



Historical Association of Wetlands and Rivers in the Perth-Bunbury Region



WATER RESOURCE TECHNICAL SERIES

WATER AND RIVERS COMMISSION REPORT WRT3 1996



WATER AND RIVERS
COMMISSION

Cover Photograph:
Mundaring Weir. Photograph courtesy of Battye Library 4675B/32.

Historical Association of Wetlands and Rivers in the Perth-Bunbury Region

Report to Water and Rivers Commission

**Mark A. Lund
& Helen C. Martin**

Department of Environmental Management
Edith Cowan University

WATER RESOURCE TECHNICAL SERIES

WATER AND RIVERS COMMISSION REPORT WRT3 1996



**WATER AND RIVERS
COMMISSION**

© Water and Rivers Commission of Western Australia, 1996

Published by the Water and Rivers Commission

Hyatt Centre
3 Plain Street
East Perth, Western Australia 6004
Telephone: (09) 278 0300

Publication Number: WRT3
ISBN 0-7309-7249-6

STREAMLINE ABSTRACT

This study and report documents the historical association of wetlands and rivers of the Perth - Bunbury Region to people of European origin. It covers their first exploration of the Region, early settlement and farming development, water supply developments for domestic use and irrigation, the development of the timber industry and land drainage. It draws up a list of important sites within each Local Government Area in the Region

The study contributes to a series of documents published for the purposes of water allocation planning in the Perth-Bunbury Region. Other publications focus on the following topics:

- Recreational Use of Waterbodies in the Perth - Bunbury Region
- Report on an Investigation into the Aboriginal Significance of Wetlands and Rivers in the Perth - Bunbury Region
- Environmental Significance of Wetlands and Rivers in the Perth - Bunbury Region
- Scientific and educational Use of Wetlands and Rivers in the Perth - Bunbury Region

Key Words

Water Resources Planning, Historical Association, European settlement, Wetlands and Rivers, Perth - Bunbury, Western Australia

ACKNOWLEDGEMENTS

The authors wish to express their thanks to the following individuals and organisations who have provided information and resources used in this study.

Alice Fyfield of the National Trust of Australia (WA)
Heritage Council of Western Australia
Australian Heritage Commission
Dr Pierre Horwitz and Angela Wardell-Johnson of Edith Cowan University
All respondents to the questionnaire we sent out (listed in the appendix)
All who provided feedback on the draft version of this report
Edith Cowan University

and to Peter Williams of the Water Authority of WA who managed this project.

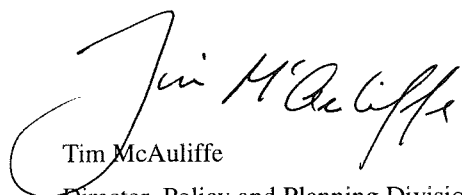
FOREWORD

The Water and Rivers Commission's Policy and Planning Division is currently undertaking a series of studies aimed at developing a water resources allocation strategy for each of the six regions into which the State has been divided for the purpose. Allocation strategies are to be based on the Commission's aim of promoting a sustainable balance between environmental, economic and social values of the State's water resources. This report contributes directly to that aim.

This current study relates to the Perth-Bunbury Region of the South West, the first region to be covered. As part of the study consultants were engaged by the Commission to report on the historical association of wetlands and rivers within the Region.

This report by the consultants is being published by the Commission in order to inform the community, and to encourage wide debate on this component of the community's need for water, and on the allocation planning process as a whole. While this report has been prepared consistent with the Commission's resource management aims, many of the opinions expressed are those of the consultant and are not necessarily all endorsed by the Water and Rivers Commission.

The Commission would welcome comments on the report from any interested person or organisation. Comments should be addressed to the undersigned.



Tim McAuliffe

Director, Policy and Planning Division

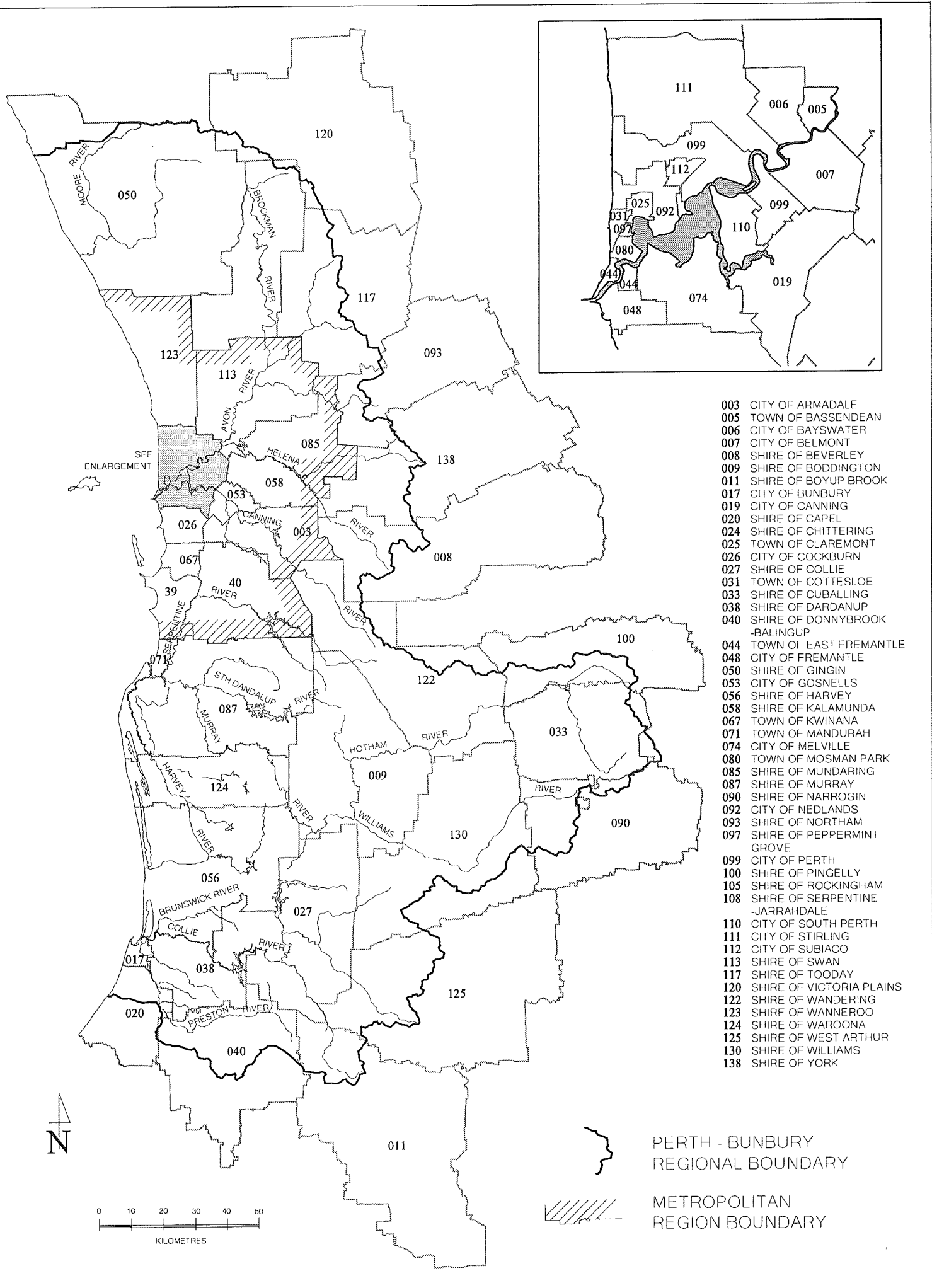
Water and Rivers Commission

November 1996

ACKNOWLEDGMENTS	(ii)
FOREWORD	(iii)
CONTENTS	(iv)
1.0 INTRODUCTION.....	1
1.1 BACKGROUND	1
1.2 AIMS OF THE STUDY	1
1.2 STRUCTURE OF THE REPORT	1
1.3 STUDY REGION.....	2
1.4 EARLY EXPLORATION.....	2
1.5 GENERAL HISTORY OF EARLY SETTLEMENT	2
1.6 A TIMELINE OF WATER RELATED EVENTS IN THE HISTORY OF THE REGION	2
The early years - 1829 to 1839	3
The colony struggles 1840 -1879.....	3
The goldrush years 1880-1889	4
Water supply and sewage systems 1890- 1909.....	5
The war and postwar years 1910- 1929	7
The Great Depression 1930 -1939.....	8
The second war and postwar years 1940 -1959	9
The boom years 1960 to 1979	9
Unprecedented growth 1980-1995.....	11
1.7 DEMANDS FOR WATER	13
2. METHODOLOGY.....	14
2.1 OVERVIEW.....	14
2.1.1 SOURCES OF INFORMATION.....	14
2.1.2 CONTACTS.....	14
2.2 INFORMATION ACQUISITION	14
2.2.1 TYPE OF INFORMATION REQUESTED	14
2.2.2 STATE AGENCIES	15
2.2.3 MAPPING	15
2.2.4 COMPILING THE INFORMATION	15
3. IMPORTANT HISTORICAL AREAS	16
3.1 METROPOLITAN LOCATIONS	16
3.1.1 ARMADALE.....	16
3.1.2 BASSENDEAN	18
3.1.3 BAYSWATER.....	20
3.1.4 BELMONT	22
3.1.5 CANNING.....	24
3.1.6 CLAREMONT.....	26

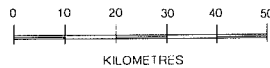
3.1.7 COCKBURN.....	28
3.1.8 COTTESLOE	29
3.1.9 FREMANTLE & EAST FREMANTLE	30
3.1.10 GOSNELLS	31
3.1.11 KALAMUNDA.....	32
3.1.12 KWINANA	33
3.1.13 MELVILLE.....	33
3.1.14 MOSMAN PARK	35
3.1.15 MUNDARING.....	35
3.1.16 NEDLANDS	36
3.1.17 PEPPERMINT GROVE.....	37
3.1.18 PERTH (VINCENT, SHEPPARTON, CAMBRIDGE, PERTH).....	38
3.1.19 ROCKINGHAM.....	39
3.1.20 SOUTH PERTH.....	40
3.1.21 STIRLING	42
3.1.22 SUBIACO.....	43
3.1.23 SWAN	44
3.1.24 WANNEROO.....	47
3.2 COUNTRY LOCATIONS	50
3.2.1 BEVERLEY.....	50
3.2.2 BODDINGTON	52
3.2.3 BOYUP BROOK	54
3.2.4 BUNBURY.....	56
3.2.5 CAPEL	59
3.2.6 CHITTERING.....	61
3.2.7 COLLIE	63
3.2.8 CUBALLING	65
3.2.9 DARDANUP.....	67
3.2.10 DONNYBROOK-BALINGUP	69
3.2.11 GINGIN	72
3.2.12 HARVEY	75
3.2.13 MANDURAH.....	78
3.2.14 MURRAY	81
3.2.15 NARROGIN.....	84
3.2.16 NORTHAM	88
3.2.17 PINGELLY	90
3.2.18 SERPENTINE-JARRAHDALE	93
3.2.19 TOODYAY.....	96

3.2.20 VICTORIA PLAINS	99
3.2.21 WANDERING.....	101
3.2.22 WAROONA.....	103
3.2.23 WEST ARTHUR	105
3.2.24 WILLIAMS.....	107
3.2.25 YORK	110
4. CONCLUSIONS	113
4.1 CONCLUSIONS	113
4.2 FUTURE RESEARCH REQUIREMENTS	113
5. REFERENCES.....	114
6. APPENDICES.....	117
6.1 APPENDIX A	117
6.2 APPENDIX B	119
6.3 APPENDIX C	120



