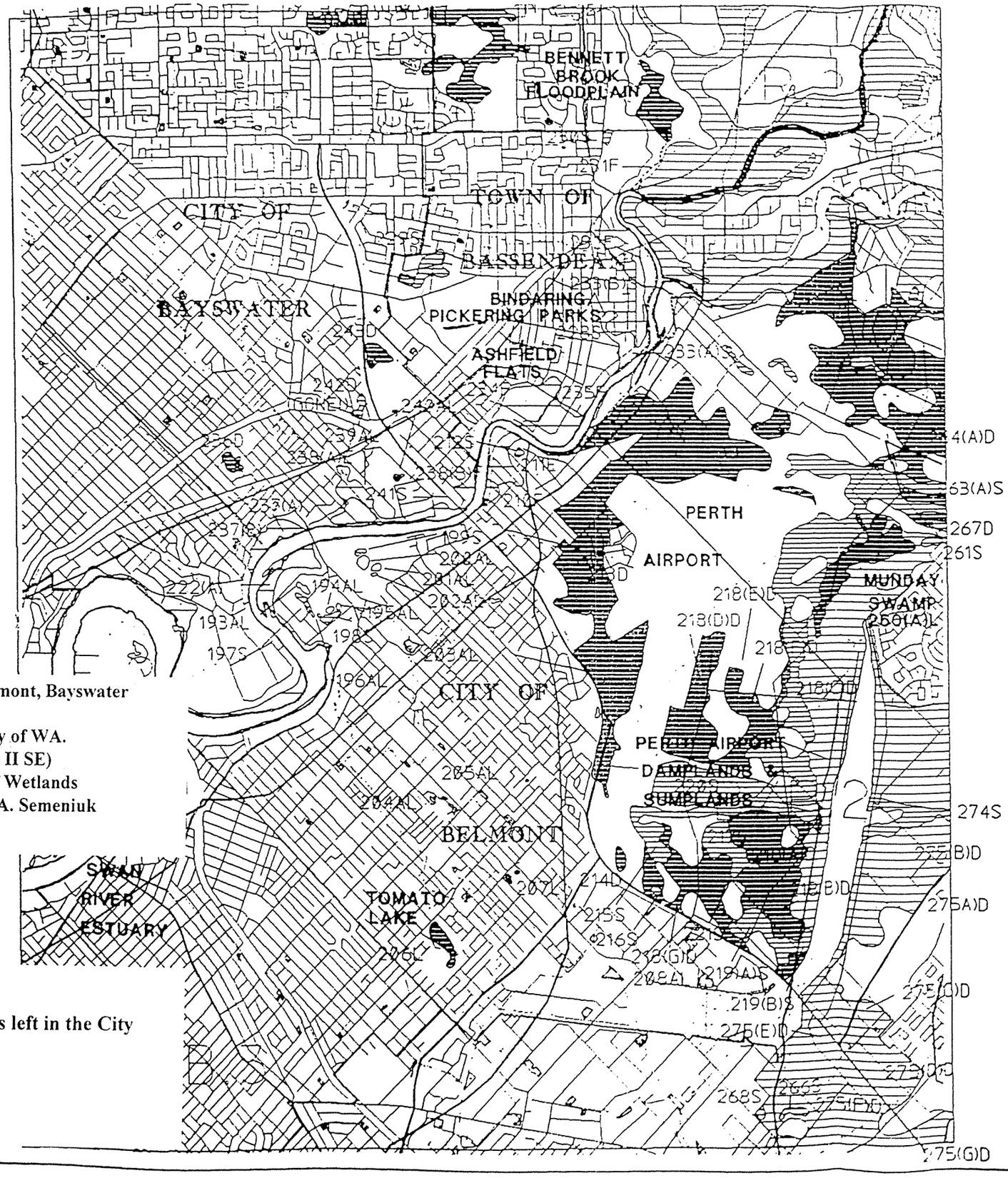


Figure 2.7 Wetlands in Belmont, Bayswater & Bassendean.

Source: Water Authority of WA. (Map Sheet 2034 II SE) Classification of Wetlands According to C.A. Semeniuk (1987a).

Note: Not many Wetlands left in the City of Bayswater.

CLASSIFICATION OF WETLANDS ACCORDING TO C.A. SEMENIUK (1987a).

LEGEND

BASINS
- Lake
- Sumpland
- Dampland
- Artificial Basin

FLATS
- Floodplain
- Palusplain

CHANNELS
- River
- Creek
- Artificial channel (including piped drains)

ESTUARY

NATURAL WETLAND GROUPING (Consanguineous Wetland Suite)

SHIRE BOUNDARY

MAJOR ROAD

MINOR ROAD

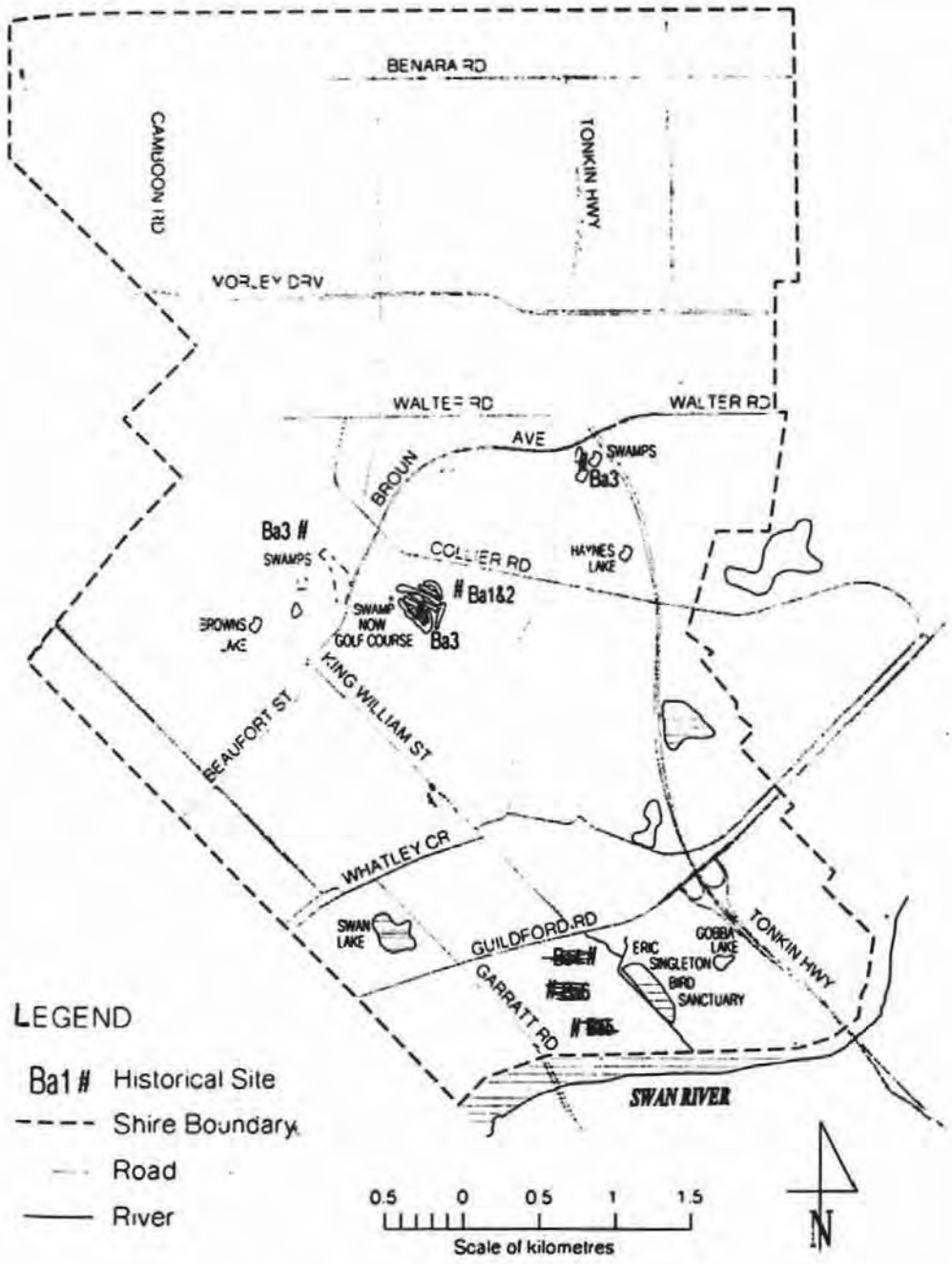
BASIN and FLAT wetlands mapped by V. & C. Semeniuk Research Group (1989-1990)

CHANNEL wetlands reclassified from the ATSAS standard by application of C.A. Semeniuk's Wetland Classification System

ROAD capture provided by ESRI AUSTRALIA.

Water Authority of Western Australia

WETLAND MAPPING SYSTEM



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE CITY OF BAYSWATER

Figure 2.8 **Historical Associations between European People and Wetlands and Rivers in the City of Bayswater.**

Source: **Adapted from Water and Rivers Commission, 1996, p. 19-20.**

Note:
Ba1 = Mr Eric Fairs property (OH. No. 1).
Ba2 = Site of a bore on Eric Fairs property in 1950.
Ba3 = Site of Morley Shopping Centre and Golf Course, former swamp sites now drained.
Ba4 = Halliday House - registered heritage site – home of Bayswater Historical Society.
Ba5 = Ellis House - registered heritage site.
Ba6 = Site where Stirling's party were followed by a group of Aboriginal people.

PHOTOGRAPHS

Many early photographs were taken of Bayswater but none of them featured the wetlands. The earliest aerial photograph of Bayswater was taken in February 1948. It is difficult to interpret, as little of the current built environment is recognisable. This early photograph is black and white and is quite unclear in patches due to its age and lack of clarity.

Other photographs provided by the Bayswater Historical Society (BHS) (a View of Bayswater 1938 - depicting winter wetlands to the left of Halliday House near Swan River) and (photograph of Eric Fairs, Terry Shrigley (cousin) and Fred Cadwaller sitting in a handmade canoe - claimed to be used "in the swamps around Beechboro Road, including Hoynes Lake") were copies of an original photograph. Unfortunately, when contacted Eric Fairs could not locate the original photograph for this study and BHS also advised they could not locate the originals.

Interviewed Bayswater residents were not able to provide photographs of the Bayswater wetlands.

A recent 2001 aerial photo of the City of Bayswater clearly shows the use of the areas where wetlands once existed and the extent of the remaining wetlands including:

- Lake Gobba (recreated wetland, previously a claypit);
- Eric Singleton Bird Sanctuary (recreated wetland);
- Baigup Wetland Reserve (modified wetland); and
- Nora Hughes Reserve (modified wetland - adjacent to John Forrest Senior High School).

Table 1.1. Register of Historical Photographs of the Bayswater wetlands

Date	Subject	Source
1948	Bayswater Road Board District (2.09).	Metro Area 6160 - taken 18 February 1948 - Dept of Land Administration - photograph black and white and unclear.
1938	View of Bayswater 1938 - depicting winter wetlands to the left of Halliday House near Swan River (Figure 2.10).	Folio 14 - Bayswater Historical Society - (unknown source).
1926/ 1927	1926/27 photograph of Fairs family in canoe - used on local swamps and wetlands including Hoynes Lake (Figure 2.11).	Eric Fairs - estimates photograph taken in 1926/27 outside of Grandpa Fairs home - photograph unclear.
2001	Aerial photograph of Bayswater, 2001 (Figure 2.12).	Central Mapping Agency, Dept. of Land Administration.
Plates 1-6	Photographs taken of: Eric Singleton Bird Sanctuary, Baigup Wetland Reserve, Nora Hughes Reserve.	Photos taken by author of several remaining Bayswater wetland sites.

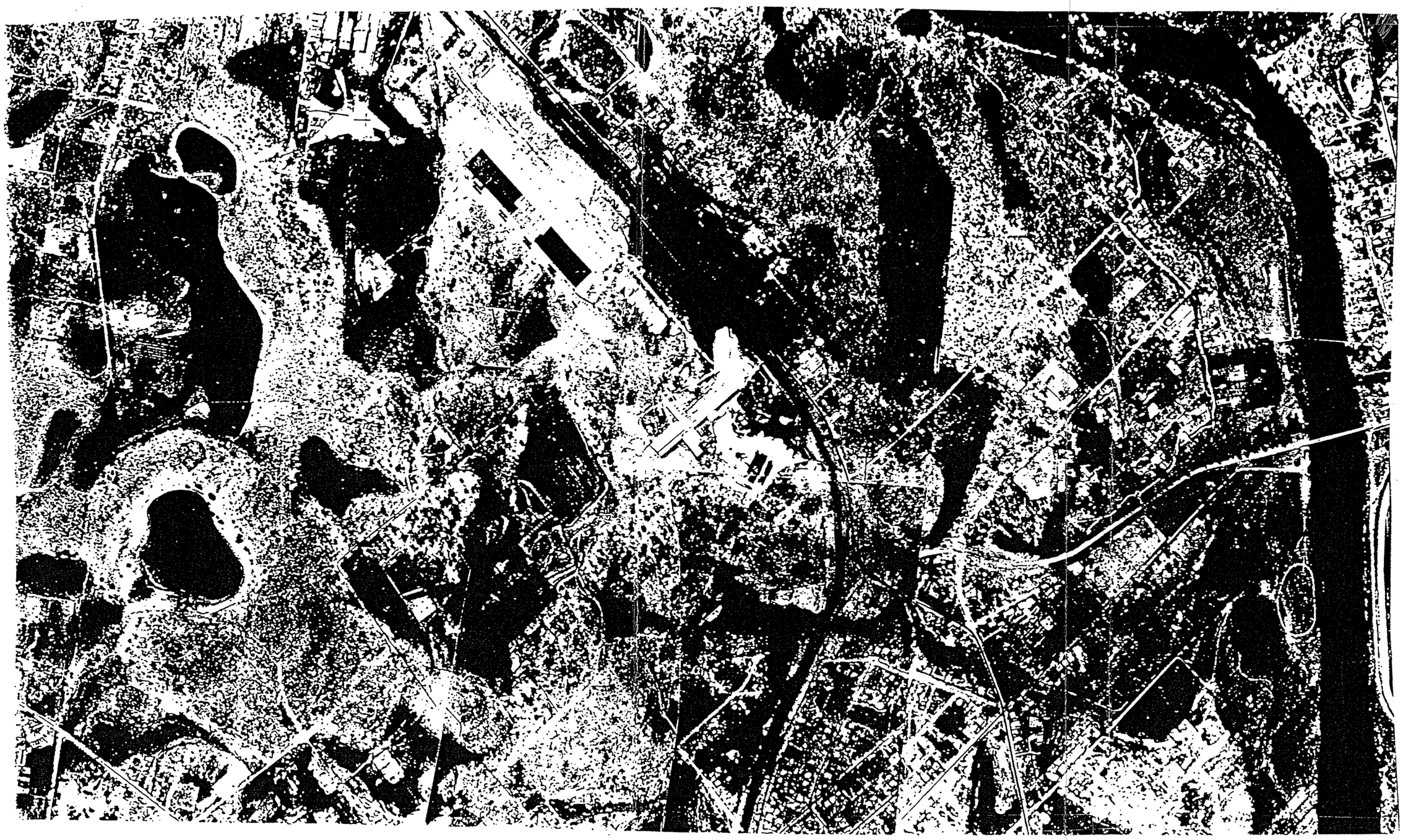
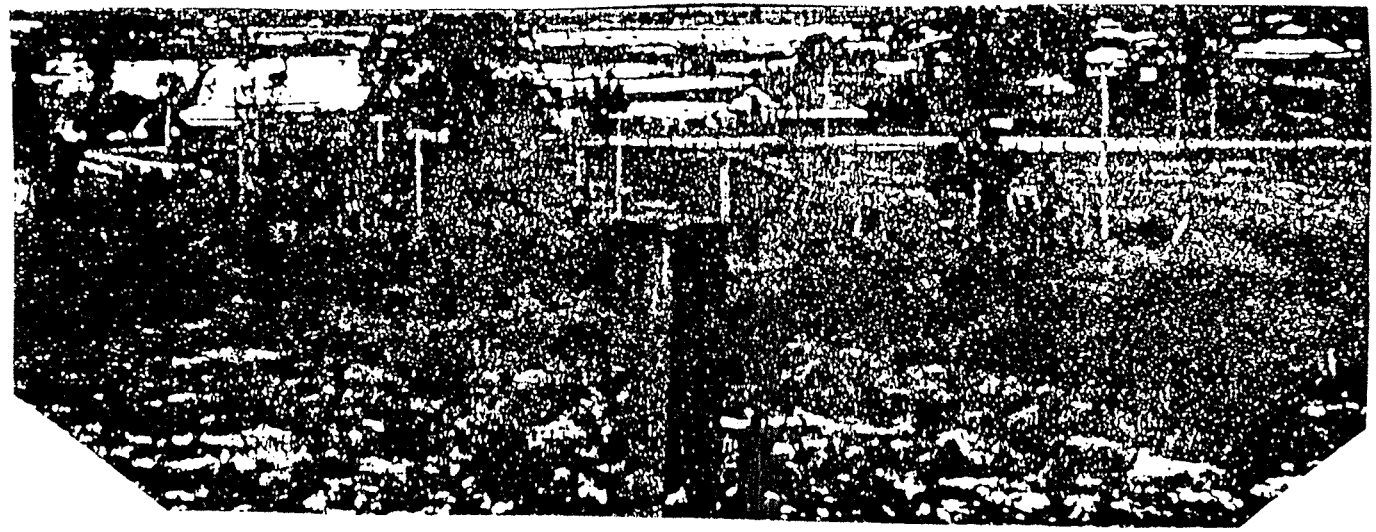


Figure 2.9 1948 Aerial photograph of the City of Bayswater.
Source: Dept. of Land Administration's Central Map Agency (Run 15, 3868-3932, Metro area 6160, 15/2/1948).
Note: This composite aerial photograph is difficult to interpret as it is composed of 8 separate photographs of varying quality and overlap. Wetland areas are still plentiful.