- 003 CITY OF ARMADALE
- 005 TOWN OF BASSEDEAN
- 006 CITY OF BAYSWATER
- 007 CITY OF BELMONT
- 008 SHIRE OF BEVERLEY
- 009 SHIRE OF BODDINGTON
- 011 SHIRE OF BOYUP BROOK
- 017 CITY OF BUNBURY
- 019 CITY OF CANNING
- 020 SHIRE OF CAPEL
- 024 SHIRE OF CHITTERING
- 025 TOWN OF CLAREMONT
- 026 CITY OF COCKBURN
- 027 SHIRE OF COLLIE
- 031 TOWN OF COTTESLOE
- 033 SHIRE OF CUBALLING
- 038 SHIRE OF DARDANUP
- 040 SHIRE OF DONNYBROOK -BALINGUP
- 044 TOWN OF EAST FREMANTLE
- 048 CITY OF FREMANTLE
- 050 SHIRE OF GINGIN
- 053 CITY OF GOSNELLS
- 056 SHIRE OF HARVEY
- 058 SHIRE OF KALAMUNDA
- 067 TOWN OF KWINANA
- 071 TOWN OF MANDURAH
- 074 CITY OF MELVILLE
- 080 TOWN OF MOSMAN PARK
- 085 SHIRE OF MUNDARING
- 087 SHIRE OF MURRAY
- 090 SHIRE OF NARROGIN
- 092 CITY OF NEDLANDS
- 093 SHIRE OF NORTHAM
- 097 SHIRE OF PEPPERMINT GROVE
- 099 CITY OF PERTH
- 100 SHIRE OF PINGELLY
- 105 SHIRE OF ROCKINGHAM
- 108 SHIRE OF SERPENTINE -JARRAHDALE
- 110 CITY OF SOUTH PERTH
- 111 CITY OF STIRLING
- 112 CITY OF SUBIACO
- 113 SHIRE OF SWAN
- 117 SHIRE OF TODDAY
- 120 SHIRE OF VICTORIA PLAINS
- 122 SHIRE OF WANDERING
- 123 SHIRE OF WANNEROO
- 124 SHIRE OF WAROONA
- 125 SHIRE OF WEST ARTHUR
- 130 SHIRE OF WILLIAMS
- 138 SHIRE OF YORK

SEE ENLARGEMENT



PERTH - BUNBURY REGIONAL BOUNDARY

METROPOLITAN REGION BOUNDARY

1.0 INTRODUCTION

1.1 Background

The Water Authority of Western Australia (WAWA) in conjunction with the Western Australian Water Resources Council (WAWRC) initiated a series of studies in the late 1980's to facilitate the responsible planning and allocation of water resources in the Perth-Bunbury region (see Figure on opposite page). These studies covered recreational, cultural, scientific, ecological and social needs for water within the region. As a result of the studies a draft regional allocation plan was produced in 1991 (WAWRC 1991). The studies were published as a series of WAWRC publications (O'Connor et al. 1989; Feilmann Planning Consultants 1987; Olsen & Skitmore 1991; LeProvost, Semeniuk & Chalmer 1987). Unfortunately, circumstances prevented completion of the study investigating European historical associations with wetlands and rivers in the region. This study will finish this investigation and thereby complete the series of studies. This report was written by scientists rather than historians and so has consisted of a summary of historical work rather than new interpretations of primary sources.

1.2 Aims of the Study

Since settlement in the early 1980's Europeans¹ have had a profound effect on the region's environment. This has resulted in wetlands being drained, river flows altered, water bodies polluted and large demands placed on water resources for drinking, agricultural, and recreation purposes. Indeed, without European settlement none of these WAWRC studies would have been necessary as Aboriginal people had little impact on water resources. Although they did exploit the wetlands and rivers for food and water and may have burnt fringing vegetation to 'improve' growth, this can probably be viewed as sustainable use. European use of water resources has been largely exploitative and environmental degradation and water use are linked. At present, there are examples of where this link is being broken. This series of studies aims to provide information to be used in the strategic planning of water allocations within the Perth-Bunbury region. This study concentrates on the European settlers and things of historical significance to them that are directly or indirectly related to water. This will provide a guide to

where significant historical sites are located so that these can be considered in any future water developments.

1.2 Structure of the Report

This report is divided into the following sections:

1. Introduction - which details general aspects of the history of the study region, from early exploration to first settlement and presents a timeline showing major events of relevance to water resources. The importance of many of the events to water resources and the environment is highlighted at the end of the section.
2. Methodology - as any study of this nature is limited by the amount of time available in which to complete it, details are provided of how the study was undertaken and why material was included or excluded from the study. The aim is to show the limitations of the study and to illustrate the general approach taken by the authors.
3. Important Historical Areas - the data collected for each local government or shire area. Country locations are also given a brief description and a short history. Council areas within Perth are kept together and no individual histories are provided as much of the detail is available in each data table or in Section 1. A bibliography is provided at the end of each section for further reading.
4. Recommendations - a series of recommendations are made for water resource allocation based on the information collected in the study.
5. References - references cited in the text are listed in Appendices

¹ The term 'Europeans' has been used to broadly refer to all recent immigrants to Western Australia, from the original British Colonists, through to European and Asian immigrants.

1.3 Study Region

The Perth-Bunbury Region is comprised of the Preston, Collie, Harvey, Murray, Swan-Canning, and Moore River Drainage Basins, excluding the inland Avon River catchment. The region covers an area of approximately 50 000 km², extending southwards from the northern boundary of the Gingin Shire to the Shires of Boyup Brook and Donnybrook. The region extends inland a varying distance to the hydrologic divide of the river catchments listed above. (see Figure opposite p1)

The Perth-Bunbury region comprises three main geographical regions, the Swan Coastal Plain, the Darling Range and the inland agricultural areas to the east of the Range known as the Darling Plateau.

The study area encompasses 50 local government boundary areas although some localities may only partially fall within the study area due to differences between catchment and government boundary divisions. As a result some shires are also covered by other reports (see Horwitz & Wardell-Johnson 1995). The rivers of the region have also been covered in WAWRC (1992) and Olsen and Skitmore (1991).

1.4 Early Exploration

The Dutch were the first Europeans to discover Western Australia (WA) in 1616 and over subsequent years mapped the coast and lost many ships to reefs. The Dutch found that the land contained little in terms of accessible supplies and the Aboriginal people were seen as 'fierce savages' (Appleyard & Manford 1979). As a result they made no attempt to claim the land. Between the 1700's and early 1800's both French and British explorers mapped the WA coastline, although it was a British explorer (George Vancouver) who found the best natural harbour on the coast which he named King George Sound (in present day Albany). This provided a valuable base for more detailed explorations of the coast. Rivalry between British and French interests allowed Captain James Stirling to persuade Governor Darling of the New South Wales Colony to allow him to explore the Swan River with the intention of determining its suitability as a site for a new colony. His reports led to the eventual establishment of a British colony on the Swan River in 1829.

1.5 General History of Early Settlement

The early settlement of Perth and other cities/towns within the region has been well documented by historians (eg. Appleyard & Manford 1979; Stannage 1981; Ewers 1971; Barker & Laurie 1992; Richards 1978). Typically in these accounts the settlers use and needs in relation to water has been secondary to the political and social intrigues of the times. The publication of 'Water: The abiding challenge' by Morony (1980) has remedied this situation for Perth. The book provides a comprehensive history of water supply, drainage and sewage in Perth. No similar histories have been written for the other cities/towns within the study area.

Captain Stirling visited the Swan River in March, 1827 and spent 9 days exploring (Markey 1977). He concluded that the area was supplied with a wealth of fresh water sources, including wetlands, streams, springs and accessible groundwater. He also concluded that the climate was moderate. At the beginning of autumn he was fortunate to find the area with ample water supplies. On his return in 1829, he located the Swan River Colony (later renamed Perth) on the northern banks of the Swan River, just east of Mount Eliza. Why he choose this particular site has been cause for much speculation (see Markey 1977 and Seddon & Ravine 1986). The colony was surrounded to the north by ten wetlands which at times of high rainfall joined and flowed through Claise Brook to the Swan River. In the colony's first summer, it became apparent that the wetlands were an unreliable source of water and many settlers resorted to using groundwater extracted from shallow wells. The same situation occurred in Fremantle where the two inland wetlands also proved unreliable as a water resource and were quickly filled in and built over. Once the wetlands lost their importance for a water supply they turned from assets to liabilities restricting further growth of the city and posing drainage problems.

1.6 A Timeline of Water Related Events in the History of the Region

The following is a summary of major historic events that are related to water in Region, although most of the information concerns Perth (based on information from Ewers 1971; Jarvis 1979; Markey 1977; Morony 1980; Parker 1983; Seddon & Ravine 1986; Tauman 1978; WAWA 1994; WAWRC 1992). More specific details can be found in the shire histories and data tables.

The early years - 1829 to 1839

- 1829 - Swan River Colony founded.
- 1829-64 - Water for ships docking at Fremantle is obtained at a price, from the well of Mr Bateman. Water is transferred in barrels by boat
- 1829-85 - Swan River used as the principal means of transport for both goods and passengers between Perth and Fremantle.
 - Fremantle Trust encourages the draining and infilling of all wetlands around Fremantle.
- 1829-90 - Most drinking water is supplied by shallow wells, wealthier people may also have a water storage tank, otherwise water from the drains and lakes is used.
- 1831 - The construction of Burswood Canal allows boat passage from Fremantle, past Heirisson Island to Guildford.
- 1832 - Henry Reverley constructs the first of the colony's reservoirs by excavating an area of land between Mill St and William Street in Perth. The reservoir is to be used to power a mill.
- 1833 - Agricultural output is so poor, that the colony nearly starves before supplies arrive by ship.
 - First drains in the Colony are built down middle of Perth's major streets to control flooding (also used for household scraps and sewage).
 - A rival mill, built by Samuel Kingsford (on Mill St) is given perpetual rights to four of the lakes as water sources, which marked the end for Reverley's Mill. It is also hoped that this venture would reduce the chances of flooding, but it didn't.
- 1834 - Wool is first exported, and is an agricultural success.
- 1836 - Jarrah is first exported to England.
- 1837 - Whaling operations commence in Cockburn Sound.
- 1839 - A dam is constructed across the Swan River ie. first Causeway.

The colony struggles 1840 -1879

- 1842 - Perth's first jetties are built at William and Mill St into the Swan River.
- 1843 - Canning Bridge and a bridge over the Causeway are built.
- 1845 - Sandalwood is exported.
- 1848-54 - Lake Kingsford is deepened by removing sediment in summer when it is dry. The sediment is used to raise the height of the surrounding land, of which a condition of sale is that it is raised by 0.6 m above the winter level of the lake. This aims to reduce flooding of the area.
- 1848 - A drain is constructed from Lake Kingsford to Claise Brook to control peak water levels in the lake. Lakes Irwin and Sutherland are drained into Lake Kingsford. One aim is to improve the quantity of water available to wells.
- 1850 - Bridges had been built over the Serpentine River, Collie River (at Australind) and Vasse River.
- 1850's - Mounts Bay is partially infilled with rubble through quarrying of the limestone cliffs of Mount Eliza.
- 1854 - The lake drains of 1848 are upgraded, but numerous difficulties are encountered.
- 1855 - Small scale dredging of Perth water.
- 1862 - Disastrous floods affect Perth and settlements along the Avon River.
 - Main Perth drain collapses.
- 1862-82 - Mason and Bird Timber Company use barges on the Swan River to transport timber from Swan to Nicholson Bridge.
- 1864 - Lake Kingsford is drained.
- 1866 - Water powered timber mill is built on Canning River.
- 1867 - A small jetty from Mr Bateman's well is built to allow ships to collect their own water.
 - Fremantle Bridge is built.
- 1868 - Appointment of 'Inspector of Nuisances' by both Fremantle and Perth Councils.

- 1868-69 - More serious flooding occurs in Perth.
- 1869 - The colonies first dredge is acquired.
 - Perth drains are upgraded.
- 1870 - 72 - First artesian bores are dug around Gosnells and upper Canning Bridge.
 - Private railways are established from Darling Scarp to Canning River, Rockingham and Busselton by timber companies.
- 1871 - A channel is dredged from the Narrows to William St Jetty.
- 1872 & 1873 - Severe flooding occurs in many parts of the region.
- 1875 - Wells dug by prisoners under Fremantle Goal provide a large supply of freshwater, this was pumped by prisoners into a reservoir. A main pipe was laid down High Street from the Goal reservoir to the new jetty in the harbour and pipes directed to the Railway Station, Public Officers headquarters, the Land and Water Police stations and Round House goal.
- 1876 - Fremantle Council fails to introduce regulations for the adoption of a dry-earth sewage system, despite demands from the public.
- 1877 - The Perth drains are upgraded again.
 - Attorney-General produces suggested by-laws for the disposal of nightsoil, these are not taken up in full by either Council, although Fremantle Council does ban dumping of nightsoil into rivers or the sea within it's municipality.
- 1878 - Normal practice is for nightsoil to be used on market gardens.
 - Perth City Council backs out of introducing a dry-earth system but resolves to encourage citizens to use it.
- 1879 - Landfill of Perth Water to form the Esplanade.
- 1879-80 - Private contractors employed by the Councils to remove nightsoil.
 - A Government rail line is built between Northampton and Geraldton.

The goldrush years 1880-1889

- 1880-81 - An artesian bore is sunk in the Perth railways yards, this is used to supplement Perth's water supplies in 1891.
- 1881 - Fremantle to Guildford railway is completed. This effectively put an end to use of the Swan River as a means of transport. The line and Perth station, which is built on a drained wetland proved to be an effective barrier to development further north for many years. Ferries link Perth to South Perth until they are replaced with the New Causeway and Narrows Bridge. A rail bridge is built at Fremantle.
- 1881-89 - The Guildford rail line is extended to Clackline with branches to Toodyay, Northam and to Beverley.
- 1883 - Construction of Barrack Square by reclamation, first of a series of infill projects in Mounts Bay.
 - Flooding occurs again in Perth.
- 1884 - Government sets up Sanitation Commission which reports that sewers were unsuitable for both Perth and Fremantle, cesspits should be abolished and the dry-earth system should be introduced.
 - Governor Broome approves construction of three public taps down High St in Fremantle.
- 1885-93 - Gold discovered in the interior, this is followed by a gold rush. The population of Perth increases at record rates, there is a lot of building as wealth pours into the city.
- 1887 - About 20 wealthy members of the community, paid for connections to the Fremantle Harbour main.
 - Fremantle introduces sewage by-laws.
 - Government rail line from Bunbury to Boyanup completed, but was so poorly laid as to be unusable.

- 1888 - Members of the west ward of Fremantle are allowed to be connected to the Harbour Main, but not north and south wards.
- A dam was constructed at Clackline to allow trains to fill up with water at a reasonable cost. This illustrates the need for regular water supplies for the rail network, especially as the line was extended towards Kalgoorlie.
- 1889 - The wells, the main and reservoir in the Fremantle goale are upgraded.
- A rail line linking Beverley and Albany is completed and run by a private company in a land-grant deal.

Water supply and sewage systems 1890- 1909

- 1890 - Work starts on Victoria Reservoir, materials for which are transported up the river and by rail to the site.
- 1890's - Legislation is introduced covering regulations for sanitary arrangements, detection and abatement of 'public nuisances'.
- A serious outbreak of typhoid is the trigger for the construction of a sewage system.
- Fremantle's Board of Health, starts to 'clean' up the town by closing cesspits and contaminated wells.
- Few of the State's roads are sealed with bitumen, most are just gravel or sand.
- Another land-grant scheme results in the construction of a rail line from Perth to Geraldton (joining the existing line at Walkaway).
- The scarcity of water in the goldfields became a major concern for the government and plans are devised by C.Y. O'Connor to pipe water to Coolgardie from a dam in Perth.
- 1891 - Victoria Reservoir completed, providing Perth with it's first water from the Darling Scarp.
- 1892 - 'Municipal Water Supply Preservation Bill 1892' was passed to protect the catchment of the reservoirs.
- All wards in Fremantle are reticulated for drinking water.
- 1893 - A double pan system is introduced into Perth.
- Government railway from Perth to Bunbury completed and later extended to Collie.
- 1894 - Perth City Council introduces its own night soil collection service.
- 1896 - Fremantle Council introduces a covered pan system for sewage disposal.
- The Government passed the 'Perth Waterworks Purchase Bill' and bought the Water Works Co and let control pass back to the Council. The Council had been trying to get control of the company soon after its formation, as the Victoria reservoir had been allowed to become polluted. The Company becomes the Waterworks Board.
- Fremantle strengthens it's sewage by-laws.
- Fremantle Council contracts out nightsoil collection and leases its sewerage farm to Laudehr and Gillespie.
- 1896-98 - Perth Council introduces a series of by-laws aimed at improving sanitation and drainage.
- 1897 - Under C.Y. O'Connor's direction, the bar across the mouth of the Swan River was removed by explosives, thus changing the nature of the estuary forever. This allowed the construction of Fremantle's Inner Harbour, which saw it replace Albany as the principal port in the state. The bar was made of

- Calcarenite and not sand as Stirling had originally predicted. Previous attempts to remove the bar occurred in 1849 and 1869 without success.
- A channel is dredged between Barrack St jetty and both Mends and Coode St jetties.
 - 'Bathwater' carts were used to supply Fremantle's Canvas Town (a shanty town established during the gold rush).
 - Peak of typhoid epidemic in Perth.
 - Perth experiences the 'Great Water Famine' and the Board responds by laying larger mains from Victoria reservoir, sinking another artesian bore at the Railway yards and by carting water to badly affected areas.
- 1897-1904 - The drains of the city were upgraded resulting in raw refuse being discharged into the Swan River.
- 1898 - Fremantle Council demolishes Canvas Town.
- The Board is forced to resign and its members are replaced in response to allegations of corruption and mismanagement. The new Board extends the mains into Subiaco, Leederville, Victoria Park, North Perth and Mt Lawley. They introduce an aeration process to purify the water, and increase the storage capacity of Victoria reservoir.
 - A temporary bridge was built next to the old Fremantle traffic bridge which had become unstable for traffic use
- 1898 - The Perth City Council had many problems with a sewage disposal site in Bayswater. As a result waste was pumped to a site further away, where the pans were steam cleaned and the waste was filtered and settled before being used to grow crops for council horses.
- 1899 - The Fremantle Water Supply Bill passed control of Fremantle's water supply from the Government to an independent Board. The Board sank more bores near the Goal, built a new reservoir at Swanbourne St and started treating the water with lime to remove iron salts.
- A private member's bill was introduced into parliament which allowed Peppermint Grove, Cottesloe and Cottesloe Beach to be supplied by the private Osborne Water Supply Company.
 - The 'Metropolitan Waterworks Bill' gave the Waterworks Board more power to collect revenue.
 - Laudehr and Gillespie introduce the two-pan system to Fremantle and extend the sewage farm.
- 1900 - 'Land Drainage Act' was passed in which the Government assumed responsibility for the drainage of rural land.
- 1900's - Comprehensive drainage scheme started around Harvey.
- Harvey River de-snagged and straightened.
 - Waroona and Harvey main drains were built.
- 1900-30 - Large areas of land brought into agricultural production, this led to salinization of many streams, rivers and wetlands on the Darling Plateau.
- 1902 - Coolgardie pipeline is finished, pumping tests take place, and amid constant criticism C.Y. O'Connor commits suicide. Eight months later water arrives in Coolgardie.
- 1903 - The Osborne Water Supply Company is bought by the Government. Bores are sunk at Butler's Swamp (Lake Claremont) and more domestic reticulation is installed
- The 'Metropolitan Water and Sewerage Bill' combined for the first time water supply and sewerage under the same authority.
 - Hugh Oldham is asked to devise a bacterial system to deal with sewage.
 - Mundaring Dam is completed.

- 1904 - The responsibilities of the Waterworks Board are invested in the Public Works Department by the 'Metropolitan Waterworks Act Amendment Bill'.
- After a successful demonstration of septic tanks and bacterial filters at the Midland Junction Railway Workshop, the system is installed by some private citizens.
- Area fringing Geographe Bay west of Capel is drained by a network of channels.
- 1907 - Construction of Perth's sewerage main begins.
- Drainage schemes built at Vasse and Wonnerup.
- 1908 - Old Fremantle Traffic bridge is upgraded and supports a new tramway to the northern parts of the city.
- 1909 - The Government proclaims the '1904 Water and Sewerage Act' and appoints a Metropolitan Board of Water Supply and Sewerage, after political manoeuvring the Board was disbanded and absorbed into the Minister for Works Department. This was an important step as for the first time there was a state controlled integrated approach to drainage, sewerage and water supply in the metropolitan area.

The war and postwar years 1910- 1929

- 1910-11 - Another storage reservoir is constructed at Mt Eliza.
- 1911 - The availability of galvanised iron water tanks allows many householders to collect water off roof tops. This is needed as many areas still have limited access to reticulated water, water is also variable in quality and high in price.
- A pipehead dam is constructed across Bickley Brook.
- Below ground cesspits are abolished by the Health Act.
- 1912-67 - The use of septic tanks for residential housing becomes increasingly common as subdivisions are opened up at a faster rate than sewers can be provided.
- 1912 - A new Department of Water Supply, Sewerage and Drainage is established by the incoming Labour Government.
- Claise Brook and Burswood Island sewerage treatment plants are completed, which utilised bacteria, percolating filters and large septic tanks.
- Fremantle's sewerage system is commissioned, with a main sewer draining into 3 septic tanks near Robb's jetty, the effluent is pumped out into the sea.
- For the first time, shipping and the railways in Fremantle are supplied with water from Victoria Reservoir.
- An experiment to increase runoff into Mundaring Weir by thinning trees in the catchment results in increased salinity in streams entering the dam.
- 1912-13 - Large infill sewer program and construction of stormwater drains.
- 1913 - Sewerage pump houses built on the Perth foreshore.
- 1913-14 - The metropolitan area is regazetted and now includes Armadale (supplied by a pipehead dam on Narrogin Brook), Guildford and Midland.
- 1914 - Perth, Fremantle and Claremont are consolidated together with common account systems, ratings and pricings for water.
- More filter beds are built at Claise Brook.
- Mt Hawthorn reservoir is completed.
- Fremantle's domestic water is augmented by Hill's water.
- Claremont also starts to use Hill's water.
- 1916 - Water is taken from Mundaring Dam to supply Perth.
- 1918-20 - Another 3 filter beds are completed at Claise Brook and a new settling pond is built at Burswood Island.

- 1920 - Fewer than 30% of Perth houses are connected to the sewers.
- Water restrictions are introduced for the summer.
- 1920's - Service reservoirs are constructed at Melville Park, Swanbourne Terrace, Fremantle, Richmond Hill, Mt Eliza and Mt Hawthorn.
- Algal blooms become a problem during summer in the Swan River, the sewerage plants at Claise Brook and Burswood Island are blamed although various experts are produced to find other causes. To combat the problem, the algae is harvested during 1922-23.
- 1921 - A reservoir is constructed on Bickley Brook.
- 1921-32 - Loss of Point Fraser and some of Mounts Bay by reclamation to allow construction of Langley Park.
- 1923 - Pipehead dam constructed on the upper Canning at Araluen.
- Legislation is enacted which provides for the Public Health Department to administer the design and installation of septic systems.
- 1925 - Wungong Brook Pipehead dam is completed, this is eventually removed following the construction of a major storage reservoir on the site in 1979.
- 1926 - Fremantle is connected to the Hill's water main.
- Fremantle rail bridge collapses and is repaired.
- Severe flooding occurs along the Avon River. River training takes place to reduce flooding risk.
- Collie floods up to 2.5 m deep in places.
- 1927 - A wastewater treatment plant (WWTP) is built at Subiaco.
- 1928 - The Government commits to ocean rather than river disposal of sewage effluent.
- 1929 - Churchman's Brook Reservoir is completed.

- 1929-31 - Smiths Lake drain is upgraded to reduce flooding at Lake Claremont.

The Great Depression 1930 -1939

- 1930's - During the Depression, expenditure on water and sewerage works were the largest items in the State's capital expenditure account.
- The goldfields pipeline is overhauled and extended to service other country areas.
- Dams are constructed at Harvey, Waroona and Collie (Wellington).
- Sewering continues into Mt Lawley, Claremont, Peppermint Grove and Mosman Park.
- Harvey River diversion drain is built entirely by hand to change the outlet of the river from Harvey estuary to the ocean near Myalup.
- 1933 - Construction of Canning Dam begins to provide employment during the Depression and to provide a valuable water resource for the city.
- The mosquitofish (*Gambusia holbrooki* (sic affinis) is introduced into Western Australia by an amateur fish breeder, it has since spread throughout the region. It is believed responsible for the elimination of native fish in certain areas.
- 1935-39 - Subiaco WWTP is expanded and a sludge digestion system is introduced.
- 1936 - Burswood Island and Claise Brook Sewerage plants are closed, and wastewater is diverted to Subiaco WWTP.
- Swanbourne WWTP is built to service Claremont and Cottesloe with an ocean outfall (same as used by Subiaco WWTP).
- 1937 - Riverside drive is extended to the Causeway by reclamation.
- 1938 - Filling of Millers Pool (Mill Point).
- 1939 - Completion of Smiths Lake and Bayswater drains.
- New Fremantle Traffic Bridge (Stirling Highway) is built on the site of the temporary bridge.