BAYSWATER BAPTIST CHURCH PICNIC
HENRY THOMAS HALLIDAY (CENTRE OF GROUP)



VIEW OF BAYSWATER - c 1938

HALLIDAY HOUSE (LEIGHTON)
WHITE ROOF ON RIGHT

Folio-14

Figure 2.10 View of Bayswater circa 1938 – White roof to the right of picture = Halliday House .
Source: Bayswater Historical Society (BHS). Folio 14.
Note: Original of photograph is not available. BHS advised that white areas in photograph denote flooded areas

Figure 2.11 Eric Fairs and handmade canoe, circa 1926-27.
Source: Bayswater Historical Society (BHS).
Note: Original of photograph is not available. Eric Fairs advised that this photograph was taken on his Grandfather's property which was a part of the original City of Bayswater Ribbon Land Grant "W". The canoe was used on local swamps and wetlands including Hoynes Lake.

Figure 2.12 2001 Aerial photograph of the City of Bayswater.
Source: Central Mapping Agency Dept. of Land Administration.
Note: Modern City of Bayswater now fully urbanised.

Plate 1.	**City of Bayswater Eric Singleton Bird Sanctuary - recreated Wetland.**
Note:	Open drain channel (part of Bayswater Main Drain) adjacent to Bird Sanctuary, well manicured lawn, and walkway, paperbark and sheoak trees. Drain stormwaters (during heavy rain) often threaten to leak into the lake.
Photos:	**A. Ciuppa, 20th October, 2002**

Plate 2.	**City of Bayswater Eric Singleton Bird Sanctuary - recreated Wetland.**
Note:	To the right of the picture is Zone D (The Lake) and the white objects to the back of the photograph are Eric Singleton's white (innovative) breeding boxes (open at both ends). The Sanctuary has successfully bred 120 ducklings since the early 1980s.
Photos:	**A. Ciuppa, 20th October, 2002**

Plate 3.	**Baigup Wetland Reserve.**
Note:	Boardwalk (behind sign) through natural bushland to the Swan River. Bushland on both sides of boardwalk full of rubbish and weeds. Vandalism (sign) also a problem on this site.
Photos:	**A. Ciuppa, 20th October, 2002**

Plate 4.	**Baigup Wetland Reserve.**
Note:	Water is dotted with paperbark and sedge communities. Friends of Baigup are planning to plant more sedgeland communities. Water in Reserve is stained and also contains chemical pollution. There are future plans to build more water filtering facilities to improve the quality of water draining into the Swan River.
Photos:	**A. Ciuppa, 20th October, 2002**

Plate 5.	Nora Hughes 'Wetlands Biofilter' Project.
Note:	Wetlands Biofilters are flood compensating basins restored to natural wetlands to: filter pollutants from drainage water, restore local plants and fauna habitat, beautify the landscape, create recreational value and improve land values.
Photos:	A. Ciuppa, 20th October, 2002

Plate 6.	Nora Hughes 'Wetlands Biofilter' Project.
Note:	Weeping Willow trees are dormant in winter and active in summer, unlike Australian native species, which drains the wetlands. Reserve is surrounded by lawn and housing and adjacent to the John Forrest Senior High School.
Photos:	A. Ciuppa, 20th October, 2002

ARTWORK

The only artworks located of the City of Bayswater wetlands were by Henry F Harffey and a drawing compiled by Bob Long.

Laurie Batters a long time resident of Bayswater herded cows for Gino Gobba from 1944-1945, and from 1946 to 1953, was a delivery boy for a Bayswater butcher. He provided a sketch of the wetlands he passed on his delivery rounds. Mrs Marina Thompson turned this sketch into an original artwork (not to scale). It is an excellent example of the many swamps and lakes that existed in a small section of Bayswater before the drainage schemes and development modified and eradicated them.

Table 1.2. Register of Historical Artwork relating to the Bayswater wetlands

Date	Subject	Source
1926	Use of wetlands - Chinese Market Gardens, Beechboro Road Bayswater 1926 (Figure 2.13).	From an original artwork by Henry F Harffey - Bayswater Historical Society.
1901	Bayswater early 1930s (2.14).	From an original drawing by Bob Long.
	Bayswater in late 1940s to early 1950s according to Laurie Batters (2.4).	Artwork by Ms Marina Thompson.

EARLY NEWSPAPERS

Some information on Perth's wetlands is contained in early newspapers, such as *The Swan River News*, held in the Battye Library. Local community newspapers such as the *Bayswater Community News*, available from about the 1950s were found to contain very little information on environmental issues, particularly wetlands.

Figure 2.13 Chinese Market Gardens – circa 1926 - by Henry F Harffey

Source: Bayswater Historical Society (no folio number).

Note: Testifies to use of wetlands for market gardens.

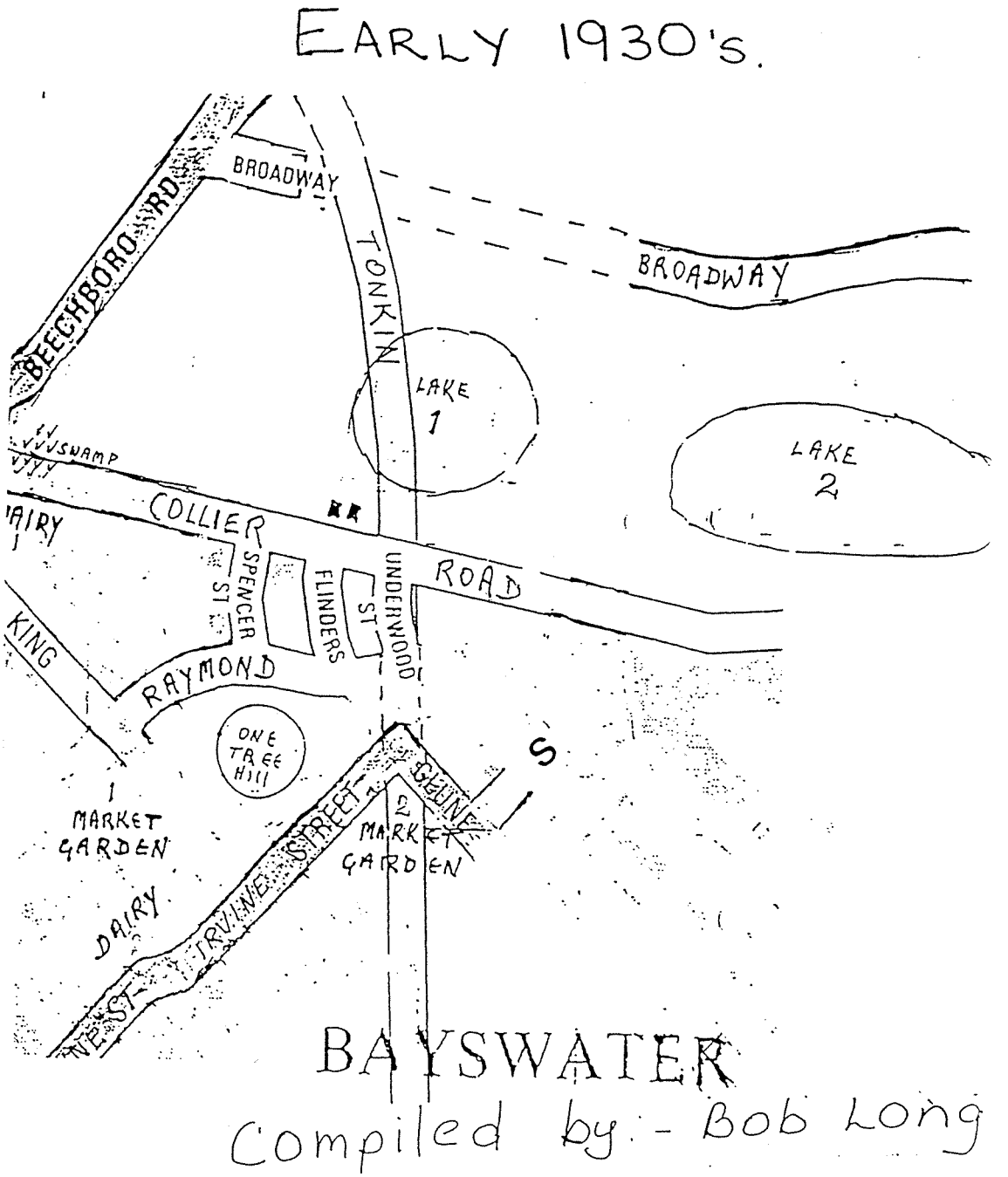


Figure 2.14 Drawing of a small section of the City of Bayswater, circa 1930, compiled by Bob Long.

Source: Bayswater Historical Society (BHS).

Note: Lake 1 is Hoyne's Lake later called Smith's Lake. Lake 2 is acknowledged by Bob Lang as the "Big Lake" and is covered with reeds and other lake vegetation.

2.3 Oral Histories

As discussed in section 2.1, the land clearance, drainage and poor land management effected Bayswater's wetlands and those of the Swan Coastal Plain. This study of the wetlands of the City of Bayswater is important as a reminder to conserve the remaining wetlands. Even though there is a book on Bayswater's history written by Catherine May (1997), *Changes they've seen*, very little research has been conducted on Bayswater's past and present wetlands.

BICM (2002) estimate the loss of Bayswater's wetlands to be as high as 90%. These losses occurred mainly during Bayswater's periods of rapid growth and development (from early settlement to the post war period) which required the catchment area to be drained.

As mapping by early surveyors did not substantiate the extent of early Bayswater wetlands (Figure 1.4, 1901 only shows drainage required) the only way to establish the extent of Bayswater's wetlands, how they were modified and eradicated and what, if any, remain today was to conduct oral histories with early residents. There have been very few oral histories recorded in the Battye Library of environmental changes in urban wetlands.

The following methods were used to recruit interviewees:

- A presentation on the Honours project on 24th March 2002, and attendance at the monthly meeting (26th May 2002) of the Bayswater Historical Society yielded the names of possible interviewees.
- An advertisement was placed in the Bayswater Historical Society's newsletter on 31 March 2002 calling for volunteer interviewees which yielded names.
- Interviewees themselves offered the names of other interested persons.
- Ms Catherine May the author of "Changes they've seen" a history of Bayswater from 1827-1997 was interviewed and provided a list of possible interviewees.
- Ms Cathi Day, Consultant, *Heritage* TODAY who conducted a Heritage Impact Assessment of *Gobba Lake* provided names of possible interviewees.
- Key officers from State and Local Governments were interviewed.
- Coordinators and Friends of Eric Singleton's Bird Sanctuary, Gobba Lake, Baigup and BICM were interviewed. These groups protect and conserve the remaining wetland areas in Bayswater.

Their oral histories were combined with literary sources throughout the study to illustrate how attitudes of the day influenced development that modified the Bayswater wetlands. The comments gleaned from the oral histories were also tabulated to:

- Confirm the flora and fauna found in past wetlands (Figures 3.3 and 3.4).
- Identify Aboriginal associations with the area.
- List the environmental attitude of past and present residents, wherever possible (Figure 2.15).

The following Bayswater residents were interviewed:

1. 16th April 2002 - Eric and Doris Fairs, Bayswater residents.
2. 25th April 2002 - Ms Roma Trainer, Bayswater resident.
3. 11th May 2002 - Mr Eric Singleton, Embleton (City of Bayswater) resident and Honorary Warden and inspiration for the City of Bayswater Eric Singleton Bird Sanctuary.
4. 15th May 2002 - Laurie and Daphne Batters, Bayswater residents.
5. 19th September 2002 - Ms Joan Sidebottom, Bayswater resident and Vice President, Conservation Council of Western Australia and Friends of Gobba Lake;
6. 8th October 2002 - Mr Pat O'Hara, Morley (City of Bayswater) resident and former Secretary to the Morley Progress Association and City of Bayswater Councillor.
7. 9th November 2002 - Mr Harry Bastow, President, Friends of Baigup Wetlands and Bayswater resident.
8. 6th February 2003 - Ms Linda Tamon, Coordinator, Environmental Liaison Activity Group, Bayswater's wetlands.
9. 12th November 2002 - Mr Len Craddock, long time Bayswater resident and Police Constable with Bayswater Police from 1956 to 1967. At his request Mr Craddock was interviewed over the phone.
10. 4th February 2003 - Ms Doolan-Leisha Eatts and Walter Eatts, Aboriginal/Nyungah Elders.

It was difficult to locate an Indigenous person who possessed "handed down" knowledge of the Bayswater wetlands within the Swan River area. To this end, Ms Eatts was referred to the author by Mr Norman Harris, Chairman, Metropolitan Nyoongar Council of Elders.

Figure 2.15 ENVIRONMENTAL ATTITUDE OF INTERVIEWEES

Past	Present	Name of Interviewee	Comments
Not aware	Environmentally aware	Eric and Doris Fairs	Unique level of knowledge of Bayswater wetlands and history of development.
Not aware	Environmentally aware	Ms Roma Trainer	Enjoyed growing up amongst the wildflowers and swamps.
Environmentally aware	Environmentally aware	Mr Eric Singleton	Single minded about birds and the Sanctuary that is named after him.
Not aware	Environmentally aware	Laurie and Daphne Batters	Unique level of knowledge of Bayswater wetlands and history of development.
Not aware	Environmentally aware	Ms Joan Sidebottom	Passionate and proud of Lake Gobba.
Not aware	Environmentally aware	Mr Pat O'Hara	Worked for the progress and development of Morley and Bayswater.
Not aware	Environmentally aware	Mr Harry Bastow	Works tirelessly as President of Friends of Baigup Wetland Reserve.
Environmentally aware	Environmentally aware	Ms Linda Tamon	Always worked for environmental issues.
Not aware	Environmentally aware	Mr Len Craddock	Sad that the wetlands are gone and with them the birds.
Environmentally aware	Environmentally aware	Mrs Doolan-Leisha Eatts	Proud of her indigenous heritage and "handed down" knowledge from her grandmother.
Not aware	Environmentally aware	The Author.	Did not return to the property she resided in during the 50s and 60s for 30 years because nothing of the natural environment remained. Fond memories of the swamps and beautiful wildflowers.

CHAPTER 3 THE STUDY AREA

3.1 Landforms and Physical setting

The City of Bayswater is situated in the Perth Metropolitan Region, which is situated on the Swan Coastal Plain. The Plain is built up of two wide belts of sediments, one accumulated by the wind 'aeolian' and the other water-laid 'alluvial'. The aeolian sediments occur in the west and the alluvial in the east (Seddon, 1972, p. 7). The resulting landforms are the Ridge Hill Shelf, Pinjarra Plain, Bassendean Dunes system, Spearwood Dune system, Quindalup Dune system as well as the coastal lakes and rivers. The Swan Coastal Plain is mainly made up of sand dunes, interspersed with trees, and was not considered a beautiful landscape by the early settlers.

> *I love all beauteous things,*
> *I seek and adore them;*
> *God hath no better praise,*
> *And man in his hasty days*
> *Is honoured for them.*
>
> *The World Around Us* by Robert Bridges (in Living Verse, 1961, p. 71)

The above verse could relate to the landforms and physical settings of Bayswater during its early settlement days, if only environmental awareness existed and the early settlers had not brought along with them their preference for European landscapes.

Perth, in Western Australia, is similar to most other Australian capital cities in that it occurs in proximity to the coast. The district of Bayswater is situated on the Swan Coastal Plain, which according to Riggert (1966, p.2) is an area:

> Approximately 31° 30' to 34° 30' S, with a mean longitude of about 116° and is bounded on to the east by the Darling Fault, on the north by Yanchep National Park and the south by the Collie-Naturaliste scarp, encompassing approximately 3,000 square miles of coastal land. Its geological development, according to McArthur and Bettenay (1960), was derived almost entirely of depositional material either from fluviatile or aeolian activity.

The City of Perth is built on the banks of the Swan River and is tuated over a reservoir of underground water. Much of the rainfall that falls in Bayswater (adjacent to Perth) would find its way through the layers of sand and rock and become part of the Gnangara Groundwater Mound. The water only rises in winter when inundated areas of land such as swamps, lakes and sumpholes become saturated. Bayswater is located on the Swan River and originally contained many small lakes, wetlands and swamps.

Before European settlement the City of Bayswater wetlands (along with areas on the Swan and Canning estuaries) were among the "most biologically productive areas on the plain" and supported prolific wildlife including waterfowl (Seddon, 1972, p. 226).