The second war and postwar years 1940 -1959

- 1940
 - Canning Dam is finished
 - A pipe is laid between Canning and Mundaring weir to allow Mundaring to be augmented by Canning water
- 1941
 - A tank on Mt Flora is used to connect North Beach to the water supply system.
 - A tank is built at Doubleview to improve supply water to the area.
- 1945
 - The suburbs, Inglewood, Bassendean and Graylands are sewerred.
- 1947
 - Work on the New Causeway is started.
 - Old Fremantle Traffic Bridge is demolished.
- 1950
 - South Perth, Claremont, Bassendean, Inglewood, Subiaco, Victoria Park and North Perth are finally completely sewerred.
 - A service reservoir is built at Mount Yokine.
 - Severe water restrictions are introduced following the collapse of the Canning contour channel near Araluen.
 - Kent St weir is built.
- 1950's
 - A diversion weir is constructed on Kangaroo Gully to divert water into Canning Dam.
 - More reservoirs are built at Mount Yokine.
 - More bores are dug to augment Hill's water supply.
 - Upgrade of the Mundaring reservoir to Greenmount service reservoir pipeline to improve water supply to Midland.
 - Construction of high-level tanks, pumping stations and feeder mains at Scarborough, Roleystone, Yokine, North Beach and Melville.
 - A main is constructed from Fremantle to Kwinana, with a storage tank at Mt Brown to supply the industry starting at Kwinana.
 - Another traffic bridge is planned for Fremantle.

- Mechanisation allows rapid clearing of native vegetation, this continues strongly into the 1960's, the result is salinization of rivers, streams and wetlands.
- 1955
 - Publication of 'ÔPlan for the Metropolitan Region - Perth and Fremantle'. The plan is quickly adopted and Perth develops along four corridors which leave semi-rural to rural areas over the Groundwater Mounds. This plan fundamentally alters the design for the city making it ideal for cars but poor for public transport users.
 - Large infilling of Mounts Bay occurs for the construction of the Narrows Bridge.
 - Thomson's Lake reservoir is completed to improve supply to industry and Medina.
 - Severe flooding occurs along the Avon River.
- 1955-60
 - Drainage work is undertaken in Bayswater, Bentley, Victoria Park and Belmont.
- 1957
 - A pipehead dam is constructed at Serpentine River, which also includes an automatic chlorinator
- 1958-70
 - Extensive river training of the Avon River takes place between Brookton and west of Toodyay.
- 1959
 - Narrows Bridge is opened.
- 1960
 - A longer ocean outfall is built for Subiaco WWTP.

The boom years 1960 to 1979

- 1960's
 - Mass immigration and a booming economy result in rapid re-development of much of Perth, with the loss of many historic buildings.
 - Large numbers of service reservoirs, summit tanks and water towers are built to cope with the rapidly increasing population. There are now 18 sewage treatment plants to deal with the large quantity of waste being produced.

- Some Perth wetlands are used as sites for sanitary landfill (eg. Lake Monger and Bibra Lake).
- 1961 - The Serpentine Dam is completed.
- 1961 - Completion of the upgrade of Subiaco WWTP to secondary treatment using an activated sludge process, and a new longer ocean outfall is constructed.
- 1962 -
- 1963 - A scheme to provide sewerage to properties south of the river is announced and a primary treatment plant is built at Woodman Point.
- 'Metropolitan Water Supply, Sewerage and Drainage Amendment Act' was passed and control of the old department passed to the Metropolitan Water Board.
- Catchment clearing is believed responsible for the Collie River flooding Collie.
- First stage of the Bunbury sewerage scheme is commissioned, with secondary treatment and ocean discharge at Bunbury (north).
- 1964 - Collie is flooded again.
- 1965 - Fremantle septic tanks (Robb's Jetty) are abandoned as their role is taken over by Woodman Point WWTP. Treated wastewater is discharged by outfall to Cockburn Sound.
- 1965-1968 - Collie River is widened and cleared to reduce the risk of flooding.
- 1966-1967 - Testing of the Gnangara Mound leads to the development of new borefields to extract groundwater.
- 1967 - Mounts Bay is filled for the Mitchell Freeway interchange.
- Fluoridation of water begins.
- Government Policy dictates that all new subdivisions must be seweraged.
- 1968 - Fremantle's inner harbour is extended upstream.
- 1969 - Opening of Point Peron WWTP and ocean outfall.
- 1970's - Up to 1970, only untreated artesian water was used to augment the Hill's supply of domestic water. By 1979,
- only 6% of the domestic water used came from artesian sources, 34% came from shallow groundwater
- Construction of neighbourhood WWTP's in new suburbs to cope with the rapid expansion of the city.
- The mid-seventies saw a rise in public education with regards to water conservation techniques, overall individual consumption decreases as one in five customers sink private bores.
- Severe eutrophication occurs of the Peel-Harvey estuary.
- 1971 - Water restrictions are introduced for the summer.
- North Dandalup pipehead dam is completed.
- 1972 - Bunbury (north) WWTP is upgraded.
- Gordon Road (Mandurah) WWTP is commissioned using land infiltration to dispose of the effluent.
- 1973 - Metropolitan Water Board disconnects services for failure to pay rates.
- South Dandalup Dam is completed.
- An amendment to the Water Supply, Sewerage and Drainage Act gives the Metropolitan Water Board the power to protect and regulate areas in the interests of conservation and protection of the aquifers.
- First stage of Beenyup WWTP is completed to serve the northern suburbs, it includes secondary treatment. Land infiltration is used to deal with treated wastewater.
- 1976 - Water restrictions are introduced during summer.
- 1977 - Treated wastewater from Beenyup WWTP is discharged into the ocean at Ocean Reef.
- 1978 - Introduction of a pay-for-use system for domestic water.
- Halls Head (Mandurah) WWTP is commissioned, using land infiltration for effluent disposal.
- 1979 - Wungong storage dam is completed.

- The major WWTP's at this time are Subiaco, Woodman Point, Beenyup, Swanbourne (all with ocean outfalls) and Westfield. The following small plants also are being used Canningvale, Kwinana, Point Peron, Forrestfield, Kelmscott, Kewdale, Kalamunda Hospital, Two Rocks, Yanchep and Wanneroo. In this year the following plants are closed, Gosnells, Eden Hill, Maddington and Carousel.
- Second WWTP is commissioned at Bunbury (south), with land infiltration.
- Eaton WWTP is commissioned, with land infiltration.
- Gordon Road WWTP is upgraded.

Unprecedented growth 1980-1995

- 1980's - The Water Authority of WA sponsors research into wetland and stream ecology.
- 1981 - Government Sewage Policy aims to eliminate the backlog of sewerage work.
- 1983 - Australind WWTP is commissioned, with land infiltration.
- New primary WWTP is opened at Woodman Point.
- 1984 - Woodman Point WWTP effluent is now directed down to Point Peron for discharge to reduce pollution of Cockburn Sound.
- Hundreds of birds die on Forrestdale Lake, which are believed to have eaten Abate granules used to control nuisance midges.
- Severe algal blooms are observed on the south branch of the Collie River.
- 1985 - The Metropolitan Water Board becomes the Water Authority of Western Australia.
- Halls Head WWTP is upgraded.
- Subiaco WWTP is upgraded and Swanbourne WWTP is abandoned with waste being diverted to Subiaco WWTP.

- Government Sewage Policy commences to eliminate the backlog of sewerage work.
- 1986 - Gordon Road WWTP is upgraded.
- 1987 - Bunbury (south) WWTP is upgraded.
- 1989 - Severe algal blooms observed on the south branch of the Collie River.
- 1990's - Construction of residential canal developments in the Peel Harvey estuary (Mandurah).
- 1992 - The Water Authority commissions the 'Perth Coastal Waters Study', to assess the likely effects of any increase in the discharge of treated wastewater effluent to the sea.
- A second ocean outlet is built for Beenyup WWTP at Ocean Reef.
- Gordon Road WWTP is upgraded.
- 1993 - The free water allowance is reduced and then removed.
- Dawesville cut is constructed to allow better flushing of the Peel-Harvey estuary to improve water quality.
- Government announces a large infill sewerage program, designed to reduce reliance on domestic septic systems which are believed to be contaminating the groundwater.
- Severe encroachment onto the Jandakot Mound by housing. Construction of a series of drains to control flooding in the new estates links a series of wetlands together and increases water depth and reduces water quality in the majority of them.
- 1994 - Water restrictions are introduced for the summer.
- Toxic algal blooms are recorded on the Canning River.
- An extensive power cut results in a small amount of sewage overflowing into the Swan River from pump stations (as per design), resulting in public outcry.
- Publication of 'Wetlands of the Swan Coastal Plain, Volume 1, Their nature and management' by Dr Shirley Balla,

brings together a series of research projects sponsored by the Water Authority of WA and the Environmental Protection Agency.

- 'Wastewater 2040 Discussion Paper' is produced by the Water Authority to examine options for dealing with sewage in the future.
 - The following WWTP's are in operation; with ocean outfalls - Woodman Point (primary treatment, discharged through Point Peron), Beenyup and Subiaco, and using land infiltration - Wundowie, Northam, Kalamunda Hospital (Private), Health Department Septage and Industrial Wastes Plant, Kwinana, Port Kennedy, Gordon Road, Yunderup, Pinjarra, Halls Head, Eaton, Australind, and Bunbury (north and south). The following temporary WWTP's are also being used - Two Rocks, Yanchep, Bullsbrook and The Vines Resort. New plants are proposed at Alkimos, East Rockingham and Caddadup.
- 1995
- The Water Authority of WA is undergoing a process of division into the Water and Rivers Commission and The Water Authority. Corporatization of the supply division promises substantial changes to the future of water supply in the state.
 - Upgrading of treatment facilities at Beenyup WWTP to keep up with demand.
 - Relining of Coolgardie pipeline takes place to extend life by 50 years.

1.7 Demands for Water

Despite Captain Stirling's rosy descriptions of the availability of water, the early settlers quickly found that the provision of water was an impediment to growth and expansion inland. Initially settlers and explorers may have gained insight into the location of sites of good water from Aboriginal people. The rapid decline in relations between Aboriginal people and settlers, especially through the attitudes of the first generation of locally born settlers, is likely to have limited this cooperation (Reece & Stannage 1984). Settlers obtained drinking water mainly from groundwater wells, as the lakes and springs proved to be often dry during summer. Accompanying the problems of finding water was disposal of sewage, which initially ended up in cesspits contaminating many of the wells. The provision of drinking water and sewage didn't become widely available until the early 1910's. Corruption, intransigent local councils and a faltering economy until the 1880's goldrush are probably responsible for this (see Morony, 1980). The gold was located in an area where water was difficult to find and this became an impediment to the development of this resource. This led to one of the world's great civil engineering projects, the goldfields water pipeline which piped water from Perth (Mundaring Dam) to Coolgardie (eventually to Kalgoorlie).

Contamination of the shallow groundwater supplies, resulted in a shift to using water from reservoirs on the Darling Scarp. Apart from problems at Victoria Reservoir, the State has been fortunate that dam construction preceded urban expansion and early legislation has led to the protection of the catchments of these reservoirs. The limited opportunities for construction of further dams, the corridor plan (which indirectly protected groundwater mounds) and improvements in sewerage disposal have led to a return to using groundwater for domestic supply. Rapid urban expansion in the late 1980's onto the Jandakot groundwater mound has again threaten this resource. The construction of reservoirs has had a profound impact on the environment, with areas permanently flooded and the natural flow of streams and river altered downstream of the dams.

Progress in dealing with wastewater was also slow with a gradual move from cesspits, to collection of nightsoil, to septic tanks and finally to sewers transporting the waste to a treatment plant. The construction of sewers has often lagged behind urban

expansion and many suburbs are not sewered and use septic tanks. Potential problems identified with the use of septic tanks has encouraged a shift towards underground sewers.

Transport initially very difficult with the cost of moving supplies from Fremantle to York being more than nine times more expensive than shipping them from England (Markey 1977). This was because overland transport was so difficult, the use of the river and sea transport was used where possible as this was much more economical. As the Swan River was very shallow and blocked by a bar at its mouth this limited shipping considerably. Dredging allowed boats to move up the river and near the turn of the century the bar was removed. By this time, however the construction of railway lines and reasonable roads had led to the demise of river transport.

The steam trains used on the rail lines required regular water points. The expansion of the rail network into the goldfields meant that numerous storage reservoirs had to be created to supply the trains. The same situation can be found on all the other major train routes (including private timber company lines). Along with the tracks a variety of bridges had to be built, where standing, these are now of historical interest. Roads also required supply stops where water could be obtained. Roads had a profound effect on the landscape; increasing the amount of surface runoff, resulting in wetland loss (many road reserves follow wetland chains), and the construction of bridges.

The timber industry used the Canning River for transporting logs downstream towards Perth. The industry is also responsible for the early pollution experienced in Victoria Reservoir, as workers were living on private land within the catchment and were contaminating streams entering the reservoir. Clearing in catchments as timber is removed increases runoff into rivers and streams. This and the extensive clearing that occurred for agriculture purposes has resulted in increased salinity within many rivers, streams, and dams (eg. Wellington Dam which was in danger of becoming too saline for even agricultural uses).

2.0 METHODOLOGY

2.1 Overview

The data collected in this study could be collected through a variety of approaches. The approach used was believed to be the most cost-effective for the time available. The details of this approach are presented below.

2.1.1 Sources Of Information

Historical information is available from documentary and archival records including diaries, maps, Government and Council records, which are generally available at the Batty Library of Western Australia. This represents a primary source of data, which is best pieced together by historians. Published histories have often been prepared without specific reference to water and as such, sites or events relevant to this study may not have been recorded. The scope of this report makes it impossible for the authors to review every local history publication available, although publications have been used when information from other sources was lacking. Histories and Water Authority publications were used extensively for construction of the time line. It was not possible to check all dates against primary sources and so discrepancies may occasionally arise.

Another important source of information is local community groups such as historical associations and individuals with an historical interest or association with an area. These individuals and groups are a valuable source of relevant information and were used extensively in this study.

In addition, there are three historical agencies within the state that list places of historical and cultural heritage and legislative controls are then afforded to the said sites.

2.1.2 Contacts

Initial contact was made with the local governing body for each locality by telephone in order to obtain information on:

1. Local History Groups.
2. Other local interest groups, (Ribbons of Blue, Preservation Groups).
3. Information held by the local governing body, (ie, pamphlets, touring routes).
4. Publications produced by the local governing body.

5. Names of people with long family associations with an area or a special interest in historical aspects of an area.

6. Tourist Information Centres.

Contact was made with the three agencies that list sites of historical importance within the state:

1. The Heritage Council of Western Australia
2. The National Trust of Australia (WA)
3. The Australian Heritage Commission (Canberra)

2.2 Information Acquisition

2.2.1 Type Of Information Requested

Contact, by telephone was made with the people and organisations suggested by the local governing body. This provided an opportunity to explain the research being undertaken and to ask for assistance in completing a questionnaire (a copy of which is provided in the Appendix) relating the history of water use.

Seventy three questionnaires were posted to individuals and organisations after a telephone contact and a further twenty six sent to Land Conservation District Committee groups through the Department of Agriculture. The questionnaire was divided into several categories and responses are listed in the report with a category number relating to the type of activity undertaken relating to a respondents reply.

The categories are listed as:

1. First European exploration
2. Historic settlement sites including farming, mining, and industry.
3. Water supply development: Domestic
4. Water supply development: Irrigation
5. Land drainage, reclamation or alteration of waterways and wetlands.
6. Reservation of waterways and surrounding lands including recreational reserves and other reserves.
7. Anecdotal records of water quality, floods, and droughts.
8. Timber industry development and utilisation of waterways for transport etc.
9. Historical utilisation of aquatic flora and fauna

2.2.2 State Agencies

Contact was made with the three agencies that list sites of historical importance within the state and each agency was given a code within the report to simplify listings:

1. The Heritage Council Of Western Australia HCWA
2. The National Trust Of Australia (WA) NTWA
3. The Australian Heritage Commission (Canberra) AHC

A database of listings was obtained from each agency and relevant sites listed within the report. As some localities had numerous listings, only those that could be directly associated with water were listed, according to the following criteria:

1. In the case of more than five listings for any one locality then listings outside townships were included, usually homesteads which were near water as a matter of course.
2. Those within the township were included if an association with water could be determined, such as on a river bank.
3. For those localities that had less than five listings, all were included as a matter of course.

Landscape and reserve listings have also been included as historic associations were not always easy to determine and it was considered in this report that if an area was listed by an agency then its importance as part of our cultural heritage should be noted as per the criteria below:

1. A listing may not necessarily indicate historic associations but by the very fact that an area is listed as having cultural and heritage value it has to be assumed that it is of significance to the community.
2. Some landscape listings are specifically noted as having historic values however all three agencies do not supply the same detail within the supplied databases.
3. Listed reserves often contain important water bodies of significance to the local community and there was not enough information supplied by the agency to determine which were these so it was deemed more appropriate to include them than not to.
4. Without boundary maps of the areas it is difficult to determine whether known historical sites fall within the boundary of an area.

In addition the Heritage Council of Western Australia in conjunction with local authorities produced a series of Heritage Trails which mapped and documented sites of historical importance for the 1988 Bicentennial and these provided a good reference guide to the more well known sites within each locality.

2.2.3 Mapping

A map of the Shire was sent out with each questionnaire. Where respondents marked localities on the maps, these were collated on a master map with a code for each locality (see Appendix 1). Where a respondent has supplied details of a location but not marked places on a map, then a description of the location has been included in the database. All places within the database where possible are supplied with location details. Where possible all sites considered to be of importance have been included on the maps. Dams, rivers and wetlands are not given a location code, but are shown on the maps. Areas of land, such as reserves, are not shown on the maps.

2.2.4 Compiling The Information

A database of all responses to the questionnaires was compiled indicating the sources of information and map references within each local government boundary. Although some shires contain only a portion of the study region, it was more practical to collect information on the overall area as most historical texts and groups operate within the local government boundary areas. Statistical and historical information was then used to create a short historical summary of each locality within the country region while the time line covers Perth city.

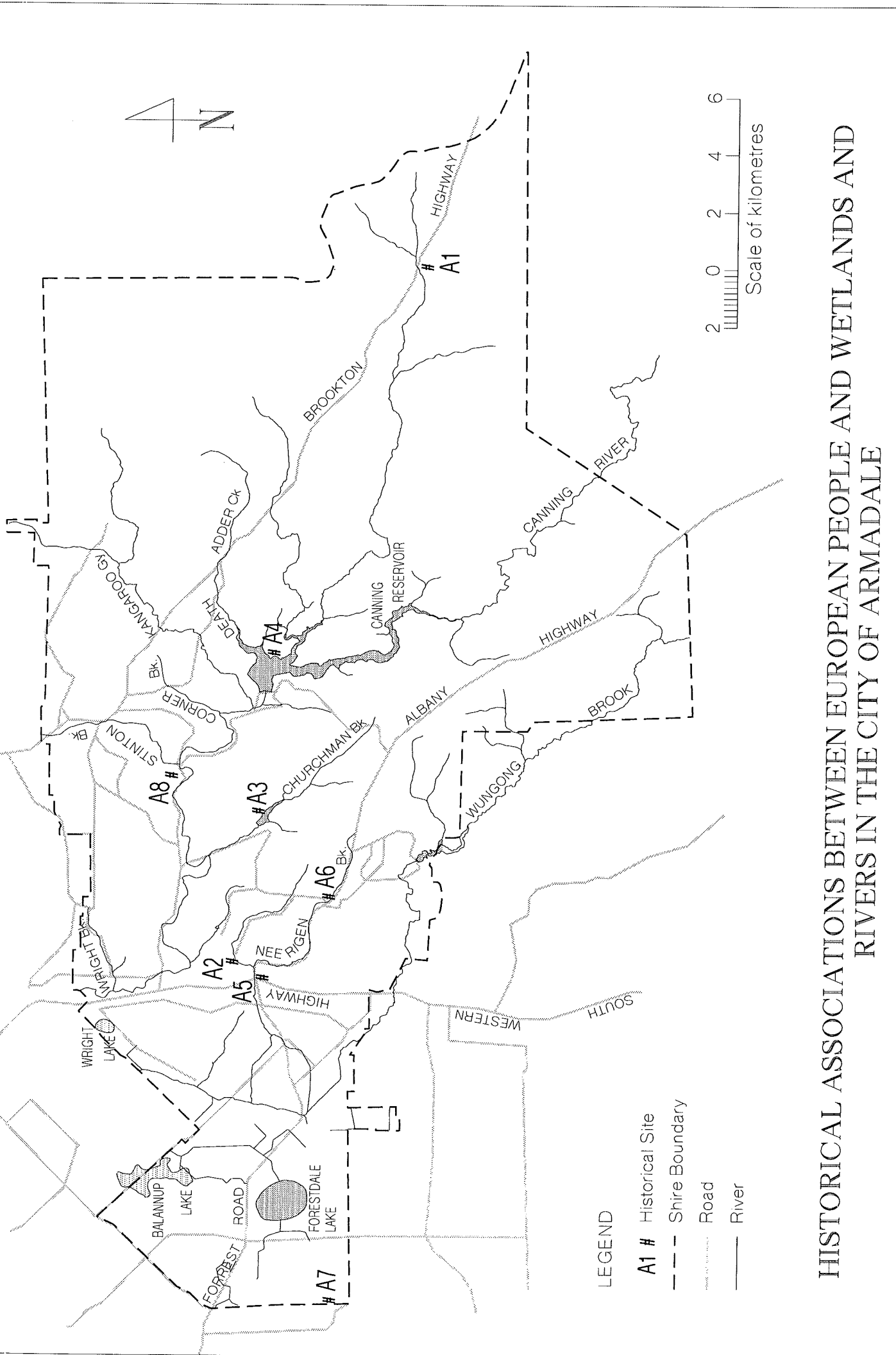
Once the data had been compiled, a draft version was sent to the Town Clerk of each Shire for comment. Approximately 50% of the Shires responded with a range of suggested changes, which were incorporated into the final report.

3.0 IMPORTANT HISTORICAL AREAS

3.1 Metropolitan Locations

3.1.1 Armadale

Land use	Historic Site and/or water use	Date	Map ref	Source of information
2	Canning River Water Wheel used for timber mill, (Buckingham).	1866	A1	Mrs Margaret Bettenay Hon Curator History House Museum ARMADALE 6112 Ph: 397 5926
2	Paradise Water Mill on Neerigen Brook, Armadale.	1850	A2	
2	Water Wheel at Bowden's Orchard, Waterwheel Rd Bedforddale.	1910	A6	
3	Earlier diversion channel at Stocker Rd Rolystone.	1866		
3	Churchman Brook Reservoir.	1929	A3	
3	Canning Dam.	1940	A4	
3	Armadale Town Water Supply, (windmill and tank).	1898		
3	Armadale Water Board.	1911		
2	Lakes Yangebup & Forrestdale- Chinese market gardens.	1900		
3	Neerigen Brook diversion.	1912	A5	
2	Orchards at Karragullen, Wongong, Bedforddale, Canningdale and Canning Mills.			
8	Buckingham Mill.	1866	A1	
2	Lake Forrestdale used for boating and swimming.	1900-10		
2	Two Fords over Canning River at Kelmscott & Rolystone for early coach route to Albany.	1830		
6	Declaration of Canning Reservoir Dam. Reduces flow of Canning River adversely affecting wildlife and gradually silting up the many popular local swimming spots by the 1940's.	1915		S. O'Brien Local History Librarian, Gosnells Library, 2240 Albany Hwy GOSNELLS 6110 Ph: 398 1210
	Port Jackson Fig, AHC database no 017406, Armadale. Wirra Willa Gardens, 3258 Albany Hwy Armadale. Moreton Bay Fig, 405 Railway Ave Armadale. Forrestdale Lake and adjacent wetlands. 475 ha, System 6 area M95, located 23 km south of Perth & 15 km inland, south of Forrest Rd. Seasonal wetland with only small areas of intervening uplands Gibbs Rd Wetland system, 1 km west of Forrestdale. Araluen Park, Croyden Rd Rolystone. Natural bushland & historic associations Brookton Hwy 1 km strip, 8000 ha, 10 km east of Kelmscott. Dale Management Priority Area, 6272 ha, 30 km south east of Kelmscott. Russell Management Priority Area, 5702 ha, 45 km south east of Kelmscott.		A7 A8	AHC AHC AHC NTWA, AHC AHC NTWA, AHC AHC AHC AHC