The early Bayswater landscape would have contained a variety of trees and shrubs including Swamp Banksia *Banksia littoralis*, Swamp Sheoak *Casuarina obesa*, Jarrah *Eucalyptus marginata*, Swan River Blackbutt *Eucalyptus patens*, Common Swamp Paperbark *Melaleuca raphiophylla* and Blackboy *Xanthorrhoea preissii*. The almost immediate clearing of trees in and around Bayswater's catchment area meant considerable changes to the physical environment. When the tree cover was removed in the Bayswater area the sand dunes became mobile to the extent that contour maps from the 1890s and 1920 differ (BICM, 1993, p. 19).

Soil types in the Bayswater catchment area include:

- Bassendean sands (deep grey sands);
- Guildford formation (sand over clay);
- Tamala limestone sands,
- swamp deposits (peaty sands, e.g. Bassendean swamp); and
- Alluvium (water deposited sandy silts).

(BICM, 1994, p. 24)

In 1925 the Government commissioned Esson to conduct a geological survey (Figure 1.5) to determine if peat mining was a possibility in Bayswater. However, there is no evidence to indicate that peat mining from wetland areas took place in the City of Bayswater.

However, market gardening, nurseries, dairy farming and clearing occurred during the early part of the 20th Century. Disturbance of the soils, pesticide and fertiliser use caused the soils to pollute the catchment area and the natural drainage to the Swan River. The City of Bayswater (formerly the Bayswater Road Board) started reclaiming prime Swan River lots for recreational land. It also continued draining and filling the wetlands to make way for new housing and business (see Figures 3.0 & 3.1). However, this development of the former wetlands in the City of Bayswater did not reach its maximum until after the 1950s.

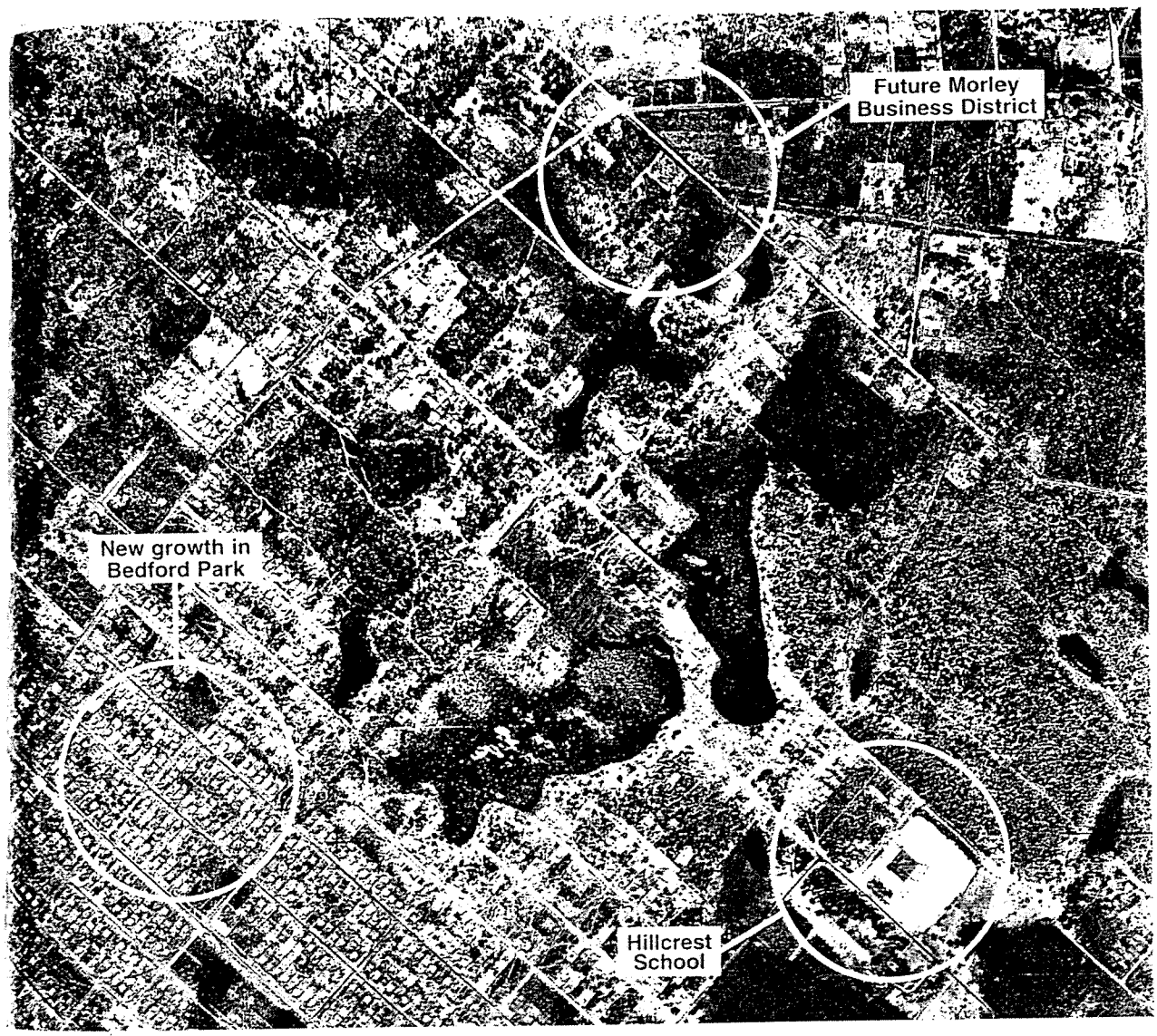


Figure 3.0 1953 Aerial photograph of Morley.
Source: May, 1997, p. 229.
Note: 1953 aerial photograph showing future Morley Business District and new growth in Bedford Par.

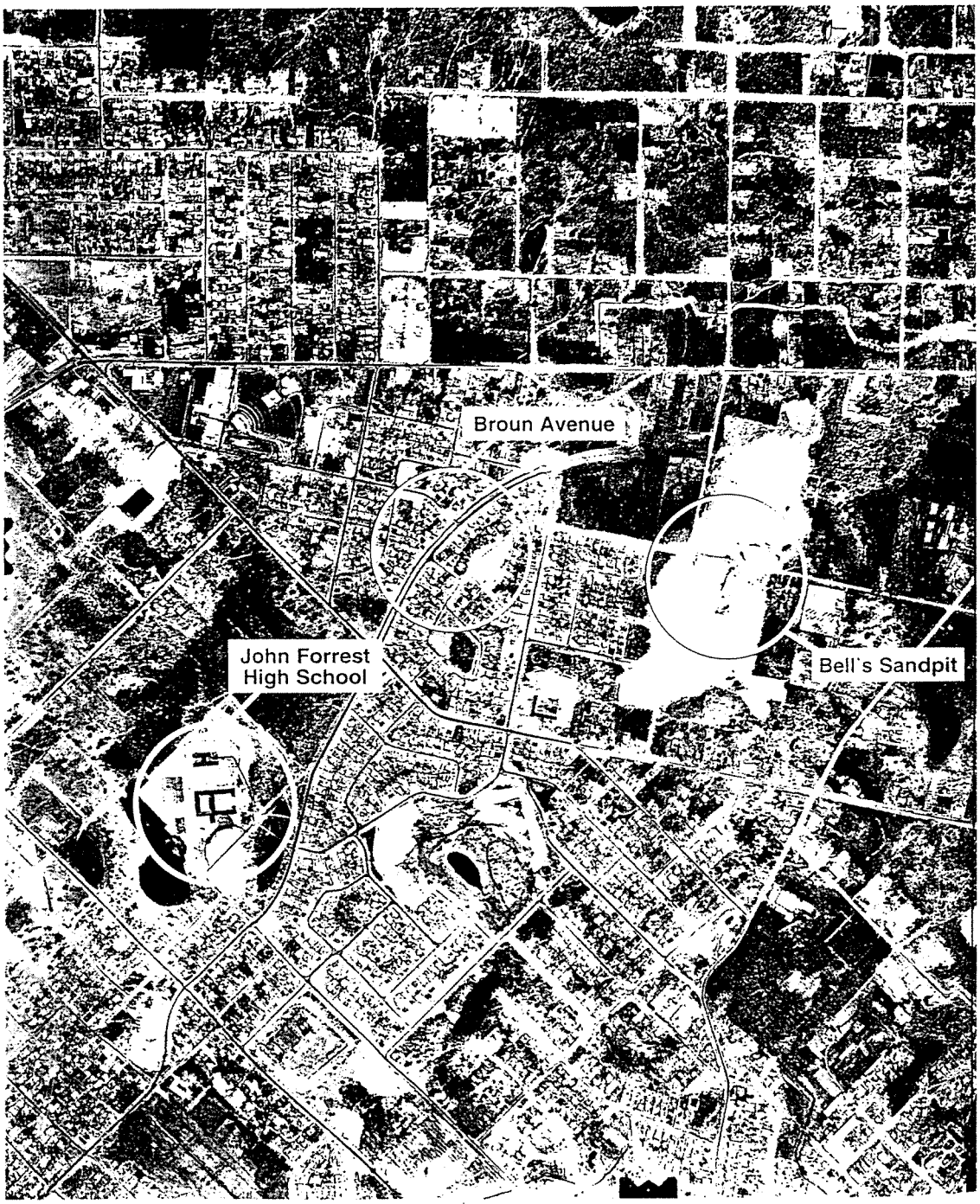


Figure 3.1 1963 Aerial photograph of Morley.
Source: May, 1997, p. 282.
Note: Photograph shows established Morley Business District (Boans Morley Shopping Centre) adjacent to Wirrina Drive-In Theatre (circular fan shaped section on the corner of Collier and Walter Roads). 1963 photograph shows considerably more residential sites and an increase in the industrial/business sector, John Forrest High School (just built) and Bell's Sandpit.

In the early 1950s and 1960s new industries and housing increased in Bayswater. In 1950 the population was only 8,376 and by 1966 it increased to 26,112 (BICM, 1994, - p. 5).

According to Eric Fairs:

> Industry and housing lowered the water table and caused the wetlands to be filled in or drained. Building materials were also hard to come by, as there was an increased demand for housing. You were put on a waiting list until the building product became available.

All the development during this period damaged the wetlands, as the extra refuse from commercial development and the need for more drainage due to the increases in septic tank use meant that more open drains had to be installed to lower the water table (May, 1997).

According to BICM (1994, p. 6), the current status of the landforms and physical environment of the City of Bayswater can be summed up as:

> *It can be seen from the brief history of the drain and its catchment described, above, that human intervention has resulted in significant degradation of what was once a pristine environment.*

Fortunately, in 1991 the Bayswater Integrated Catchment Management group (a Commonwealth Heritage Project) was established, the first in Western Australia, to put in place management plans for the restoration of the Bayswater catchment area.

3.2 Climate

The South-West Region of Western Australia experiences a Mediterranean type climate with hot dry summers and cool wet winters. Perth is one of Australia's sunniest capital cities enjoying an average of eight hours sunshine daily throughout the year. Perth's average rainfall is approximately 869 millimetres (Bureau of Meteorology, 2003) per year. Any habitat destruction or change to its hydrology impacts immensely on delicate flora and fauna and species diversity. No individual meteorological records are available for Bayswater but the area has rainfall and hydrology similar to Perth.

The Westerly winds bring rain during May to October. The movement of an anti-cyclonic belt, which extends east-west across the State, and moves north and south with the seasons, mainly governs Perth's climate. Perth's rainfall is approximately 869 millimetres per annum. Its fairly predictable because it falls mainly in winter, and the summers are usually hot and dry. This means the wetlands and lakes are mostly replenished with water during the wet months of May, June and July, as rainfall decreases appreciably into spring.

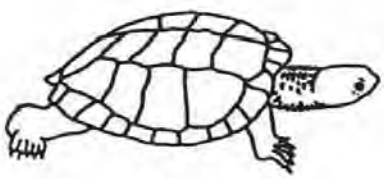
In the City of Bayswater any surface water (such as wetlands) begins to evaporate by late September (spring). According to Joan Sidebottom, the Eric Singleton Bird Sanctuary, a recreated City of Bayswater wetland:

> The water dries out in summer to quite an extent, so they pump water from the Swan River to maintain the large body of water for the waterfowl. This cause the wading and diving birds move to Lake Gobba as it is a very deep lake.

The hot dry summers were the reason that the early settlers used water from the wetlands for their crops, to water stock, and as a source of drinking water. The Bayswater catchment area flooded during winters initiating the push for drainage.

3.3. Flora and Fauna

Australia is famous for the uniqueness and strangeness of its flora and fauna. It's wildflowers are amongst the world's most unusual and diversified with Western Australia having claim to some of the more unusual species Australia-wide.



Western Swamp Tortoise
(*Pseudemydura, umbrina)*
(critically endangered)
Dept. of Conservation and Land Administration brochure,

The lovely things that I have watched unthinking,
Unknowing, day by day,
That their soft dyes had steeped my soul in colour
That will not pass away:—

Colour by Dorothea McKellar (1961, Living Verse, p. 75)

Dorothea McKellar's beautiful words evoke the colour, splendour and exceptional memories that the wildflowers of Western Australia brought to everyone of us that experienced them growing abundantly in the paddocks and fields of our youth. These wildflowers are now a magnet attracting overseas visitors to our shores during the spring months. However, in some urban wetland areas, such as Bayswater, they unfortunately cannot be found in their former abundance and splendour.

For thousands of years, the fact that Australia was isolated from the rest of the world meant that its flora and fauna were protected. The South West of Western Australia from Shark Bay to Esperance is renowned for being:

> *The oldest part of the Australian land mass and, in a broad sense, the cradle of Australian plant life. The flora has no beginning yet it is believed to have been the plant life of South America, South Africa, Antarctica, Madagascar and some Pacific Islands, but such relationship is limited, for some groups are strictly confined to south-western Australia, or perhaps linked only with antarctic South America.* (Gardner, 1997, p. 6)

Figure 3.2 indicates James Stirling's and Charles Fraser's evaluation of the Swan River (Appleyard & Manford, 1979, p. 160). These early environmental assessments gave the first settlers the wrong impression as to how and what grew, and could grow in this very new land.

The early settlers brought with them a sense of place, that valued rose gardens and deep open lakes, but not the Australian bush, wildflowers and seasonally shallow, wetlands. Water resources were always a critical element to the survival of Australia's flora and fauna. However, the early settlers did not realise the role the wetlands played in the survival of the usual flora and fauna species. As a result, some of these species are now no longer found in the Bayswater area. According to the CSRIO (cited in unpublished Water Authority of WA report number 168, October 1992, p. 20) "the most botanically diverse wetlands are those which are only subject to temporary water excess".

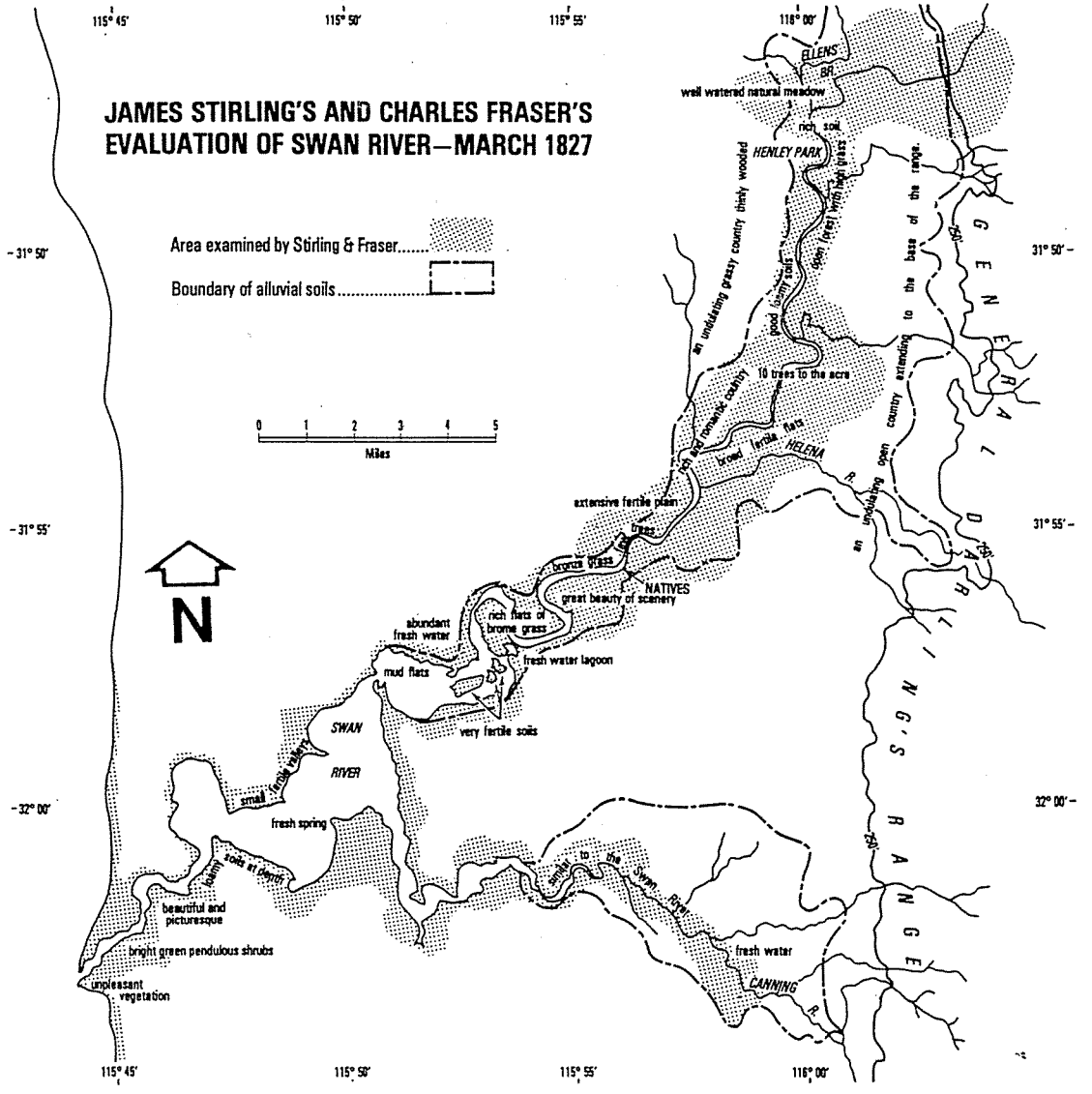


Figure 3.2 James Stirling's and Charles Fraser's evaluation of the Swan River, March 1927.
Source: Appleyard & Manford, 1979, p. 160.
Note: The Swan River land was described as lush and fertile and the extent of alluvial soils exaggerated.