LEGEND

- A1 #** Historical Site
- Shire Boundary
- Road
- River

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

Bibliography

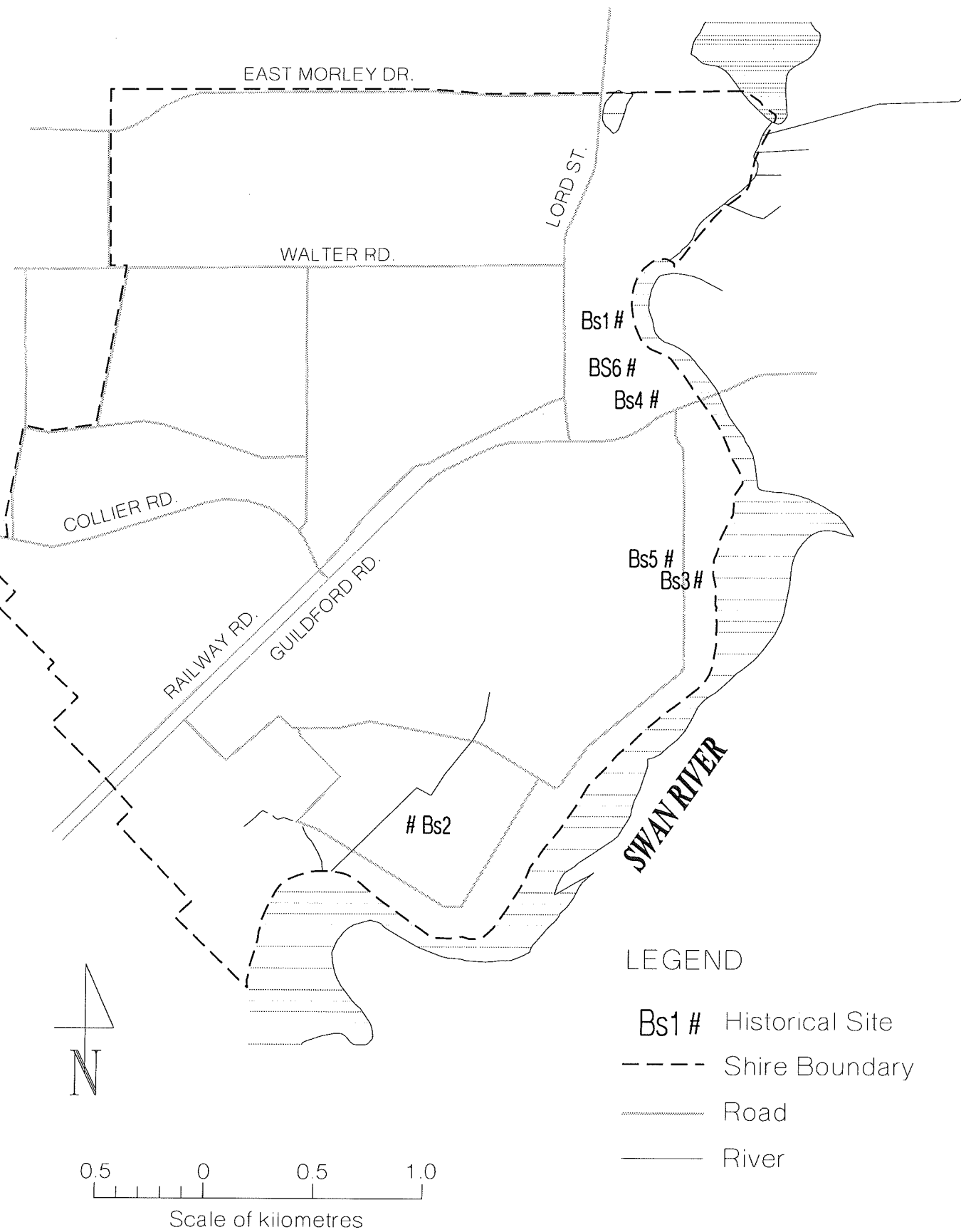
- Armadale-Kelmscott Historical Society. (1994) Spanning The Years Pictorial. 1894-1994. Armadale-Kelmscott Historical Society & History House Committee Of Management, Western Australia.
- Camlleri, C. (1946). Armadale 1829-1926. (np)
- Popham, D. (1980) First Stage South: A History Of The Armadale-Kelmscott District. Town Of Armadale, Western Australia.
- Shoesmith, M. (1973) The History Of The Armadale Township, The First Century 1829-1929. Teacher College Thesis.

3.1.2 Bassendean

Land use	Historic Site and/or water use	Date	Map ref	Source of information
1	Captain Stirling and party travelled upstream, legend suggests that they found good water at Success Hill, possibly wrong.	1827	Bs1	Gregory Peterson Chairman Bassendean Preservation Group Inc PO Box 75 BASSENDEAN 6054 Ph: h 279 7713 w 316 5196
2	Farms along Swan River.	1829 - 1940 - 1920 -	Bs2	
8	Use of river for transport- Fremantle to Guildford.			
5	Wetlands drained for housing.			
7	Drains from industrial areas to Swan River- heavily polluted, consult DEP records.			
2	Daylesford House, Daylesford Rd.	1890's	Bs3	NTWA, AHC
2	Earlsferry House, Nurstead Ave.	1890's	Bs4	
2	Pensioner Guard Cottage, Surrey St.	1853	Bs5	
6	Sandy Beach Reserve, West Rd Bassendean.	1940's		HCWA (1988bb)
2	Riverside Vineyard, Bassendean Estate, West Rd Bassendean.			
2	Pensioner Guard Cottage, 1 Surrey St Bassendean.	1864	Bs5	
2	Lockridge Hotel, cnr Anzac Tce & River St Bassendean.	1896	Bs6	
1	Success Hill Reserve, Seventh Ave Bassendean.		Bs1	
	Place of freshwater spring found by Stirling on early exploration.			

Bibliography

- Carter, J. (1986) Bassendean, A Social History. Town Of Bassendean, Western Australia.
- HCWA (1988bb) Swan River Heritage Trail. Heritage Council of Western Australia, Western Australia.



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE TOWN OF BASSENDEAN

3.1.3 Bayswater

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Lot 289 Sanderson St (now 15 Sudlow St) 1.5 acre farmlet (subdivided), dairy and poultry farms	1900's	Ba1	Mr Eric. E . Fairs 15 Sudlow St EMBLETON 6062 Ph: 271 7405
3	Put down bore, no scheme	1950	Ba2	
5	Swamps all filled	1990's	Ba3	
	- Golf Course, most drains covered - Galleria, industry, housing on other swamp areas			
7	Bore water 80 grains of salt /1000 gallon (faintly acid)			
7	Sulphate of iron (after exposure to air) in tank			
8	Household use of timber			
2	Chinese Market Gardens			
	- Ah Chow & Ong Hing	1898		
	- Ah Chin, Murray St	1903		
	- Ah Chow, Slade St	1903		
	- Ah Moy, Stone St	1903		
	- Ah Suey, Moore St	1903		
	- On Hop, Guildford Rd	1903		
	- Sing War, Moore St	1904		
	- Suey Fong, off Grafton Rd	1904		
	- Wing Fat, Stone St	1904		
	- Chew Hing Thos, King William St	1905		
	- Clavering St	1929		
	- Coode St right from Railway	1929		
	- King Song Wah & Co, Francis & Paterson Sts	1929		
	- Ah Gee, Hayward St	1929		
	- Suey Wah, Hayward St	1929		
	- Ah Quong, King St off Beechboro Rd	1929		
	- Essex St	1929		
	- Stone St	1929		
	- Sen Lee, Stone St	1929		
2	Magnolia Tree, Beechboro Rd.	1880's	Ba4 Ba5	NTWA NTWA NTWA, AHC AHC
2	Olive Tree, Slade St.			
2	Halliday House, King William St.			
2	Ellis House, 17 Neville St Bayswater			
6	Cloughton Reserve, Katanning St Bayswater.	1830	Ba6	HCWA (1988bb)
1	Leake St Lookout, Leake St Bayswater. It was near this point in 1827 that Stirling's party were followed by a group of Aborigines as they sailed upriver. '...as we made no attempt to approach them, the warriors followed us along the bank, the women and children retiring out of site. The woods now resounded with their shouts, to which replied our bugle with equal loudness and with more than equal melody. At this point appearances wore a threatening aspect, for the natives seemed much enraged, and I judged from their violent gestures and the great noise they made, that we should shortly have a shower of spears. The river here was only 60 yards across, and as they had the advantage of a bank 20 ft high, our situation put us much within reach of annoyance'			
6	Bayswater Bird Sanctuary, King William St.			
2	Olive Tree, Slade St.			

Bibliography

Bayswater State School. (1948) Bayswater State School Magazine, Local History. Bayswater School, Western Australia.

HCWA (1988bb) Swan River Heritage Trail. Heritage Council of Western Australia, Western Australia

Sewell, M. (1972) Bayswater & 75 Years. Bayswater Shire Council, Western Australia.

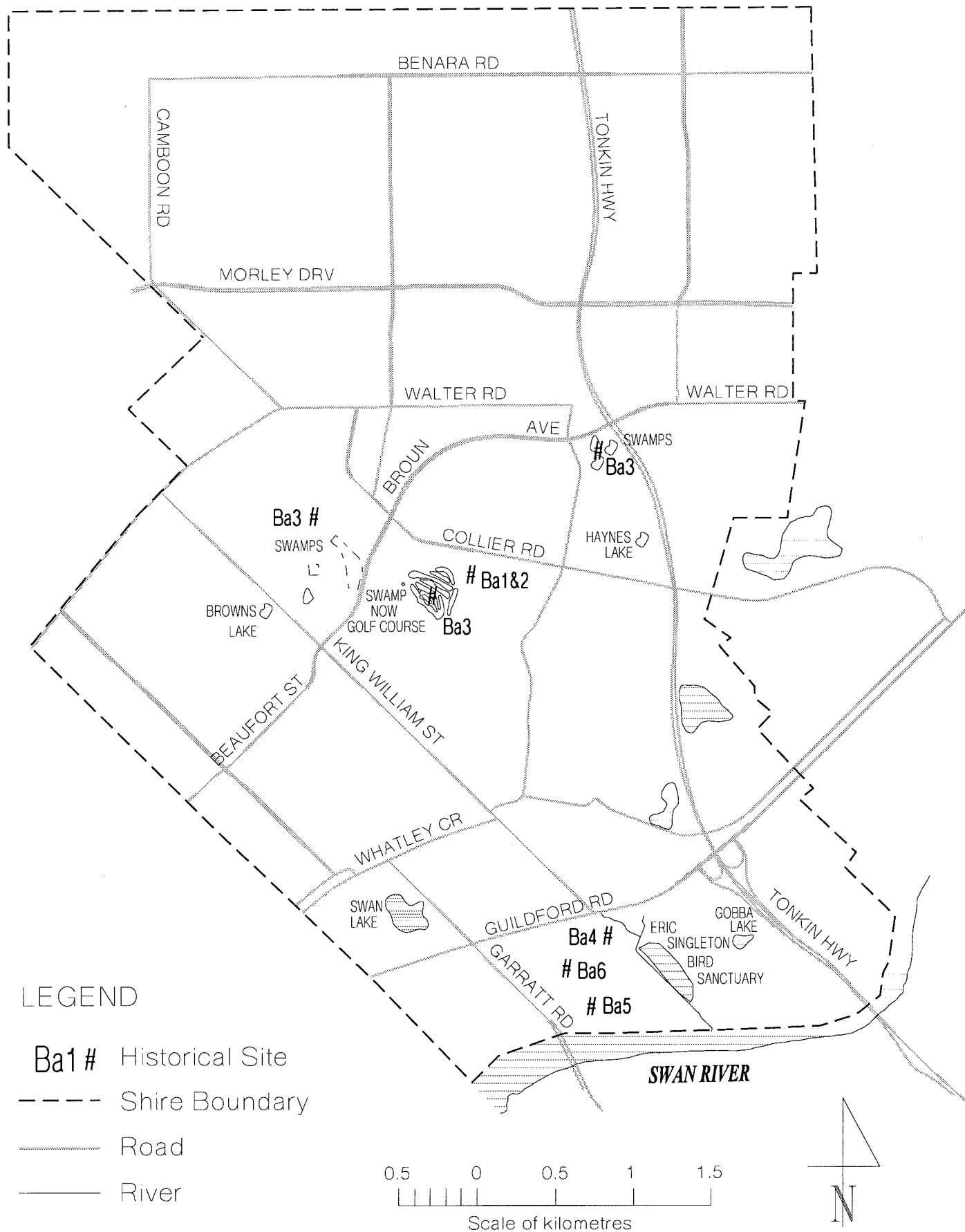
Van Nierop, H. (1962) Bayswater, Some Aspects Of Its Development. Teacher College Thesis.