The author resided in close proximity to a Bayswater swamp and vividly remembers picking spider orchids, donkey orchids and cowslip orchids near her home (corner Beechboro Road and Christianson Avenue, Bayswater).

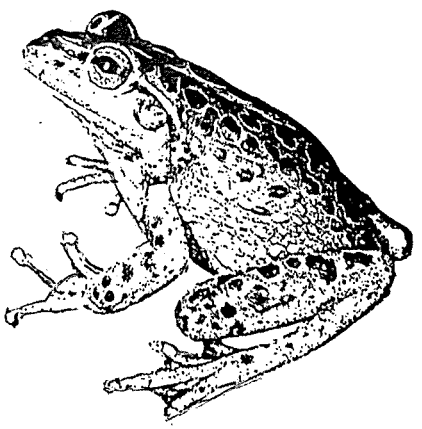
The hot dry summer experienced by the study area means that water resources, as well as trees, aided the survival of its flora and fauna. The trees were cleared as soon as the land was settled, and drainage of the wetlands commenced as early as the early 1900s. The drain was updated during 1935, extended during the 30s to 40s, and became polluted in the 50s and 60s (BICM, 1994, p. 5-6). From the 60s to the present more drainage occurred. According to BICM (1993, p. 19) until:

> "None of the original waterway system now remains in a natural state in the catchment area".

Interviewed Bayswater residents also remembered sighting many flora (Figure 3.3) and fauna (Figure 3.4) species. Unfortunately, as these City of Bayswater wetlands were never studied, or charted, it was difficult to determine how many of these species were effected.

The Fauna

Scientists rate the presence of frogs as an indicator of the environmental health of a particular area (WA Museum, 2003).



Spotted-thigh Frog
(*Litoria cyclorhyncha*)

> There, when the trumpeting frog boomed forth in the night,
> *Gobbagumbalin!* He said, *Gobbagumbalin!*
> And even as Aristophanes heard, in the far-off deeps
> Of his Grecian marshes, the frogs, so we in that word
> *'Gobbagumbälin!* • • • *Gobbagumbalin!* • • •'
> Hearken, and measure the sound.
>
> *Australia* by Mary Gilmore 1961, Living Verse, p. 101.

Figure 3.3 FLORA SIGHTED IN BAYSWATER WETLANDS AREA

Common name	Botanical name	Source of information	Location
Bacon-and-eggs	*Oxylobium capitatum*	Ms Roma Trainer	Collier Road
Blue Hovea	*Trisperma*	The author	Beechboro Road
Blue Leschenaultia	*Leschenaultia biloba*	The author	Beechboro Road
Blue Tinsel Lily, Star of Bethlehem	*Calectasia*	Ms Roma Trainer and the author	Collier & Beechboro Roads
Catspaw	*Anigozaanthos humilis*	Ms Roma Trainer and the author	Collier & Beechboro Roads
Cowslip Orchid	*Caladenia flava*	Ms Roma Trainer and the author	Collier & Beechboro Roads
Christmas Tree	*Nuytsia floribunda*	Ms Roma Trainer and the author	Collier & Beechboro Roads
Donkey Orchid (common)	*Diurus longifola*	The author	Beechboro Road
Fringed Lily	*Thysanotus multiflorus*	The author	Beechboro Road
Holly leaved Hovea	*Hovea chorizemifolia*	The author	Beechboro Road
Kangaroo Paw	*Anigozanthos manglesii*	Ms Roma Trainer and the author	Collier & Beechboro Roads
Pink Fairy Orchid	*Caladenia latifolia*	The author	Beechboro Road
Purple Enamelled Orchid	*Elythranthera brunonis*	Ms Roma Trainer and the author	Collier & Beechboro Roads
White Spider Orchid (common)	*Caladenia patersonii*	Ms Roma Trainer and the author	Collier & Beechboro Roads
Yellow flower bush	*Hibbertia hypericoides*	The author	Beechboro Road

Figure 3.4 FAUNA SIGHTED IN BAYSWATER WETLANDS AREA

Common name	*Scientific name*	Source of information	Location
Western Grey Kangaroo	*Macropus fuliginosus*	Len Craddock	Araluen Street, Benara Road
European Fox	*Vulpes vulpes*	Joan Sidebottom, the author, Mr Laurie Batters, Len Craddock	Vicinity of Swan River, Beechboro Road, Collier Road, Araluen Street
Dabchicks (Little Grebe)	*Podiceps novaehollandie*	Joan Sidebottom, the author, Mr Laurie Batters, Len Craddock	Vicinity of Swan River, Beechboro Road, Collier Road, Araluen Street
Blue-billed Duck White-eyed Duck Grey Teal Duck	*Oxyura australis* *Athyya australis* *Anas gibberifrons*	Joan Sidebottom, the author, Mr Laurie Batters, Len Craddock	Vicinity of Swan River, Beechboro Road, Collier Road, Araluen Street
Gilgies	*Cherax quinquecarinatus*	Joan Sidebottom, the author, Mr Laurie Batters, Len Craddock	Vicinity of Swan River, Beechboro Road, Collier Road, Araluen Street
Sacred Kingfisher	*Halycyon sancta*	Len Craddock	Araluen Street
Spotted-thigh Frog	*Litoria cyclorhyncha*	Joan Sidebottom, the author, Mr Laurie Batters, Len Craddock	Vicinity of Swan River, Beechboro Road, Collier Road, Araluen Street

Prior to the European invasion and settlement, the Aboriginal people respected the trumpeting frogs, as well as they did the birds, ducks and other wildlife of the wetlands. They only harvested these valuable food sources when necessary and trekked across the wetlands for seasonal food sources and left the environment intact.

The Public Works Department of WA (presently the Water Authority of Western Australia) records from State Records of WA (Appendices 2 & 3) clearly demonstrate that in the early 1920s and 1930s numerous complaints were received by the Bayswater Road Board from angry ratepayers about the winter flooding of their lands. However, the draining of Bayswater's wetlands did not reach full momentum until after the Second World War.

Still in the 1940s, 50s and 60s Bayswater residents recalled sighting frogs, ducks, turtles, dabchicks and other birds in the Bayswater wetlands. They also recalled freshwater turtles, prawns and gilgies. However, residents during this period lobbied the Bayswater Road Board into establishing drainage schemes so that their lands adjacent to, and dissected by, the wetlands were completely drained.

Residents were charged "storm water rates" by the Road Board so that these monies could be used to pay for these drainage works.

Recently, the City of Bayswater have commenced re-creating wetlands, and a bird sanctuary was built in 1977 on the site of a proposed rubbish dump. According its Honorary Warden Eric Singleton:

> A bore was installed and trees planted. In the early 1980s nest boxes were put in. Thirty boxes were installed and twenty of these were in use. One hundred and fifty eggs were laid, one hundred and twenty ducklings hatched. Pink-eared Ducks, Blue-billed Ducks, Hardheads, Grey Teal Ducks and Black Ducks with the occasional Coot being bred. The Bird Sanctuary has been established for over thirty years and to date over one hundred species of birds have been recorded.

Undrained wetlands allow the water table to remain accessible, enabling this water to feed plants, and in turn the bird population feed on the plants eating and dropping their seeds near and far.

The Flora

As confirmed in (e.g. Bekle, 1981, Seddon, 1972 and Giblett and Webb, 1996) the early settlers to Australia did not appreciate the uniqueness of the flora and fauna. While settlement expanded some species quickly disappeared from the local scene. The early settlers were driven by economic necessity and were more preoccupied with finding suitable farming land than focussing on environmental issues. This situation is not unique to the City of Bayswater.

According to Giblett and Webb (1996, p. 1):

> *So strange were the shallow, often seasonal wetlands of this new land that explorers did not mark them on their maps nor even note the existence of the lakes and swamps in their descriptions of the country.*

The wetlands contained and were surrounded by plant communities, such as freshwater woodlands/shrublands, sedgelands and samphire shrublands. Peat swamp and grassland communities also occur but are not common. At least 2000 wetland plant species occur in Western Australia and endemism is relatively high, especially in ephemeral wetlands of the South-West. (Directory of Wetlands, 1992, p. 10-1)

Early European settlers believed that the farming technology they brought with them would produce crops and enable them to use the land more efficiently. This meant that they almost removed all of the trees and amazing wildflowers around the areas in which they settled. Livestock, such as dairy cattle, pigs and horses, also caused significant disturbance to native plant species.

Due to the fact that Bayswater's unique flora was not recorded in great detail by early historians or residents, oral histories have been used to verify the extent of some of the unusual wildflowers before the wetlands disappeared. From the 1940s to the 1960s wildflowers grew in abundance and splendour around Bayswater 's wetlands (Figure 3.3). The areas where these flowers used to grow have now been cleared for housing and the Bayswater industrial estate.

According to Roma Trainer:

> We used to pick wildflowers such as enamel orchids, spider orchids, cowslip orchids, egg n bacon, stars of bethlehem, catpaws and Kangaroos in Collier Road.

Wildflowers are not found in abundance in Bayswater now except in a few pockets of undeveloped land or in reserves. However, there is hope for the future as a recent discovery meant there are some species of flora being rescued from the brink of extinction.

According to *The West Australian* newspaper:

> *The Department of Conservation and Land Management and the Botanic Gardens and Parks Authority are both working to save the blue babe-in-the-cradle orchid. A small population of this endangered native orchid exists at the Beechboro Orchid Park Reserve, where it was discovered in 1987....A drainage system with a gate has been installed to regulate water flows into and out of the wetlands, trees have been planted around the orchid habitat and groundwater levels are monitored regularly.* (5 January 2001, p. 4 - Appendix 4)

As the City of Bayswater in partnership with BICM, is recreating and conserving remaining wetlands the prognosis for flora is hopeful. With the removal of exotic species, native species are being replanted in and around wetlands. Unfortunately, as funding is scarce the community groups are doing most of the weeding. According to Joan Sidebottom, President, Friends of Gobba Lake:

> The group work extremely hard to remove weeds in and around Gobba Lake as the amount of funding received from the City of Bayswater does not cover the amount of work required to clean up the Lake.

The built environment of the City of Bayswater has changed significantly since early settlement, which has caused the eradication of most of its wetlands.

3.4. Built Environment

The built environment of a new land becomes a changed landscape once it has been colonised. Settlers to the City of Bayswater had not experienced this type of natural landscape before and instantaneously cleared most of the trees. Crops were planted, housing was constructed and the wetlands, closest to the Swan River, were quickly drained and filled before their purpose and value was understood.

According to BICM (1994, p. 1):

> *The landscape of the catchment area prior to settlement around Bayswater, consisted of sand dunes, which were covered by a heavy growth of trees. The early settlers cut out much of this for timber, exposing the dunes to sand movement driven by prevailing winds.*

When this vegetation was removed and the land drained of water, the network of streams and swamps disappeared. According to Eric Fairs the demand for building products could not keep up, in 1948/49 when he bought his property for £27.10 (for 1 acre). He had to wait many months for building materials as the post war population surge meant asbestos sheeting, timber and plumbing supplies were scarce:

> Everyone was put on a waiting list, as there were no building products. Most of the buildings erected were home made.

Len Craddock also remembers that:

> War services people could not get supplies to build their houses because of the amount of State Housing Commission houses being built in the City of Bayswater.

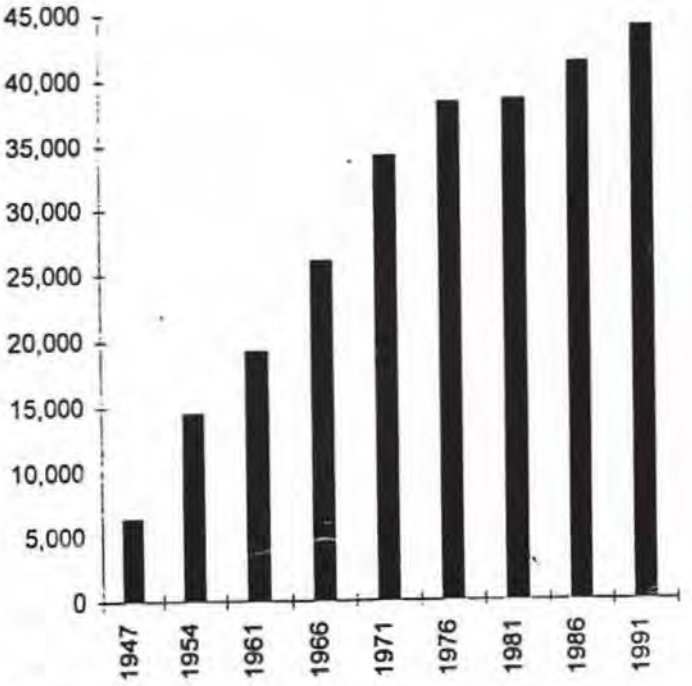
Public housing could not keep up with the demand for accommodation, temporary self-built structures were common in the City of Bayswater. Some residents lived in these structures until they could afford to build better homes. The author remembers her father building the family home with the help of other local residents and also being encouraged by the City of Bayswater to clear as much of his property as possible. This included the trees and amazing wildflowers.

When Eric Fairs cleared his block so that he could build, he noticed:

> A crude humpy made out of Woolly Bushes, which he presumed was an Aboriginal dwelling.

The Census of 1947 recorded a population of 6,453 in Bayswater, which increased to 14,555 in 1954 and approximately 20,000 by 1961 (Table 3.0).

Table 3.0 Population dynamics of the City of Bayswater 1947-1991



The surge in figures.

(Adapted from May, 1997, p. 225)

All of this increased population meant more land and bush was declared to housing or industry (May, 1997, p. 226-227). Figures 3.0 and 3.1 show the changes and development to the Morley Shopping Centre area (within City of Bayswater). These changes meant extra drainage was required and the water table had to be lowered again to cater for the extra demand of sewerage.

Wetlands such as Andrew's Swamp, Hoynes Lake and wetlands (name unknown) near Hillcrest and the old Morley Shopping Centre (Kmart) and Bayswater Golf Course have now gone according to Roma Trainer, "the drains took them away". Some of them now are parts of an open drain system but few of them are in their original condition.

The population movement to Bayswater meant an increased pressure on the hydrology of the area. Bayswater is a catchment area draining into the Swan River, and prior to European settlement it supported a wide variety of species. Fortunately, due to Commonwealth Heritage funding Bayswater now has BICM, which aims:

- To improve the water quality and the amenity of the drain, and
- To involve the community in doing so.

Aboriginal people and their associations with the City of Bayswater's wetlands are examined in Chapter 4.

CHAPTER 4 ABORIGINAL PEOPLE

Aborigines to early settlement period

The Aboriginal people lived nomadic lives visiting the wetlands and coastal plains of Western Australia. They moved from one wetland or water hole to another, they had no cattle or horses, and did not stay in one place long enough to pollute, drain or clear the land.

> The hunter is gone: the spear
> is splintered underground; the painted bodies
> a dream the world breathed sleeping and forgot.
> The nomad is still.
>
> *Bora Ring* by Judith Wright (1961 Living Verse, p. 103)

The words of the above poem adequately describe the disappearance of the Aboriginal people from Swan River settlement area. The first guardians of these wetlands were the Aboriginal people. Literary sources site Aboriginals as the guardians of the land, the keepers of the knowledge.

According to the *Aboriginal Heritage Act 1972*:

> *Aboriginal Culture is rich, complex and enduring, belonging to pre-history as well as the present. It is one of the oldest living cultures on Earth, with evidence of a human presence on our continent for at least 40,000 years, possibly longer.*

Aboriginal people were the first settlers of Australia. It has now been estimated that they arrived approximately 50,000-60,000 years ago in Kakadu, Northern Territory and approximately 40,000 years ago in the more southern parts of the Australian landscape (Environment Australia, 1998, p. 41). At time of discovery all Aboriginal people were semi nomadic and directly dependent on their natural environment as they wandered across the Australian landscape, especially the wetlands, hunting and collecting food. They were true "hunters and gatherers" depending on what the environment provided rather than modifying it to suit themselves.

According to Yuraleen, grandmother of Doolan-Leisha Eatts of the Nyoongar Pibelmen tribe:

> The tribe's territory extended from their camp at the base of Kings Park to as far as Brookton, Kalamunda, Joondalup and Pinjarra as they trekked across wetlands in search of seasonal food sources.

According to May (1997, p. 6):

> *Were it possible to draw a map of Aboriginal Bayswater, it would show a network of landmarks, tracks, food resources, campsites and places of significance - all those features which provided the physical and spiritual framework of life for these original inhabitants.*

It is evident that the Aboriginal people in the Perth and Swan Valley region used the wetlands as a source of food, respite and spiritual comfort. Literature, such as BICM 1994, Appleyard and Manford 1979 and the Swan River Trust Report 1997, confirms that the Aboriginal people were nomadic and trekked from one food source to another dictated only by the change in seasons. Their view of themselves within the landscape, their sense of place is summarised by their concept of "Dreamtime" or their creation beliefs. Their creation, or Dreamtime, concept covered culture, religion, morals, balance, symmetry, continuity, constancy, regularity, here and now and that everything is related and inter-related (Environment Australia, 1998, p. 45):

> *The Aboriginal view of nature is an intensely humanised one, in which people trace their descent from ancestral beings and carry the responsibility of continuing their actions. In terms of sustainability, for example, for many Aboriginal people the thing that needs sustaining is the responsibility of people to care for the land and fulfil ritual responsibilities.*

Figure 4.0 shows the locality plan of sites of Aboriginal Spiritual & Cultural Importance relating to the Nyungah community. These sites are located from Bayswater to Bullsbrook (Pearson & Tedeschi, 1999, p. 23).

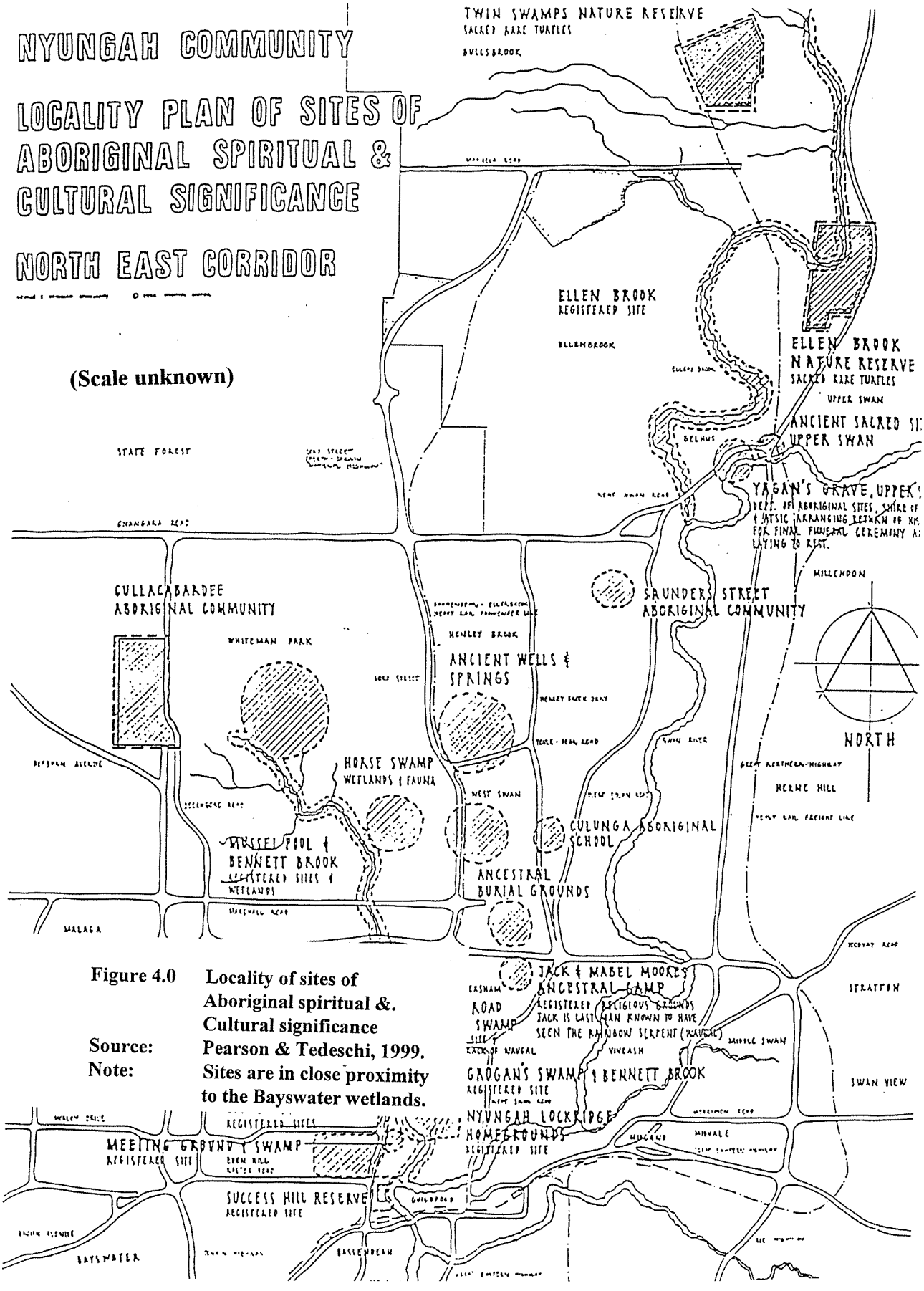


Figure 4.0 **Locality of sites of Aboriginal spiritual &. Cultural significance**

Source: **Pearson & Tedeschi, 1999.**

Note: **Sites are in close proximity to the Bayswater wetlands.**

According to Carter, 1986 (cited in the Bennet Brook Study, 1999, p. 24):

> *The Waugal lives in Bennet Brook where it flows into a bend of the Swan River, below Success Hill.....Traditionally, the powerful Waugal is said to inhabit the dark water of pools and swamps and it is held responsible for the well being or illness of those who come into its presence.*

There are also historical references of the Aboriginal people in Bayswater Joan Sidebottom (OH No: 5 - 19 September 2002) remembers a story regarding Dr Whatley and his wife who were original Bayswater residents. The story detailed:

> Dr and Mrs Whatley settled here in 1829 and Mrs Whatley was very scared of the Aboriginals as they used to come around the camp, their little bush hut dwellings were near the railway bridge.

According to Doolann-Leisha Eatts, granddaughter of Yuraleen of the Piblemen tribe the Aboriginal people were also frightened of the European settlers. Her grandmother handed down to her knowledge of Yagan and his interactions with the white settlers:

> Yagan was angry at the white people for taking his land and he fought back. But there were also times when he helped the white man. When a white woman got lost in the bush he took her back to the settlement.

Unfortunately, Yagan their hero was killed and the Aboriginal people moved away. After European settlement, the Aboriginal people were discouraged from leading their former lifestyles as hunters and gatherers, as the European settlers moved them away from the Swan River settlement. Unfortunately, according to Berndt (Octagon Lectures, 1979, p. 17):

> *Economic development for Europeans meant increasing poverty for Aborigines. Many, those who remained as well as those who were displaced, became strangers in their own land.*

The Aboriginal population of the Swan River area was estimated to be 700 by Armstrong (1836, p. 797) and a density of 25 people to 100 square miles was considered a reasonable assumption for the Swan Coastal Plain by Hallam (1977, pp. 26-27).

Moore (1885, p. 115) reported that in 1840 there were about 3,000 Aboriginal people in the Swan River settlement. The Aboriginal people were hard to count as they moved around the Swan River area to wherever the seasonal food sources were located. Unfortunately, the Aboriginal people were forbidden to hunt and gather food in some areas.

Table 4.0 lists Aboriginal food sources, which may have been found in or around a healthy wetland before European settlement:

Table 4.0 The Aboriginal people and their use of wetlands as a food source

Flora/Fauna	**Food source**
Yabbies and fish	The Aboriginal people knew where to dig for Yabbies and they used traps made out of sticks or stones to catch fish. Fish were also speared.
Ducks, swans, swamp hens, magpie geese, coots, rails, crakes and grebes	As waterfowl used the wetlands for resting, nesting and feeding the Aboriginal people caught them at these vulnerable times.
Ibis, egrets, herons and spoonbills	Used the shallows of wetlands to spear fish or dig in mud for crustaceans. Food source for Aboriginal people.
Cormorants and Pelicans and migratory birds	Often used the wetlands for catching fish. Food source for Aboriginal people.
Kangaroos & other large animals	Aboriginals trapped or speared large animals when they came to drink.
Frogs	Wetland food source for the Aboriginal people as well as the snakes and birds that visited wetlands.
Tortoises	Breed near wetlands, eat insects, fish, tadpoles, snails and some plants. They are food for other wetland users such as fish, birds and goannas as well as the Aboriginal people.
Invertebrates = worms, aquatic insects, spiders, & water fleas	Fish, birds and other animals feasted on invertebrates in the wetlands so they in turn were caught as food sources for the Aboriginal people.
Waterlilies, rhizomes of bulrushes, reeds, Nardoo.	Used as food for Aboriginal people, which is harvested, pounded into a flat damper shape and roasted in the ashes.

Source: Erbacher, 1998, pp. 11, 27, 29, 33 & 37.

The 20th Century

By the 1900s the Aboriginal people still may have used some of the wetland sites of Bayswater, but kept themselves out of sight. From the 1920s to the present, few of the interviewed residents remembered seeing Aboriginal people.

However, Laurie Batters remembers:

> In 1936-38 Aboriginals were selling clothes props made from 6-8ft saplings which they cut down and de-barked and sold house to house in Milne Street Bayswater.

And:

> In 1944-45 whilst herding cows for Gino Gobba between the old Bayswater landfill site and former Bayswater Dog Pound and Tonkin Highway, a group of Aboriginals who were camped there stood up to look at me whilst I was herding the cows. I avoided their camping area from then on.

Then later:

> In 1960 my brother had a shop on the Collier/Tonkin Road intersection called Greenpoint Shop and behind the shop was a bush humpy with an Aboriginal group living in it.

The Swan River Aboriginal people still used some of the wetlands further inland, as the Bayswater wetlands near the Swan River were increasingly used for housing and agriculture. Niyubra Swamp (Bayswater and Bassendean), bounded by Broadway, Collier, Troy and Grey streets was said to be used by the Aboriginal people from the 1920s until recent years (O'Connor, Quartermaine, Bodney, 1989, p. 30) when it was drained into a small lake system.

The Aboriginal people (and their descendants) that used Bayswater's wetlands prior to European settlement moved to other sites, such as the Bennet Brook Camping Area in Beechboro (in the 1930s to 1960s), Lord Street, East Perth (until housing developments moved them) and localities further afield such as Ellen Brook and the Swan Valley. Perth residents still see groups of Aboriginal people congregating in parks along Beaufort Street/Newcastle Street, and even the Perth City foreshore.

Table 4.1 lists some of the remaining Bayswater wetlands that were visited by the Aboriginal people prior to European settlement:

Table 4.1 Remaining Bayswater wetlands that may have been visited by the Aboriginal people prior to European settlement

Wetland	Current Status
Baigup Wetland Reserve, (modified).	Regarded as the most pristine of Bayswater's wetlands. Still contains damage of previous human activities such as market gardening and more recently polluted stormwater inputs. Some disruption to vegetation stability. A management plan has been put in place to rehabilitate this wetland. (BICM 1994). Friends of Baigup Group.
Eric Singleton Bird Sanctuary, (re-created).	This is a recreated wetland which is important as a nesting/resting/breeding site for Pink-eared Ducks, Hardhead Ducks, Blue-billed Ducks, Grey Teal Ducks and Black Ducks with the occasional Coot being bred. The Bird Sanctuary has been established for over 30 years and to date over 100 species of birds have been recorded. (Eric Singleton and the City of Bayswater).
Lake Gobba (once a claypit, created).	This is a recreated wetland, was once a claypit. The Friends of Gobba Lake are removing the Japanese pepper trees. Native trees around the Lake attract the birds such as Whistling Kite, a pair of Black Swans, Blue-billed Ducks and Hardhead Ducks enjoy the deep water of the Lake. Development is taking place on the north and north-west sides of the lake but an impact assessment indicates it will not impact on the heritage significance of the Lake. Friends of Gobba Lake.

Even though the above wetlands fall into the modified, created and re-created categories they are all located on prime Bayswater catchment area sites which would have been wetlands prior to the European settlement and later constructed as the Bayswater Main Drain. The Aboriginal people would have visited the Bayswater wetlands as they trekked back and forth in search of seasonally available food sources.

The Aboriginal people long knew the value of taking what you needed and moving on leaving the wetlands and ecosystem intact. The Aboriginal people's perception and tenure of wetlands was clearly different from that of the European settlers as a survey compiled in 1985 appears to underline the importance of wetlands (O'Connor et al; 1989, p. 30). The report examined prehistoric Aboriginal activity sites, which may have been used for mythological, ceremonial or social aspects (O'Connor et al; 1989, p. 13).

This report referred to sites significant to the Aboriginal people. It also suggested that Aboriginal people seem to have had a mental map of the coastal plain, rivers and wetlands, which they travelled along seasonally in search of food and water.

According to a discussion the Berndts had with an Aboriginal woman:

> *You people go to all that trouble, working and planting seeds . . . . All these things are there for us, the Ancestral Beings left them for us. In the end, you depend on the sun and the rain just the same as we do, but the difference is that we just have to go and collect the food when it is ripe. We don't have all this other trouble. (cited in Stannage, 1981, p. 33).*

The conclusion that can be drawn on the impact of European settlement is that considerable human use has disturbed or modified Western Australia's wetlands. The Aboriginal people did not modify or disturb these wetlands. They used them for camping sites, corroboree areas as well as fishing, hunting and gathering sites. Most importantly some Aboriginal people still feel connected to water bodies, rivers or creeks (Pearson & Tedeschi, 1996, p. 21).

The following chapter identifies the emergence of environmental awareness albeit rather late for the City of Bayswater.

CHAPTER 5 BEGINNING OF ENVIRONMENTAL AWARENESS

For the purposes of this study it is important to examine whether the environmental awareness that emerged in the Western Australian community in the 1960s also spread to the City of Bayswater. It is evident in the previous chapter that the original inhabitants, the Nyoongar people of the Swan Valley possessed a style of environmental awareness that did little to alter the river and wetlands. Their 'firestick farming' of the land actually caused plants to grow and regenerate. They also left evidence of their travels through Bayswater. According to May (1997, p. 4):

> *Under the present Tonkin Highway in Bayswater, there is a dune ridge some five hundred metres in length and adjacent to several formerly existing swamps, which has all the hallmarks of such a major campsite.....Such camps were used for many purposes all seasons and provided a headquarter in the winter months, millennium after millennium. (Aboriginal Sites Department File SO170)*

A search of the State records (such as Bayswater Community News, letters and Council documentation) from early settlement until the late 1940s did not yield any written evidence of environmental awareness. In fact the opposite appeared to be the case, as records at the State Records Office of Western Australia demonstrated that the City of Bayswater reacted willingly to the drainage requirements of the local landowners. (Appendix 2/Chapter 3).

This research also revealed that Bayswater's wetlands were modified substantially by the late 1880s. Mainly, because the first ribbon allotments of land defined by May, (1997, p. 9) as "the original Bayswater Ribbon Grants" were actually prime and pristine sections of the old drainage route that flowed naturally to the Swan River. However, these sections of the ribbon allotments contained the wetlands that were quickly drained or used for agricultural purposes. As confirmed by Field Geologist Esson in 1925 (Figure 1.5), the City of Bayswater catchment area and its first ribbon allotments contained drainage channels that seemed at one time to have connected up with a main drainage channel emptying into a swamp lying between King William Street and Slade Street, south of Guildford Road.

It is evident that environmental awareness was unheard of in those early days of settlement. Numerous letters were written by the City of Bayswater to the Metropolitan Water Supply and Drainage Department requesting that flooded areas of the district "receive the early attention of your engineers" as they were in a haste to placate the settlers who wanted their lands drained (See Appendix 2). Bayswater residents also lobbied Members of Parliament regarding their drainage problems. Mr Halliday a well-known Bayswater landowner in his letter on 12 January 1931 to Mr J Hegney of Parliament House stated:

> *For a number of years now flood water has been a menace in this locality, and after repeated efforts on the part of local residents to have the area drained, the Water Supply Sewerage and Drainage Dept. published in the "West Australian" their proposal to construct a drain the relieve the area concerned.....Unfortunately for the Bayswater residents, only the John St. Maylands scheme was proceeded with.....Other drainage schemes have been constructed since the time mentioned. These must have been financed, and I think that the Department is most unfair in the way they have treated the residents of the Bayswater locality.* (Appendix 3)

As its residents largely influenced the decisions of the City of Bayswater, environmental awareness did not appear to be an important factor during the first half of the 20th Century in the Bayswater catchment area. The unfortunate fate of most of Bayswater's remaining wetlands was determined by this early rush to drain with a desire to improve the productivity and economic value of the land.

In the 1950s (SROWA) the City of Bayswater ratepayers were irate that they paid stormwater rates and were still flooded out by winter rains. The City of Bayswater undertook a period of foreshore resumptions where it purchased huge tracts of low swampy river land, flooded in winter, and reclaimed them for recreation ground along Swan River foreshore. The WA Government Gazette on 8 May 1953 records 20 such transactions (Appendix 6). The land close to the river was being purchased for recreation ground along Swan River foreshore.