3.1.4 Belmont

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	First exploration of river by Captains Stirling & Frazer	1827		Mrs Ann Spalding Secretary Belmont Historical Society Inc 19 Ullapool Rd APPLECROSS 6153 Ph: 364 4048
1	Commander Currie & Lt James explore upriver to survey for settlement	1829		
2	Drummond's Crossing, Early crossing place	to 1840's	Be9	
2	Allocations to first settlers, small farms along riverbank	1829-30		
8	Potteries & brickworks. All goods poled down river by flat bottom barges.	1896-1920's	Be1 to 5	
2	Mainly pig, poultry, dairy farms & stables			
2	Horse landing for swimming racehorses		Be8	
3	Very high water table so people had their own wells			
3	Well to service travellers to the Avon Valley & Goldfields		Be6	
4	Irrigation from private bores			
5	Drainage a serious problem, South Belmont Drainage Board and Metropolitan Water Supply & Drainage Board took over entire district.	1920's - 1959		
7	Pollution from stable area & small industries			
7	Nutrients from gardens into the drainage system			
2	The Springs' (Cracknell Park), popular swimming area		Be7	
	Old Bristle Kilns, Grandstand St.	1910	Be10	NTWA, HCWA, AHC
	Nulsen Haven, Gt Eastern Hwy Redcliffe.	1904	Be11	
	Rivervale Uniting Church, Gladstone Rd Rivervale. Perth Airport Bushland, 210 ha.		Be12	AHC AHC

Bibliography

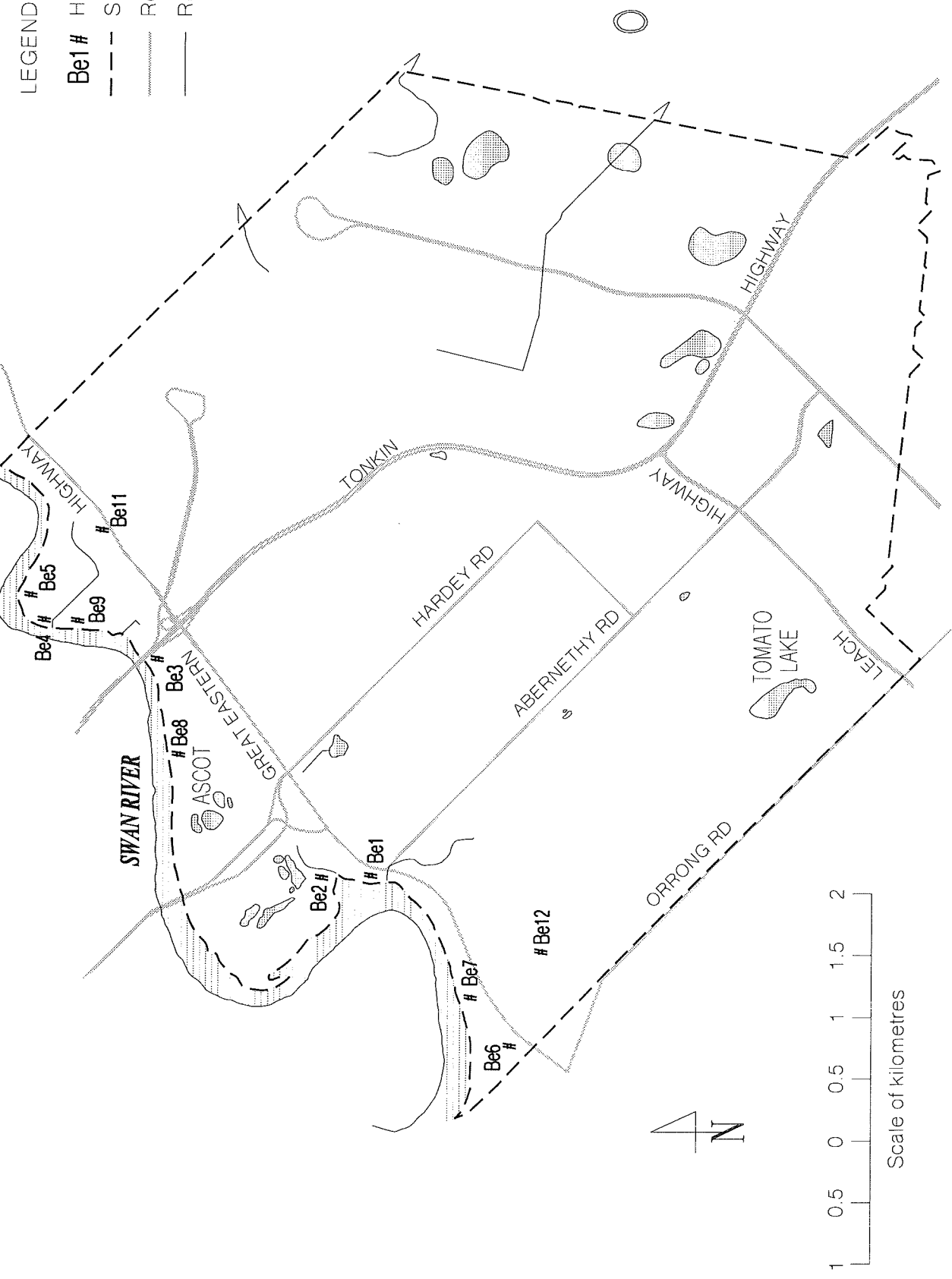
Belmont City Council. (1988) Belmont Historical Sites. Belmont City Council, Western Australia.



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

LEGEND

- Be1 # Historical Site
- - - Shire Boundary
- Road
- River



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

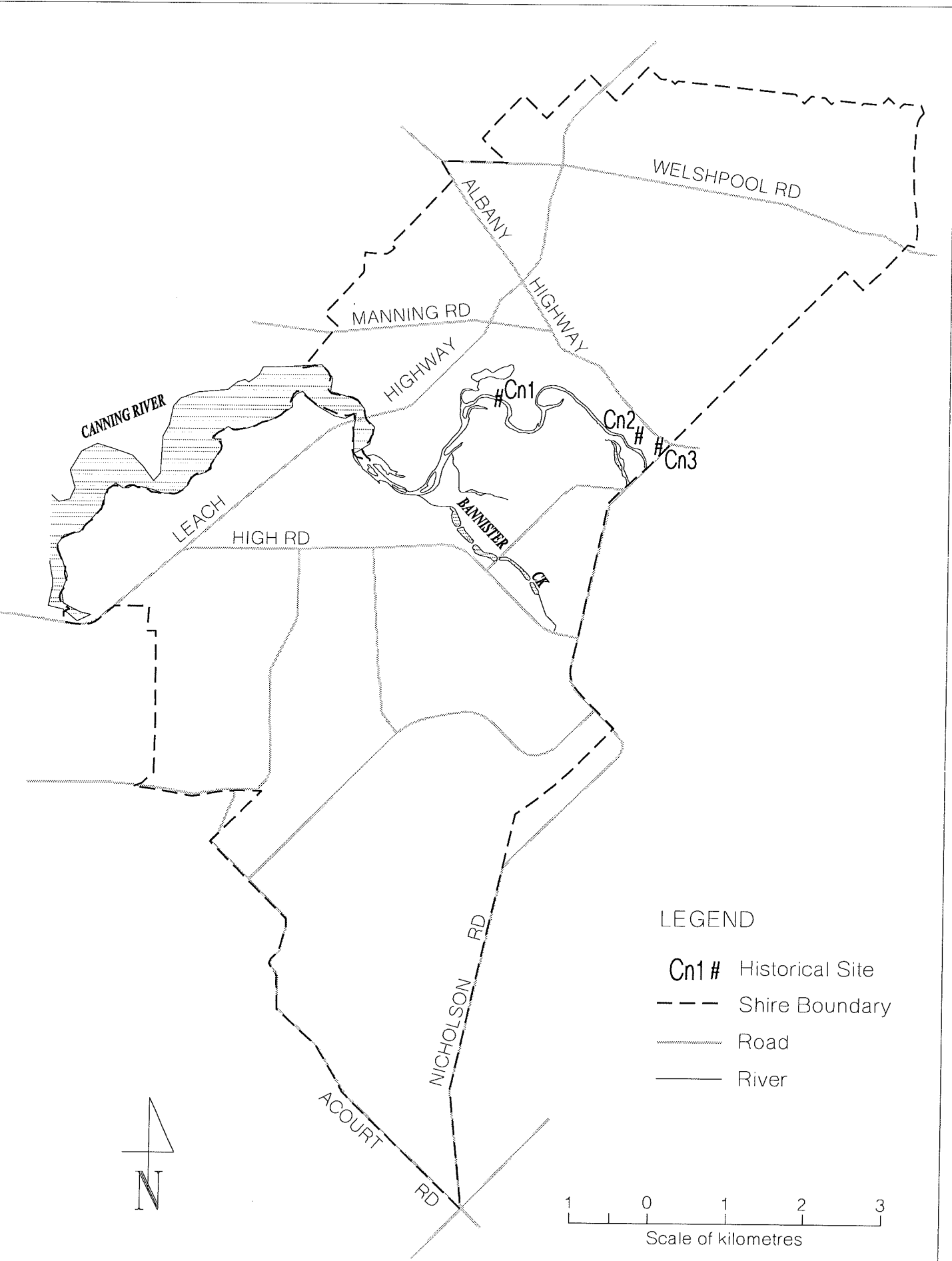
3.1.5 Canning

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Captain Stirling explores the river.	1829		John Parker 225 Hamilton St QUEENS PARK 6107 Ph: 451 8538
2	Settlement occurs along the Canning.	1837-87		
3	Ample freshwater supply from river and shallow wells.	1830		
4	Canning Dam opened, water levels of river drop.	1940		
5	Bullcreek, Yagan Park drained.			
6	Water still drawn from river for irrigation.	1930's- 1995		
7	Poor water quality in sections due to salt encroachment.			
3	Kent St Weir built.	1950	Cn1	
8	Mason & Bird Timber Company utilise river. Barged timber down river from Nicholson Bridge to Swan.	1862-82	Cn2	
2	First settlers drew water from river till opening of the Victoria			
3	Dam which supplied water to the Canning area.			
4	Market gardens along river banks using river for irrigation.			
7	Flooding in 1876, 1930.			
7	Tidal salt encroachment further upriver since the opening of Canning Dam, hence the building of the Kent St Weir.			
9	Professional fishing in the area.	1920-30		
2	Woodloes Homestead, Woodloes St.	1871	Cn3	NTWA, AHC, AHC AHC
	Canning River Regional Park, 266ha, Ferndale.			
2	Canning River Convict Fence.	1866		
8	Masons Landing, Lot 1; 59 Marriamup St, Cannington.	1862-	Cn1	John Lauri City of Canning Ph: 231 0690
	Landing at Nicholson Rd Bridge.	1882		
8	Landing Reserve no. 1455. Brickworks Landing. Canning River	1870+		
8	Regional park, Bicentennial Adenia Reserve.	1887		
	Kent St Weir Park; renamed Wilson Park 1939 in Canning River			
6	Regional Park.	1930's	Cn3	
	Sikh Cemetary/Cremation Site. Canning River Regional Park.	1932		

Bibliography

Garden, F.G. (1968) Along The Canning : A History Of The Shire Of Canning District, Western Australia. Shire of Canning, Western Australia.