In the 1960s, the City of Bayswater continued to fill and drain wetlands to meet the surge in development requirements. The author recalls:

> At the same time our 5 acre block (now Houghton Park) was resumed in the early 1960s the Bayswater Main Drain was excavated alongside our property situated on the corner of Christianson Avenue and Beechboro Roads. The back of our property contained a swamp in winter and was several kilometres from Hoynes Lake and Smith Lake (now Tonkin Highway). All that remains now is a grassy field used for sport and recreation.

Today, most of the former wetlands in the metropolitan have disappeared because of the advance of urban development. The remained wetland areas have been considerably modified and are no longer in their natural state. Some of the smaller swamps near Perth were saved as ornamental ponds, such as Hyde Park. In Bayswater, however, the wetlands were almost all modified or destroyed by development. It is hard to estimate just exactly how many were lost as they were not accurately charted or counted. According to Klemm, 1990, cited in BICM, (1994 p.16):

> *It is worth noting that about 25 wetlands in the Bayswater catchment have been filled or drained since European settlement.*

BICM (1994, p. 5) also stated that:

> *In December 1935, the predecessor of the Water Authority of WA took over management of the King William St drain and commenced extending it to the piped section it is today.*

This sealed the fate of the wetlands and lakes in the Bayswater area. Until this time, the settlers used the water for irrigation and agriculture, and even though they cleared and filled in wetlands, they did this in a small scale. When pollution started to appear in the main drainage creek the Bayswater Main Drain piping commenced in full force.

Even though in the 1960s conservation groups, such as the W.A. Naturalists Club and Swan River Protection Society, started to form it still took some time for environmental awareness to emerge in the City of Bayswater.

The following section sums up the conservation groups that have formed to carry the environmental awareness banner for the City of Bayswater. Three of the main groups are:

Eric Singleton Bird Sanctuary - 1977

According to Eric Singleton the Honorary Warden of the Eric Singleton Bird Sanctuary:

> *In 1977 the City of Bayswater purchased the land between Slade and King William Streets as a site for a proposed rubbish dump. I suggested the City leave a section of land for a bird sanctuary. The Council agreed.*

Hence the Sanctuary, adjacent to the Bayswater Riverside Gardens commenced its important task of becoming a major recreation attraction. The Sanctuary includes an attractive lake, picnic area, Bird Hide and gazebo over the lake. When interviewed Eric Singleton noted that "70 species of birds have been identified in the Sanctuary and 20 of those species have bred in the lake itself". Eric innovatively designed white breeding boxes with ventilation holes at both ends which had a lot to do with the success of breeding at the Sanctuary.

Brian J. O'Brien & Associates prepared an Environmental Management Plan for the Sanctuary in 1990. The Eric Singleton Bird Sanctuary Advisory Committee and Friends Group was formed in 2000 to continue its important work of rehabilitation.

Friends of Baigup Wetland Reserve - mid 1980s

The Reserve is part of the original ribbon allotments W and X and it extends from Garratt Road Bridge to Kelvin Road, approximately 1 kilometre downstream along the northern bank of the Swan River. The Reserve was named after the Aboriginal words for rush (Baigup) and river (Beeler). It is important to note that the Reserve has been drastically modified as it has been used for a variety of human uses, including a market garden (by Chinese immigrants) in the early 1900s.

The Friends of Baigup Reserve were formed and took over the Reserve's conservation after a local volunteer conservation group, Bayswater Greenworks, developed concepts for its rehabilitation in the mid 1980s.

Since the mid 1980s the Friends of Baigup Reserve have been working towards:

- Protecting the Reserve's conservation values especially with regard to vegetation communities and faunal habitats;
- Restoring and enhancing degraded areas by replanting and implementing weed control;
- Encouraging environmental awareness of the Reserve within the local community by using it for educational purposes: and
- Providing passive recreational uses of the Reserve compatible with conservation goals (1994-1999, Baigup Wetland Reserve Draft Management Plan).

In 1994 the Baigup Wetland Reserve Draft Management Plan (1994-1999) was developed and implemented. According to Mr Harry Bastow, President of the Baigup Wetland Reserve they have many plans for Baigup but the most important one is to get the Management Plan reviewed. The Environmental Protection Authority (1993, p. 7) rates the Reserve as:

- Belonging to the 'high conservation' management category;
- Highly valuable in providing a protected habitat for species affected by urban development; and
- Providing a major corridor for bird and other faunal movement along the Swan River and nearby wetlands.

Friends of Gobba Lake -1997

The above group was formed in 1997 after 233 concerned residents signed a 1993 petition "requesting the City of Bayswater to preserve GOBBA LAKE ....to rezone the area....as public open space and reserved for parks and recreation." (Joan Sidebottom in a letter to the City of Bayswater, 19 September 1997, Appendix 7). Fortunately, after much perseverance by the Group the Lake was saved. When interviewed Joan Sidebottom the President of Friends of Gobba Lake confirmed that the Lake:

- Is an old claypit (from which four local brickworks excavated clay until approximately 1903), is approximately 100 years old, an all season large deep water lake and now classed as a compensating basin; and
- Is visited by diving birds in the summer when the water gets low in the nearby Eric Singleton Bird Sanctuary.

The Lake cannot be valued highly enough even though it is a created wetland and according to Joan Sidebottom "people have to get together to save these places".

Other significant friends groups include:

- Friends of Lightning Swamp; and
- Friends of Beringa Park.

Another important Group which has worked for more than ten years to raise environmental awareness in the City of Bayswater is the Bayswater Integrated Catchment Management Group (BICM).

Bayswater Integrated Catchment Management Group - 1991

This community based group was formed in 1991 and works in conjunction with local councils to:

- Restore the natural environment within the catchment of the Bayswater Main Drain;
- Encourage involvement of all sections of the community (schools, residents, businesses, clubs, local and State governments) in the process of identifying sources of pollution and assisting with measures to eliminate or minimise such impacts on our environment; and
- Enlist community members to form 'Friends of' groups to assist with planning and implementatic f improvement measures eg. planting and are of plants.

It took a while for environmental awareness to become important in the City of Bayswater, but the future appears promising for the remaining wetlands if the good work of community groups (e.g. Friends of Lake Gobba) continues. The following chapter looks to the future.

6. THE PRESENT SITUATION: 2000 ONWARDS

Australia has made tremendous inroads to halt the environmental decline and there is promising hope for the future (Suzuki and Dressel, 2002) but there is still a long way to go to really provide the necessary conservation strategies. Suzuki found that when he interviewed people for his book, *Good News for a Change Hope For a Troubled Planet* (2002), they advised that they are finding their own solutions for environmental problems either through their local Government or by organising a community group.

Professor George Seddon (personal communication 22 August 2002) stated that "when he wrote *Sense of Place* in the 1960s there was no regard at all for the wetlands whatsoever. Today things have not improved much, but at least now we are conscious of them". There appears to be a general consensus that much has been accomplished, but we still have further to go before we can say the environment is adequately protected. The need to develop land has in the past always taken precedence over conservation and environmental issues.

It is well known there is a plethora of literature that confirms the value, uses of and need to conserve wetlands (Swan River Trust, 1997; Environment Australia 1998; Bekle 1981). From earlier chapters it has been confirmed that:

> *The early European saw the Australian environment through European senses and experience. The landscapes appeared alien, ugly and of low utilitarian value compared with Britain. In contrast to the Aboriginal people they dispossessed, the new settlers did not see themselves as a part of the Australian land but separate from it. Neither did they accord intrinsic values to Australian ecosystems.* (Environment Australia, 1998, p. 47)

There are many Commonwealth, State and Local strategies, bills and policy frameworks that plan for better conservation practices such as:

- A State Conservation Strategy for Western Australia (1987);
- A State of the Environment Report (1998);
- A National Strategy for Ecologically Sustainable Development (1992); and.
- A Policy Framework for the Establishment of Wetland banking in Western Australia (draft). (2001).

However, the only time these plans are successful is when there is a responsible authority to enforce them and make them work in the community.

Environment Australia (1998, p. 6) agreed:

> *A major continuing issue for Australia is the split of responsibility between the Commonwealth, State/Territories and local governments in environmental management. This has often hindered effective management, involving both duplication and omissions in addressing issues, as well as leading to conflict.*

And:

> *The policies will need to empower the community, landowners and decision-making agencies to be responsible for the conservation of natural and cultural elements of the river system.* (Swan River Trust Report, No. 27, p. 4).

Jennings (1996, p. 163) states that "political support for wetlands conservation will depend, to a large extent, on how successful the community groups are interested in promoting the case for conservation". This was confirmed by other sources including Joan Sidebottom:

> I was fighting for 10 years to save Lake Gobba - people have to get together to save these places...we got a budget from the Council but still had to volunteer to clean the weeds from the lake edge ourselves.

Giblett and Webb (1996, p. 8) suggested going one step further and introducing local 'Aboriginal wetland wardens' so that we can learn from them how to care for the wetlands that remain.

The City of Bayswater has Friends Groups and BICM in place to ensure the remaining wetlands are conserved and the community is educated, but it is still difficult to enlist members of the community to put into place conservation practices within their own backyards. As recent as 28 August 2002 (*The West Australian*, p. 38) a local shire council was about to prosecute a developer because "old-growth wando trees were cut down and fragile creek lines bulldozed".

The future for some of the remaining wetlands in the City of Bayswater has already been improved by the following initiatives:

The Eric Singleton Bird Sanctuary

The Advisory Committee have already secured a number of grants in 2001 which will assist with the creation of essential habitats at the Sanctuary, continue with the eradication of weeds and bamboo species from the Sanctuary, and replace them with locally indigenous plants species. The Sanctuary will continue to thrive due to the efforts of the Committee.

Friends of Baigup Wetland Reserve

This Group has many plans in the pipeline for 2003, which include:

- Monitoring and valuation of the quality of water;
- Weed mapping and control;
- Development of a seed bank;
- Lookout Point development;
- Control of foreshore erosion along the Baigup perimeter; and
- Develop better relationships with local governments

(Harry Bastow, President, Friends of Baigup Wetland Reserve 2002).

The Friends of Baigup will continue to work for the betterment of this special wetland.

Friends of Gobba Lake

During 2003 Heritage TODAY, environmental consultants conducted a Heritage Impact Assessment to assess the impact of residential development near Lake Gobba. The developers are working with the Friends of Gobba Lake to ensure the lake is not disturbed in any way.

Bayswater Integrated Catchment Management

This Group has already put in more than 10 years good work into educating the community to restore, maintain and conserve the City of Bayswater catchment area. The Group regularly visits schools, conduct workshops and revegetation of the catchment. They are also creating "living streams" and meanders within the drain to create niche ecosystems.

The future of the remaining wetlands in the City of Bayswater appears to be promising.

Chapter 7 CONCLUSION

The findings of this study on the historical geography of Bayswater's wetlands mirror the findings of other similar studies conducted on the Swan Coastal Plain. These studies concur that approximately 70-80% of wetlands on the Swan Coastal Plain have been lost or modified. These wetlands were altered because early settlers did not understand that "the natural complexity of many of these wetland communities, together with the system by which contrasting communities are locked together, contribute to the overall stability of these ecosystems" (Bekle, 1982, p. 41). Their need to develop the land for their own economic survival took precedence over conservation and environmental issues.

At the onset of occupation the early settlers of the City of Bayswater did not form an attachment to their new surroundings and this lack of a sense of place adversely affected the numerous, once pristine wetlands in the Bayswater catchment area. The overwhelming message from discussions with long term residents of Bayswater confirmed that just as they were not aware of environmental issues, neither were their parents and/or grandparents. In this reconstruction of the disappearance of the wetlands in Bayswater the following questions were considered.

In relation to the first research question about the former extent of Bayswater's wetland habitat, this study found that the areas first settled in the heart of the Bayswater catchment area were subject to the most development and drainage. BICM (1993, p. 16) confirmed that "25 wetlands in the Bayswater catchment have been filled or drained since European settlement", but it is more than likely that the number of wetlands that have been lost is higher. For example, in a small area between King Street and Broadway (intersected by Beechboro Road), Laurie Batters' recalled that 8 wetlands once existed.

It is difficult to pinpoint the exact extent of the former wetlands in Bayswater as those living close to the wetlands only noticed them. As it is difficult to contact all former long-term residents of Bayswater it is unlikely that the exact former extent of wetland habitat can be estimated.

With reference to the second research question relating to the present areal extent of the Bayswater wetlands, there are no wetlands in Bayswater that did not undergo some degree of modification from human activities. The remaining wetlands relate to the original wetlands, but in most cases they have been drastically modified.

For example, Baigup is one of the largest of the remaining wetlands. It was extensively modified for a variety of uses since European settlement, including market gardening, recreation and a ferry boat point in the early 1900s. It now requires preservation of the remaining flora and fauna, as well as habitat restoration, extensive weeding, and improvement of its nutrient filtering facilities.

BICM (1994, p. 46-59) lists 24 sites of the Bayswater Main Drain some of which may contain previous wetlands and may be part of the old natural drainage system. The Water Authority of Western Australia's list these sites as drainage routes into the Bayswater Main Drain, but they do not detail local authority drains or drainage issues on private property. This means that no accurate areal extent of Bayswater's present wetlands can be obtained from the available records.

In the case of question three on why the wetlands have been diminished, and what processes caused this phenomenon, a clear picture emerges to explain this situation. Wetland modification in the City of Bayswater commenced at early settlement due to the fact that the original ribbon land grants formed the Bayswater catchment area. Early settlers who used the wetlands for growing food crops, grazing their livestock and water supplies quickly occupied these grants. By the 1900s the land use shifted and included rural, brick works and market gardens. By the 1950s much of the land use became residential and light industrial. The author of this study recalls a deep well, dug in the early 1940s, in the middle of the swamp adjacent to her property.

The developments in the City of Bayswater meant the original wetlands were drained and modified. This process determined the fate of the City of Bayswater wetlands, and was also broadly replicated across the wetlands of the Swan Coastal Plain.

The fourth research question dealt with the phenomenon of wetland eradication being unique to the City of Bayswater. It is definitely not unique to the City of Bayswater, as other studies (Bekle, 1982, p. 41) confirm that 70-80% of wetlands have been lost or drastically modified since early settlement.

In the City of Bayswater long term residents have confirmed that winter flooding was common place on their properties. They recalled their parents and/or grandparents petitioning and writing drainage request letters which caused the City of Bayswater to accelerate drainage programs.

The residential development that occurred in the City of Bayswater was also replicated across other areas in the Swan Coastal Plain that contained wetlands and lakes. According to the *Oral Histories of Wanneroo Wetlands* "it is clear from these oral histories of the Wanneroo Wetlands that many lakes have changed a great deal since European settlement" (Kenneally, 1994, p. 38).

Other studies (Bekle, 1981, p. 31) confirm that "the latter part of the nineteenth century saw the disappearance of most of the original lakes and swamps closer to Perth". The processes that caused the modification and loss of the wetlands of the City of Bayswater also caused the disappearance of wetlands in the Swan Coastal Plain.

The fifth question on what can be learnt from past mistakes to ensure that future planning does not lead to future reductions in wetland area and quality is the most difficult question to answer. It has long been an issue amongst environmentalists that future development should not be undertaken without environmental impact assessments so that short term and long term problems are identified at the outset. This study also agrees that the community needs to become more involved in environmental issues, readily participate in friends groups, as well as being more environmentally conscious in general. The remaining wetlands in the City of Bayswater have all been drastically effected by pollutants, chemicals and fertilisers, as well as introduced species of flora and fauna.

Unfortunately, there were some limitations to this study. It is suggested that a larger sample size of interviewees may have produced more information to build up a more detailed reconstruction of former wetland areas. Also the long term residents interviewed mainly came from the north east corridor of the City of Bayswater catchment area, with 2 of them residing near the Swan River (south) and 1 residing in Hampton Park (north). Interviewing long-term residents from all sections may, or may not, have presented a different picture of the past extent of the City of Bayswater wetlands, as well as other environmental aspects.

During the course of the interviews it was noted that the interviewees rated environmental and developmental issues differently. Some residents appreciated the housing and industrial development which they felt were important, whilst others regretted this development and commented on about the loss of fauna and flora habitats, as well as the loss of the wetlands.

During the process of collecting information it became apparent that there are still many issues effecting the remaining wetlands of Bayswater namely:

- The wetlands are still effected by the high level of nutrients and toxic input of chemicals in the Bayswater catchment area.
- The wetlands still contain introduced species.
- The incidence and danger of fires still threaten wildlife habitats.
- Sewerage pumping stations are found close to the river or wetlands causing the threat of sewerage spills (Emu Lake/Ballajura).
- Friends groups are still essential to assist Local Government with the care and preservation of remaining wetlands (all remaining wetlands).
- It is still difficult to educate the community on environmental issues as well as water saving measures (all remaining wetlands).
- It is still difficult to encourage the local community to join Friends groups (all remaining wetlands).
- Extra resources and funds to assist volunteer Friends group are non-existent (all remaining wetlands).
- The wetlands are still on occasion under threat from developers.

It is recommended that further studies need to be conducted in relation to the following:

Community awareness

Although BICM is conducting education programs and workshops throughout schools, businesses and the community it is unlikely that their message has reached everyone in the City of Bayswater. A study could be conducted on how to heighten community awareness and encourage the community to accept responsibility for catchment management.

Oral Histories

As there are a wealth of oral histories in the Bayswater community, these oral histories need to be documented for further historical analysis and environmental research before they are lost.

For example, Len Craddock recounted one of the most interesting wetland stories uncovered during this study. The story is about the "Swamp Girls":

> Once a month from 1954 to the early 1960s the Ladies Club used to meet at the Hampton Park Progress Hall. The Hall was on the corner of Beechboro and Fitzgerald Roads, Hampton Park. To get to the Hall the ladies had to walk through swampy areas hence they called each other the "Swamp Girls". The "Swamp Girls" are Ms Amy Treadrea, Ms Keeva Bartsch, Ms Olive O'Malley, Mrs Doreen Craddock, Ms Val Munteanu, Ms Ethne Dodson, Ms Joan Fernihough and Ms Betty Baron

It is the collection of stories like the above that make oral histories so important to studies of this nature as historical material may provide information on the former status of wetlands or other past environmental conditions.

Environmental monitoring

Environmental monitoring studies need to be conducted to assess effectiveness of changed management practices to build up knowledge sources. (BICM, 1994, p. 72).

During the course of this study the author successfully extracted and interpreted ecological information from historical sources, albeit difficult, to produce satisfactory results. A collection of old maps arranged in chronological order revealed the sequence of settlement and progressive sub-division of the landscape. These maps coupled with the oral histories provided the locations of former and existing wetlands and their modification. This study successfully reconstructed a picture of the former Bayswater catchment landscape out of a collection of maps and oral histories.

The historical geography of Bayswater's once pristine wetlands was the focus of this study, and now it is important to shift that focus to those remaining wetlands in an endeavour to restore and conserve them. Wetland-dependant plant and animal communities, like human communities have a right to exist.

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APPENDICES

Appendix 1:

1946 petition to the City of Bayswater requesting drainage to Broadway, Beechboro and Collier Roads. (source, Laurie Batters).

3

To-

The Chairman,
Bayswater Road Board,
Bayswater.

We, the undersigned, being property owners and ratepayers resident in the North Ward of the Bayswater Roads Board do hereby request that the said Board have proper drainage... made on both sides of Broadway, Beechboro Road and Collier Road whereby such drainage will carry away the water from such roads and not, as at present, allow such water to run off such roads into our properties and cause loss to us in respect of our various classes of business being carried on on our properties. We respectfully request that the members of your Board give this matter their attention and accede to our request with as little delay as possible.

G. Russo. Cnr Beechboro Rd & Broadway
A. Rossi Beechboro Rd.
J. Delgano (per J/Osff) Cnr Beechboro Rd & Broadway
W. A. Broom Beechboro Rd
G. J. Dodson Collier RD
D. Owen Beechboro Rd
A. Goodenough Beechboro Rd
D. Redondo Beechboro Rd
K. Ulrich Broadway
Ebenezer Thomas Broadway
E. F. Thomas Broadway
A. J. Batters Broadway.
Steve Cubitron Broadway Rail
P. Ulrich Beechboro Rd
W. G. Outred Beechboro Road
E. P. Hall Beechboro Rd
M. Sampson Beechboro Rd
Mrs E. Wilson Beechboro Rd
G. Fisher Government Rd
E. R. Foster Government Rd

(20) total 34

[Mrs] M. J. Chitty Pt. 3

Mr S C Barnes

E J King

E A King

E Peden

A. Wryden

J J Paine

J Paine

V P Fairs

C. E. Burgess

M Sasson

H Cheshire

Nunzio Petritto

J. Tate

(14)

Appendix 2:

Letters from the Bayswater Road Board to the Department of Works and Labour (11/8/1928) and Metropolitan Water Supply and Drainage Departments (17/11/1928) requesting drainage to the City of Bayswater (source SROWA).

249/28

Telephone A1434 98

TCL 208

BAYSWATER ROAD BOARD.

NB

ALL COMMUNICATIONS TO BE ADDRESSED TO THE SECRETARY.

Town Hall, Slade Street,

Bayswater, 11th August, 1928.

Mr W. S. Surv. Dept

The Under Secretary,
~~Dept. of Works & Labour,~~

PERTH

Dear Sir,

re DRAINAGE

The ever recurring excess of water during the Winter months is again troubling the minds of my Board, and I am instructed to ask if your Department has any record of the levels of the ground between South Crescent and the river running along Garratt Road, and if so what would be the probable cost of construction of a drain, to drain that portion in the immediate vicinity of the Recreation Ground and the river and if no data is available would you be good enough to detail an Engineer to take a survey of the locality with the object of arriving at an approximate cost of this work.

Thanking you in anticipation,

Yours faithfully,

SECRETARY

15/8/28

16.8.28

2144/22

Telephone A 1434

BAYSWATER ROAD BOARD.

218

ALL COMMUNICATIONS TO BE ADDRESSED TO THE SECRETARY.

Town Hall, Slade Street,

Bayswater, 17th November 1928.

THE UNDER SECRETARY,
MET. WATER SUPPLY & DRAINAGE DEPT.
PERTH.

Dear Sir,

re FLOODED AREAS OF THE BAYSWATER ROAD BOARD DISTRICT.

I am directed by my Board to ask that the consideration of your engineers be given to the question of relief to flooded areas in the Bayswater Road Board district. This district in common with the other portion of the Metropolitan area is suffering from a rise of water levels, and in some portions the position is be coming acute.

Owing to the residential areas extending into our Western boundary the flooded condition is be coming more noticable, and I will particularly mention the area on the North side of Roseberry St. off Beaufort St. I have previously mentioned the area in the vicinity of Garrett Rd. between South Crescent and Murray St., and there are also areas in the vicinity of the junction of Beaufort St. with Coode St. to say nothing of certain areas on which for the present there is no settlement. My Board would therefore be pleased if these parts mentioned could receive the early attention of your engineers.

Thanking you in anticipation.

Yours Faithfully,

SECRETARY.

MET. WAT. & SEWERAGE CORRESPONDENCE 19 NOV 1928

ACKNOWLEDGED 19.11.28

MET. WAT. & SEWERAGE 20 NOV 1928 RECORDS

20/11/28

Appendix 3:

A letter dated 12 January 1931 from A Halliday to Mr J Hegney MLA, requesting drainage of May Street, Essex Street and The Strand (source SROWA).

COPY. BAYSWATER. 12/1/31.

Mr. J. Hegney, M.L.A.
Parliament House,
PERTH.

236

Dear Sir,

re DRAINAGE OF MAY ST. ESSEX ST., THE STRAND, BAYSWATER.

Further to our telephone conversation, and in reply to yours of the 10th ult., I would like to place before you the following further facts concerning the above:

For a number of years now flood water has been a menace in this locality, and after repeated efforts on the part of local residents to have the area drained, the Water Supply Sewerage and Drainage Dept. published in the "West Australian" their proposal to construct a drain to relieve the area concerned.

The date this proposal was published was, as far as I can remember, ten years ago. In any case, the proposal to drain Central Avenue and John St., Maylands appeared in the same issue of the "West Australian," as the proposal to drain the Bayswater locality. Unfortunately for the Bayswater residents, only the John St. Maylands scheme was proceeded with.

I would take it, that before proposing a scheme, the Department would have the financing of it assuredm and that once having published their intention of proceeding with the work, it surely is an obligation on their part to see it carried out. Other drainage schemes have been constructed since the time mentioned. These must have been financed, and I think the Department is most unfair in the way they have treated the residents of the Bayswater locality.

I understand both Mr. Johnson and Mr. McCallum have seen the flooded area (I cannot be positive of this) but in any case, I feel sure they would assist you in any effort you may put forward to have the whole affair brought to a successful conclusion.

Before closing I would also mention the fact that the Department does not forget to regularly charge stormwater rates, and considering they have not given relief in any shape or form, it is an imposition on their part. I feel sure that once the whole matter is known toyou, you will do your best for myself and other residents of this Bayswater locality.

Thanking you in anticipation,

Yours faithfully,
(SGD). A. HOLLIDAY.

Appendix 4:

A newspaper article - *The West Australian*, 5/1/2001, p. 4 - entitled "Help on the way for rare orchid".

Help on the way for rare orchid

■ By Pamela Magill

A CRITICALLY endangered native orchid is on the brink of salvation.

The Department of Conservation and Land Management and the Botanic Gardens and Parks Authority are both working to save the blue babe-in-the-cradle orchid.

A small population of the orchids exists at the Beechboro Orchid Park Reserve, where it was discovered in 1987.

CALM is working on a recovery plan for the orchid and has produced interim management guidelines for the nature reserve.

A drainage system with a gate has been installed to regulate water flows into and out of the wetlands, trees have been planted around the orchid habitat and groundwater levels are monitored regularly.

A security mesh fence has been erected around the nature reserve to prevent people from inadvertently trampling the plant.

Endangered: The blue babe-in-the-cradle orchid is found at Beechboro.

The Botanic Gardens and Parks Authority will work with CALM and use Federal Natural Heritage Trust funding to carry out propagation research with the aim of producing plants for translocation.

Environment Minister Cheryl Edwardes said the plans would protect the small population from disturbance and trampling and maintain water levels within an acceptable range.

"A primary aim of this program will be to build the blue babe-in-the-cradle population at Orchid Park," Mrs Edwardes said.

"CALM will also identify any other habitats suitable for the orchid so the plants that are propagated can be translocated into new areas as well."

The West Aust. 5/1/2001 pg. 4

Appendix 5:

Three resumption issues indicating land at foreshore resumed for recreation purposes (28/3/1947), Taxation letter to Bayswater Road Board indicating value of 4 resumed properties is £25 per acre (25/6/1953) and Land Resumption for Bayswater School Extension (29/4/1953) (Source SROWA).

Third Schedule. L.P.O. 11.

NOTE.—The claim must be accompanied by all deeds and documents necessary to establish the claimant's title, which are in his custody, possession, or power, and an abstract or certified copy of all such deeds or documents as are not in his custody, possession, or power (See 2 Ed. VII., No. 47, Sec. 41).

THE PUBLIC WORKS ACT, 1902-1933.

CLAIM FOR COMPENSATION.

FORM A.

For Cases where Lands are taken.

To * Bayswater Road Board.

Whereas by a notice in the "Government Gazette" dated the 28 day of March 1947, the lands mentioned in Table A hereunder, in which I have an interest as described in Table B hereunder, have been taken for the purposes of † Recreation Purposes

And whereas the lands mentioned in Table C hereunder adjacent to the land so taken in which I have an interest as described in Table D hereunder, will be injuriously affected by severance by reason that: ‡ Portion Swan Loc 5 being Lot 49 on Plan 5223 & being part of the land shown on Certificate of Title Volume 1082 Folio 297

LOCAL GOVERNMENT AUDIT

And whereas I have set forth in Table E, my estate, right or interest in land adjoining the land taken: This is to give notice that I claim the sum of £ 11-0-0 as compensation for all loss arising out of the taking of the aforesaid lands mentioned in Table A, which sum is made up as follows:—

	£	s.	d.
..... acres 1 roods 4.6 perches of land taken at ..... per acre.			
Improvements (if any): Vacant land	11	0	0
Land injuriously affected as follows:— §			
Total Claim ..... £	11	0	0

Given under my hand this 25th day of July 1947

Claimant: ‖ Edward Anthony Fisk by his agent Edwin Arthur Gilman

Address: ¶ 42 St Georges Terrace Perth

[OVER.

[redacted],
[redacted] Road Board,
[redacted] Slade Street,
BAYSWATER. .. W.A.

25th June, 1953.

[redacted],

FORESHORE RESUMPTIONS

Referring to your verbal request for [redacted] of certain lands on the river foreshore between Garratt [redacted] King William Street, Bayswater, resumed for the [redacted] of a roadway, the following report is submitted :-

(A) The southern portions with river frontage of Lots 455/462 inc. between Garratt Road and Milne Street:

The subject area is low and swampy, and mostly flooded in winter. The land has never been cleared or used and has only a position and possession value. It is considered that the value of the land is £25 per acre, plus a nominal value for a river frontage of £20 per block. The portion resumed of Lot 462, in view of its special position should be compensated by the addition of a further amount of £30.

(B) The Southern portions fronting 'Pall Mall' of Lots 454 to 447 inc. between Milne St. and Leake St.:

This land is similar to the previous area and it is considered that the value of this land is £25 per acre.

(C) The South-west corner of Lot 10 Leake Street, comprising an area of 10 perches:

The land is low and swampy and it is considered that the value is the nominal figure of £1.

(D) Portions of Lots 5, 6, and 7, with frontages to Leake Street, Pall Mall, and King William Street, as shewn in the plan of the resumption returned herewith:

The land comprises low land, wet in winter and subject to some flooding under certain tide and weather conditions in summer. It is considered that the value of this land is £25 per acre.

Yours faithfully,

(T.C.H. POWELL)
COMMISSIONER OF TAXATION (STATE)
DEPUTY COMMISSIONER OF TAXATION (FEDERAL).

[redacted] quote your file number when replying, and show the full initials included in your last taxation return.

Given under my hand this 30 day of October 1953

Signature F.J. Harrison

I appoint F.W. Armstrong as my [illegible]
F.J. Harrison

(OVER)

P.W. 2074/25; Ex. Co. No. 681.

Public Works Act, 1902–1950.

LAND RESUMPTION.

Bayswater School Extension.

NOTICE is hereby given, and it is hereby declared, that the several pieces or parcels of land described in the Schedule hereto, being all in the Swan District—have, in pursuance of the written approval and consent of His Excellency the Governor, acting by and with the advice of the Executive Council, dated the 29th day of April, 1953, been set apart, taken, or resumed for the purposes of the following public work, namely :—Bayswater School Extension and that the portions of the several roads, streets or thoroughfares referred to in such Schedule and which are by this notice so set apart, taken or resumed are thereby closed and have ceased to be public highways.

And further notice is hereby given that the said pieces or parcels of land so set apart, taken, or resumed are marked and more particularly described on Plan, P.W.D., W.A., 33575, which may be inspected at the Office of the Minister for Works, Perth.

And it is hereby directed that the said lands shall vest in Her Majesty for an estate in fee simple in possession for the public work herein expressed, freed and discharged from all trusts, mortgages, charges, obligations, estates, interests, rights-of-way or other easements whatsoever.

SCHEDULE.

No. on Plan P.W.D., W.A., No. 33575.	Owner or Reputed Owner.	Description.	Area.
			a. r. p.
1	Crown	Portion of Swan Location U, being part of Lot 38 on L.T.O. Plan 2372 and being that portion of Glyde Street lying South-west of the prolongation North Westward of the North Eastern boundary of Lot 12 on L.T.O. Plan 1637 (Certificate of Title Volume 16, Folio 78)	0 0 11·5
2	George Stone	Portion of Swan Location U, being part of Lot 38 on L.T.O. Plan 2372 and being that portion of Georges Street lying South West of the South Western boundary of Lot 10 on L.T.O. Plan 1637 (Certificate of Title Volume 16, Folio 78)	0 0 7·4

Certified correct this 21st day of April, 1953.

JOHN T. TONKIN,
Minister for Works.

CHARLES GAIRDNER,
Governor in Executive Council.

Dated this 29th day of April, 1953.

P.W. 2381/52; Ex. Co. No. 677.

Public Works Act, 1902–1950.

LAND ACQUISITION.

Nungarin Road Board—Sheep Dip.

NOTICE is hereby given, and it is hereby declared, that the several pieces or parcels of land described in the Schedule hereto, being all in the Avon District—have, in pursuance of the written approval under the Road Districts Act, 1919–1948 and the Public Works Act, 1902–1950 of His Excellency the Governor, acting by and with the advice of the Executive Council, dated the 29th day of April, 1953, been compulsorily taken and set apart for the purposes of the following public work, namely :—Sheep Dip.

And further notice is hereby given that the said pieces or parcels of land so taken and set apart are shown marked as on Plan, P.W.D., W.A., 33647 (L.T.O. Diagram 17761), which may be inspected at the Office of the Minister for Works, Perth.

And it is hereby directed that the said lands shall vest in Nungarin Road Board for an estate in fee simple in possession for the public work herein expressed, freed and discharged from all trusts, mortgages, charges, obligations, estates, interests, rights-of-way, or other easements whatsoever.

SCHEDULE.

No. on Plan P.W.D., W.A., No. 33647.	Owner or Reputed Owner.	Description.	Area.
			a. r. p.
	Harold James Dayman	Portion of Avon Location 14193 (Certificate of Title Volume 1107, Folio 147)	1 0 2

Certified correct this 14th day of April, 1953.

JOHN T. TONKIN,
Minister for Works.

CHARLES GAIRDNER,
Governor in Executive Council.

Dated this 29th day of April, 1953.

Appendix 6:

Government Gazette, W.A. (8 May, 1953) - 20 Swan River Foreshore resumptions - Bayswater Road Board (Source SROWA).

P.W. 751/52 ; Ex. Co. No. 675.

Public Works Act, 1902-1950. **109**

LAND ACQUISITION.

Bayswater Road Board—Recreation Ground along Swan River Foreshore.

NOTICE is hereby given, and it is hereby declared, that the several pieces or parcels of land described in the Schedule hereto—being all in the Swan District—have, in pursuance of the written approval under the Road Districts Act, 1919-1948, and the Public Works Act, 1902-1950, of His Excellency the Governor, acting by and with the advice of the Executive Council, dated the 29th day of April, 1953, been compulsorily taken and set apart for the purposes of the following public work, namely :—Recreation Ground along Swan River Foreshore.

And further notice is hereby given that the said pieces or parcels of land so taken and set apart are shown marked off on Plan, P.W.D., W.A., 33386 (L.T.O. Plan 6354), which may be inspected at the Office of the Minister for Works, Perth.

And it is hereby directed that the said lands shall vest in Bayswater Road Board for an estate in fee simple in possession for the public work herein expressed, freed and discharged from all trusts, mortgages, charges, obligations, estates, interests, rights-of-way, or other easements whatsoever.

SCHEDULE.

No. on Plan P.W.D., W.A., No. 33386.	Owner or Reputed Owner.	Description.	Area. a. r. p.
1	The West Australian Trustee, Executor and Agency Company, Limited, Executor of the Will of Edward Browne (deceased)	Portion of Swan Location U, being part of Lot 5 (Certificate of Title Volume 312, Folio 65)	4 1 11
2	William Frederick Hemming	Portion of Swan Location U, being Lot 6 (Certificate of Title Volume 1094, Folio 379)	2 3 6
3 and 4	John Toia and William Vincent Toia, Executors of the Will of Francesco Toia (deceased)	Portion of Swan Location U, being part of each of Lots 7 and 10 (Certificate of Title Volume 484, Folio 171)	1 3 13·9
5	Rupert Eric John Clarke and Annie Mary Clarke	Portion of Swan Location V, being part of Lot 447 (Certificate of Title Volume 1118, Folio 730)	1 0 36·9
6	Neville Dudley Watkins	Portion of Swan Location V, being part of Lot 448 (Certificate of Title Volume 1118, Folio 729)	1 0 25·1
7	Elizabeth Olive	Portion of Swan Location V, being part of Lot 449 (Certificate of Title Volume 1111, Folio 297)	1 0 20·6
8	Rose Emma Walker	Portion of Swan Location V, being part of Lot 450 (Certificate of Title Volume 722, Folio 138)	1 0 7·3
9	Arrowsmith Farms, Limited	Portion of Swan Location V, being part of Lot 451 (Certificate of Title Volume 698, Folio 110)	0 3 32·3
10	Noel Ernest Bowers	Portion of Swan Location V, being part of Lot 452 (Certificate of Title Volume 691, Folio 10)	0 3 10·1
11	Cyril Alexander Flood	Portion of Swan Location V, being part of Lot 453 (Certificate of Title Volume 1109, Folio 362)	0 2 28·1
12	John Edward James Snooks	Portion of Swan Location V, being part of Lot 454 (Certificate of Title Volume 1121, Folio 15)	0 2 5·8
13	Alma Rebecca Ellis	Portion of Swan Location V, being part of Lot 455 (Certificate of Title Volume 707, Folio 8)	0 2 28·2
14	Roland Bertie Hill and Edith Muriel Hill	Portion of Swan Location V, being part of Lot 456 (Certificate of Title Volume 611, Folio 95)	0 2 29·8
15 and 16	Malcolm Edward Baness-Skilling	Portion of Swan Location V, being part of each of Lots 457 and 458 (Certificate of Title Volume 1098, Folio 480)	1 1 25·9
17	Children's Cottage Home, Incorporated	Portion of Swan Location V, being part of Lot 459 (Certificate of Title Volume 726, Folio 72)	0 1 18·6
18	Clarice Clara Maude Boyce	Portion of Swan Location V, being part of Lot 460 (Certificate of Title Volume 835, Folio 113)	0 2 0·7
19	Frederick James Harrison	Portion of Swan Location V, being part of Lot 461 (Certificate of Title Volume 874, Folio 152)	0 1 32·6
20	Catherine Kelly	Portion of Swan Location V, being part of Lot 462 (Certificate of Title Volume 548, Folio 41)	0 1 13·2

Certified correct this 23rd day of April, 1953.

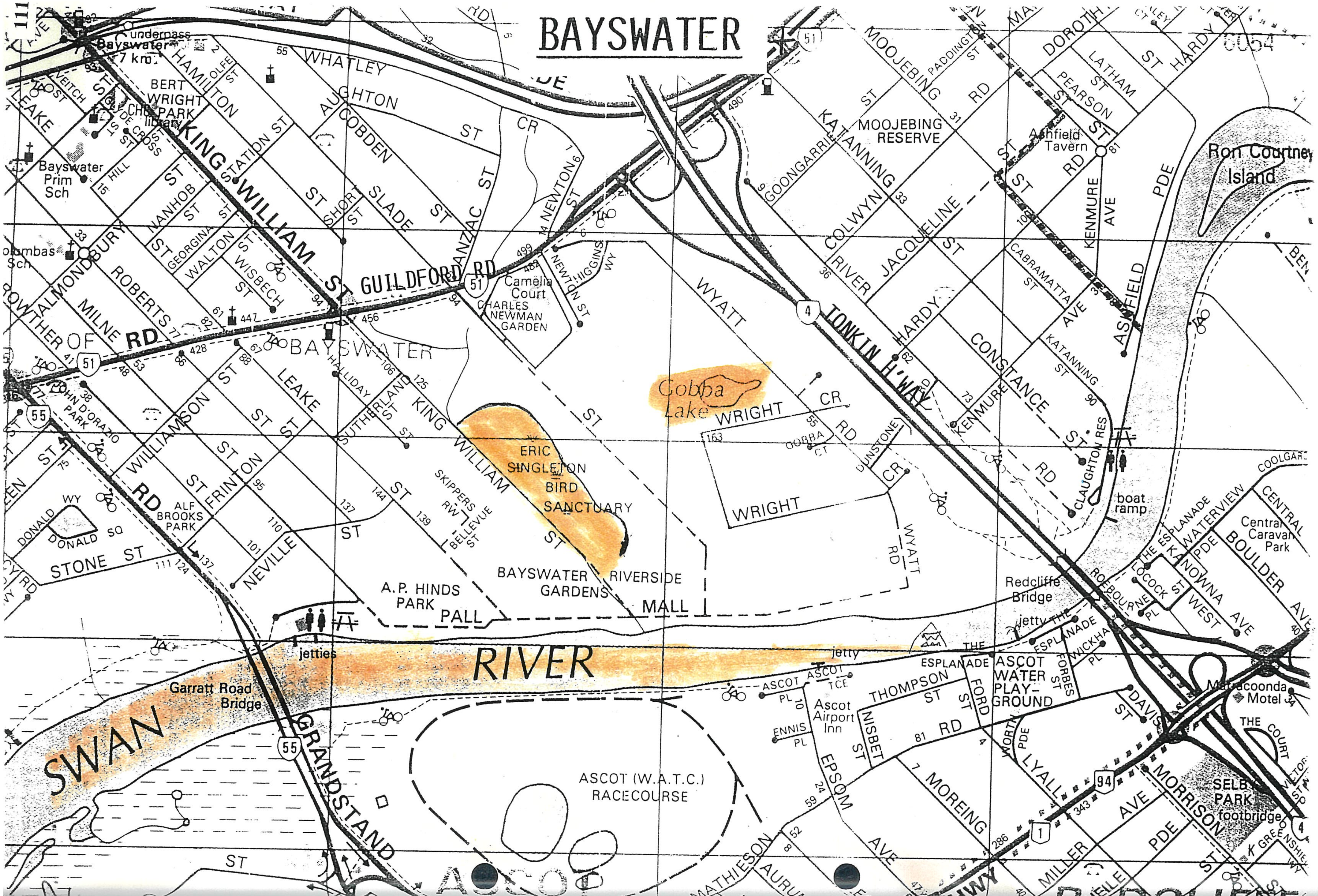
JOHN T. TONKIN,
Minister for Works.

CHARLES GAIRDNER,
Governor in Executive Council.

Dated this 29th day of April, 1953.

Appendix 7:

Copy of "Friends of Gobba Lake" submission to the Minister for the Environment; Employment and Training requesting assistance with the conservation of Gobba Lake (Source Joan Sidebottom).


BAYSWATER
Bayswater 7 km
underpass
WHATLEY
HAMILTON ST
BERT WRIGHT PARK
library
KING WILLIAM ST
STATION ST
AUGHTON
COBDEN
SLADE ST
SHORT ST
ANZAC ST
NEWTON ST
CR
Bayswater Prim Sch
HILL
NANHOB ST
GEORGINA
WALTON ST
WISBECH ST
ROBERTS ST
MILNE
TALMONDBURY
LOWTHER
GUILDFORD RD
Camelia Court
CHARLES NEWMAN GARDEN
HIGGINS WY
WYATT
Gobba Lake
WRIGHT CR
GOBBA CT
DUNSTONE CR
WRIGHT
WYATT RD
ERIC SINGLETON BIRD SANCTUARY
BAYSWATER RIVERSIDE GARDENS
MALL
PALL
A.P. HINDS PARK
KING WILLIAM ST
SKIPPERS RW
BELLEVUE ST
SUTHERLAND ST
HALLIDAY
LEAKE ST
WILLIAMSON ST
FRINTON ST
NEVILLE ST
ALF BROOKS PARK
JOHN D'ORAZIO PARK
DONALD SQ
STONE ST
RD
MOOJEBING ST
MOOJEBING RESERVE
PADDINGTON ST
GOONGARRIE
KATANNING ST
COLWYN
RIVER
JACQUELINE ST
HARDY RD
TONKIN H'WAY
KENMURE
CONSTANCE
CABRAMATTA AVE
KATANNING ST
CLAUGHTON RES
Ashfield Tavern
KENMURE AVE
ASHFIELD PDE
DOROTHY
LATHAM ST
PEARSON ST
HARDY
Ron Courtney Island
boat ramp
Redcliffe Bridge
jetty
jetties
SWAN RIVER
Garratt Road Bridge
GRANDSTAND RD
ASCOT (W.A.T.C.) RACECOURSE
THE ESPLANADE
ASCOT TCE
ASCOT PL
Ascot Airport Inn
ENNIS PL
EPSOM AVE
NISBET ST
THOMPSON RD
FORD ST
ASCOT WATER PLAY-GROUND
FORBES ST
WICKHAM PL
MOREING
LYALL
DAVIS ST
Matacoonda Motel
THE COURT
SELBY PARK
footbridge
MORRISON AVE
MILLER
ROEBOURNE PL
FOCOCK ST
KANOWNA WEST AVE
WATERVIEW PDE
CENTRAL AVE
Central Caravan Park
BOULDER AVE
MATHIESON
COOLGARDIE

"FRIENDS OF GOBBA LAKE"
correspondence to:
c/- JOAN SIDEBOTTOM
1 WRIGHT CRESCENT
BAYSWATER W.A. 6053
Phone 9370 3628

19th September, 1997

Dear Sir,

Reference: WETLANDS CONSERVATION POLICY FOR WESTERN AUSTRALIA LAUNCHED AUGUST 1997

I am writing to you on behalf of 233 petitioners, who in November 1993 signed a petition requesting the City of Bayswater to preserve GOBBA LAKE (situated Cnr. Wright Crescent & Wyatt Road Bayswater) and the perimeter of the lake which is owned by the City of Bayswater to be designated as Public Open Space. In December 1994 we were advised by the City of Bayswater our petition had not been successful and the rezoning of Gobba Lake and its surrounds not be pursued (letter enclosed).

I am now writing to your Department on behalf of our formed group "FRIENDS OF GOBBA LAKE", and also 233 petitioners who in November 1993 signed the petition,We ask for your co-operation in the rezoning of this area. Enclosed is a copy of block plan LOT 3 Wright Crescent and Wyatt Road Bayswater, the land concerned, which I obtained from D.O.L.A. We are now pursuing this matter further as we need to value our WETLAND AREAS and our main concern is GOBBA LAKE and the surrounding area LOT 3.

LOT 3 Wright Crescent & Wyatt Road, Bayswater is at present zoned Urban and we request your Department to amend the Town Planning Scheme to have LOT 3 REZONED TO P.O.S. & RESERVED FOR PARKS AND RECREATION.

We have read the recently launched "Wetlands Conservation Policy for W.A." and referring to page 5 - Scope of Policy - The "Ramsar" Convention of Wetlands defines wetlands as"

"Areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh brackish or salt....."

The water in Gobba Lake is fresh, and when overflowing runs through a large drain outlet into the Swan River, and there is an abundance of birdlife living and breading on this lake.

Many people have put in long hours canvassing the District and bringing to ratepayers attention that the City of Bayswater could have intentions of selling off Gobba Lake and its surrounds when sewer is introduced into this area which could be 18months to 2 years away

.....2

The Eric Singleton Bird Sanctuary which is in the same vicinity as Gobba Lake was officially opened in 1977, this was a man-made lake and a bore was installed to ensure adequate water supply in the dry season and artificial nest boxes were introduced for the breeding season, whereas Gobba Lake is an all season large deep water lake which never dries out, it has an abundance of plant life, trees and reeds surround this deep lake. In discussion with Eric Singleton who is the warden for the Singleton Bird Sanctuary, advised us there were approximately 35 different species of birds who live breed and frequent Gobba Lake.
This lake supplements the shallower Singleton Bird Sanctuary and is in the glide path for visiting birdlife and priorities should be made to protect wetland areas both for wildlife and for humans.

The City of Bayswater advised in their letter, 15th December, 1994 (enclosed) the lake was not included for protection under the Environmental Protection Policy the reason was Gobba Lake did not meet the criteria as it was an artificially created stretch of water. Prerequisites for lakes include -

a) Naturally occurring stretch of water.

OUR COMMENT:
We have received information from the Bayswater Historical Society as follows :
In this area "off Bayswater Road" which is presumed was the old name for Guildford Road) were about four (4) brickworks as per POSTAL STREET DIRECTORIES 1898 to 1903

Names of Brickworks: WALKERDEN Bros.
BURGES - ALFRED J, EDWARD J, & J, (JAMES)
SWAN BRICK & QUARRY - CHAS PARKER MANAGER
W.A. BRICKWORKS

These brickworks excavated clay from the Wetland (now Gobba Lake) to make bricks, this being the reason for the size and depth of the Lake today - This Lake would be approximately 100 years old.

b) Minimum area of 1000 square metres.

OUR COMMENT:
This lake exceeds 1000 square metres.

c) Containing water as at 1st December 1991.

OUR COMMENT:
This area contained water over 100 years ago.

FURTHER INFORMATION RECEIVED:

The City of Bayswater have a DRAFT called MUNICIPAL INVENTORY OF HERITAGE SITES AND LISTED ON THIS DRAFT IS GOBBA LAKE the draft states - Gobba Lake and surrounding land owned by Council, Lot 3, which covers land Wyatt Road and Wright Crescent zoned for Recreational purposes when funds available, it is listed as Site 8 - Lot 3/ 59-71 Wyatt Road Bayswater.

Attached for your information is correspondence to and from the City of Bayswater, firstly our request for deep sewerage in this area and when we realised Council could be considering selling off Lot 3 Wyatt Road we petitioned and presented this to Council.

Yours faithfully

On behalf of The Friends
of Gobba Lake.

Copies of correspondence has been sent to:

Minister for the Environment
Conservation Council of W.A.
Minister for Planning
Ministry of Planning

MINISTER FOR THE ENVIRONMENT;
EMPLOYMENT AND TRAINING

Our Ref: 07458

Ms J Sidebottom
1 Wright Crescent
BAYSWATER WA 6053

Dear Ms Sidebottom

WETLANDS CONSERVATION POLICY FOR WESTERN AUSTRALIA

Thank you for your letter of 9 August 1997 regarding the Wetlands Conservation Policy and Gobba Lake. I would also like to thank you for the background information you enclosed with that letter.

I understand that the Water and Rivers Commission have assessed Gobba Lake to have significant conservation values, and that the lake may warrant consideration for protection under the Swan Coastal Plain Lakes Environmental Protection Policy (Lakes EPP). Nevertheless, Gobba Lake appears to not meet the prescribed criteria for inclusion in the Lakes EPP, in as much as the minimum standing surface water area requirement of 1000 square metres as at 1 December 1991 was not met.

From the background information enclosed it appears that Gobba Lake was excavated for clay some decades ago. Because of this and the "artifical" nature of the wetland it would be preferable for the City of Bayswater, as the body in which the wetland is vested, to approach the EPA over possible EPP protection of the lake.

The criteria used in the Lakes EPP unfortunately do not provide for the protection of semi-permanent wetlands. Many of these sumplands and damplands are known to have important conservation value. In light of this situation, I look forward to the EPA's audit of effectiveness and compliance with the Lakes Policy and the Authority's recommendations on any changes it believes may be warranted. It is a requirement of the EPP process that this policy be reviewed within seven years and the EPA is expected to commence the review process within the next 12 months.

Although it may be sometime before the Lakes EPP is revised and any new criteria established, the local government planning process provides mechanisms for the protection of areas such as Gobba Lake. It is therefore appropriate that you continue to liaise with Bayswater City Council as it is the key decision making authority in this regard.

In view of the above I do not consider that a meeting with me is necessary at this time.

Yours sincerely

[redacted]

CHERYL EDWARDES (Mrs) MLA
MINISTER FOR THE ENVIRONMENT
- 7 OCT 1997

cc. Chairman, Environmental Protection Authority

18th FLOOR, ALLENDALE SQUARE, 77 ST. GEORGE'S TERRACE, PERTH 6000 TELEPHONE: (08) 9421 7777 FACSIMILE: (08) 9221 4665/8