Hickson, D. & Slee, J. (1978) The Mason & Bird Timber Company 1862-1882. Canning Districts Historical Society



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

3.1.6 Claremont

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Swan River area Willem de Vlamingh and his Dutch crew sailed up the Swan River	1697		Anne-Marie Poole c/- Caroline Crundall Claremont Museum 66 Victoria Ave CLAREMONT 6010 Ph: 386 3352
1	Captain James Stirling and crew explored the Swan River and admired the soil and vegetation	1827		
2	British settlers brought with them a variety of livestock, equipment, seeds and plants.	1829		
2	Colony stagnating. Agricultural failure, low returns from farming and grazing.	1830		
2	Pensioner Guards established settlement along Pensioner's Row, (now Victoria Ave) and the convict period assisted the development of the colony.	1850		
2	Main agricultural activities of Pensioner Guard farmers- -vegetable growing -viticulture -orchards -some subsistence livestock raising -limited crop growing			
7	Description by de Vlamingh, 'further on was a basin with brackish water, which we afterwards found was a river	1697		
8	River commerce in goods between Fremantle and Perth.	1829		
8	Abundant timber and limestone on river.	1830		
8	Limestone conveyed by river to Perth for street and building construction	1860's		
9	Swan River teeming with fish, flathead, kingfish, tailor, snapper, and slapjack	1697		
9	Crabs plentiful along Swan river shore, black swans, Brent-geese and divers spotted. Claremont Baths area	1697		
2	Claremont Baths opened at the river end of Chester Rd costing £750, demolished in 1972.	1901		
2	Baths used for swimming carnivals, (local, state and national), diving and lifesaving events			
5	Before the Baths were built, the beach from Claremont to Osbourne was high and dry. The Baths must have altered water movements since soon after their erection the water encroached and the beaches disappeared			
7	The baths always contained bright water, free from seaweed and with a clean sandy bottom			
9	The establishment of the Baths put an end to fishing and crabbing from the beach as the beach area disappeared Lake Claremont area, originally Butler's Swamp.			
2	John Butler was the first settler to utilise the swamp area.	1830		
2	Pensioner Guards allocated land which John Butler had been using as an experimental farm	1850's		
2	Modest cottages erected by Pensioner Guards who would walk from the bay foreshore to their swamp land to clear and cultivate it and eventually trade surplus produce via the Swan River.	1860's		

3.1.6 Claremont (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
3	Domestic water not obtained from the swamp but from underground wells/bores.			
9	Abundance of wild ducks to be found on Butler's Swamp. Claremont Jetty area.	1860	CI1	
2	Claremont Jetty built at the end of Jetty Rd. Jetty collapses 1987 and is rebuilt 1991.	1898		
2	Passenger and cargo boats regularly used the jetty.	1898		
2	Jetty occasionally used to offload sheep that were driven up Bay View Tce to the showgrounds			
9	Fishing and crabbing off jetty. Osbourne Hotel	1898	CI2	
2	Osbourne Hotel built by Mr James Grave.	1895		
2	The Osbourne Steps are built, descending the steep hillside to the river thus making swimming and boating accessible and boatloads of daytrippers from Perth could land there to enjoy the delights of the Osbourne Hotel.	1895		
3	Claremont's original water supply came from an artesian well at the site of the Osbourne Hotel			
3	The water tower at the Hotel supplied unlimited quantities of water and was capable of supplying the whole neighbourhood for miles around.			
4	50 000 gallons of water were used every day on the expansive gardens of the Osbourne Hotel.			
7	The water was of purest quality and was raised from a depth of 150-200 ft out of a stratum of mixed limestone and sandstone. Claremont water supply development			
3	Claremont had no clean water supply, water was simply fetched from wells	1893		
3	Metropolitan Water Supply Act established.	1896		
3	Installation of 18 miles of water supply reticulation.	1898-05		
3	15 artesian bores were sunk in Fremantle, Perth and Claremont to augment supplies.	1902-21		
3	The municipality rate payers had a system on demand from bores at Buttersway.	1903-04		
3	Metropolitan Water Supply, Sewerage and Drainage Act proclaimed which included Perth, Fremantle and Claremont coming together under one administration	1910		
3	Water Supply Dept began the major task of furnishing mains and drainage for all the Nedlands area. Septic tanks and outdoor privies became popular and residents sunk their own wells for water.	1912-13		
7	'The water supply at Claremont is so good that it runs the Publicans clean off the field'	1889		
2	The Freshwater Bay School, now the museum, 66 Victoria Ave.	1853	CI3	HCWA (1988d)
2	Claremont Jetty	1898	CI1	
2	"The Mansions", Victoria Ave, Claremont.	1897	CI4	
2	Bethesda Hospital, Victoria Ave.	1880's	CI5	
2	The Osborne Steps, Jetty and Hotel, Richardson Ave.	1895	CI2	
2	Claremont Baths, (demolished 1972).	1901		

3.1.6 Claremont (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Lake Claremont, farmland/gardens, watering point.	1850's		
2	Lake Claremont/Stirling Rd posts which marked the edges of the original Stirling Rd alignment, visible from the path beside Lake Claremont.	1850's		
2	Mason's Gardens, Riley Rd 1890's-1939. When the water table swamped the trees and plants Mason abandoned the gardens and the property was sold to the Nedlands Road Board and used as a tip until the 1960's.	1890		
2	Watson's Orchard, Bernard St	1900's		
2	"Riverside", 51 Victoria Ave Claremont.	1890	CI6	
2	Edith Cowan University, Claremont Campus, inc Grounds, Goldsworthy Rd.		CI7	NTWA, AHC, HCWA
2	"The Mansions", Victoria Ave, Claremont.	1897	CI4	NTWA, AHC
2	"Riverside", 51 Victoria Ave Claremont.	1890	CI6	NTWA
2	Claremont Museum, 66 Victoria Ave Claremont.	1853	CI3	NTWA, AHC
2	Mews Boat Shed, 8 Victoria Ave Claremont.		CI8	AHC
2	Swanbourne Hospital Conservation Area, Davies Rd Claremont.			AHC

Bibliography

Claremont Historical Research Group WA. (1978) A Walk Through Claremont. Claremont Historical Research Group WA.

HCWA (1988d) Claremont Heritage Trail. Heritage Council of Western Australia, Western Australia

3.1.7 Cockburn

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Land grants and early farming settlements around the chain of lakes from North Lake to Banganup Lake, Manning Lake, Lakes Henderson & Coogee			Extracts from: Cockburn - The Making of a Community
7	Western chain of lakes were saline			Courtesy of;
7	Eastern chain of lakes were fresh.			Arlene Crane
2	Pensioner Guard sites and village around Lake Coogee - established vegetable gardens.	1880's		Secretary Historical
2	Farming around lakes included market gardens & dairy.			Society of Cockburn
2	Davilak House and Estate built south of Davilak Lake. -planting of orchards, vineyard. -timber cutting from thick forest around swamps. -farming of Devon cattle and Arab horses. -65 ft deep well of fresh water.	1866	Cb1	27 Freeth Rd SPEARWOOD 6163 Ph: w 411 3444 h 418 4090
2	Joseph Meller mud brick home site, Hope Rd Jandakot.	1880's		
8	Timber cutting for many years on William Gadds land north of Leeming Rd.	1887		
2	Azelia Ley Homestead inc garden settings and associated farm buildings, Manning Estate Spearwood	1905	Cb2	NTWA, AHC, HCWA
2	Reformed Baptist Church, 15 Mell Rd Spearwood, near swamp.	1916	Cb3	NTWA, AHC

3.1.7 Cockburn (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Coogee Beach Group, 358-60 Cockburn Rd Coogee.			AHC
2	Woodman Point Quarantine Station Complex, Woodman Point.		Cb4	AHC
6	Reserve 7756, 44 ha, Jandakot.			AHC
6	Jandakot Airport Area, 400 ha, Jandakot.			AHC
6	Beeliar Wetlands, 2700 ha, Success.			AHC
6	Thomson Lake Reserve, 509 ha, Success.			AHC

Bibliography

Berson, M. (1978) Cockburn : The Making Of A Community. Town Of Cockburn, Western Australia.

3.1.8 Cottesloe

Land use	Historic site and/or water use	Date	Map ref	Source of information
3	Early water use- Domestic -Rainwater tanks, wells and windmills, bores and later the Osborne supply extended to selected houses			Miss Pat Adamson 9A Andrews Pl COTTESLOE 6011 Ph: 384 5257
4	General -Road maintenance, (road rollers), watering street trees, water troughs for horses, stock and local pound, drinking water, sanitary works, hydrants and recreational reserves			
3	Standpipe water supply, cnr of Napier St & Cottesloe Ave.			
3	Concrete tanks constructed on Congdon St.	1905-57	Ct1	
2	Cottesloe has several listings with the NTWA and AHC, none of which are located near a water source, excluding the ocean, which is not part of this study			

Bibliography

Adamson, P. (1992) Our Club, A History Of The Cottesloe Tennis Club. Cottesloe Tennis Club, Western Australia.

Downey, H.S.G. (1971) Mosman Park, Western Australia. UWA Press, Nedlands.

Jaggard, E. (1984) The Premier Club. Cottesloe Surf Lifesaving Club, Western Australia. (np)

James, R.M. (1992) Heritage Of Pines, A History Of Cottesloe. Town of Cottesloe.

3.1.9 Fremantle & East Fremantle

Land use	Historic site and/or water use	Date	Map ref	Source of information
3	Metropolitan Sewerage Plans for Fremantle, East Fremantle, North Fremantle, marks location of wells	1907-50's		Local History Collection Fremantle City Library PO Box 807 FREMANTLE 6160 Ph: 430 2239
3	Fremantle Water Supply Maps, (show wells) MSW & DD Plan no 2226	22/2/13		
5	Reclaiming of wetlands around the two bridge sites	1900's		
6	Swan & Canning Rivers- Dept of Marine & Harbours 1987			
2	Water supply to ships at Anglesea Pt from reservoir in Fremantle Prison	1872	F1	Ann Brake Curator Fremantle Prison The Terrace FREMANTLE 6160
3	First domestic water supply to Fremantle from reservoir in Fremantle Prison	1890's		
7	Increased brackishness of Fremantle water Ref: O'Brien	1899		
	Carroll's House, 15 Riverside Dve, East Fremantle.	1900's	Ef1	HCWA (1988f)
2	Seven Sisters Quarry platform, Rocky Bay.			HCWA (1988y)
2	"Knocknagow", 24 Preston Point Rd, East Fremantle.	1894	Ef2	NTWA, AHC
2	"Aldgate" 28 Preston Point Rd, East Fremantle.	1900	Ef3	
2	15 Riverside Rd, East Fremantle.	1900	Ef1	
2	West End Conservation Area, (large area within Fremantle town).			
2	"Hillcrest" Salvation Army Home, Harvest Rd North Fremantle.	1890's	F2	
2	Turton House, Harvest Rd, North Fremantle.	1897	F3	
2	House and Grounds, 91 Preston Point Rd East Fremantle.		Ef4	
2	Harvose Grounds and Front Fence, 1 Surbiton Rd East Fremantle.			
2	Stirling Bridge, Stirling Hwy Fremantle.		F4	
2	Victoria Quay, Fremantle.		F5	
6	Woodman Point Natural area, 154 ha, 9 km South Fremantle.			
2	Glanville's Buildings, 5 Riverside Rd East Fremantle.	1902	F6	
2	Fremantle Prison, Terrace Rd Fremantle.	1851	F1	

Bibliography

- Ewers, J.K. (1971) *The Western Gateway : A History Of Fremantle*. UWA Press, Western Australia.
- HCWA (1988f) *East Fremantle Heritage Trail*. Heritage Council of Western Australia, Western Australia.
- HCWA (1988y) *Rocky Bay Heritage Trail*. Heritage Council of Western Australia, Western Australia.
- HCWA (1988) *Old Shoreline Heritage Trails : "Old Foreshore", "Convict Trail" and "Manjaree Track"*. Heritage Council of Western Australia, Western Australia.
- Hitchcock, J.K. (1930) *The History Of Fremantle; The Front Gate Of Australia 1829-1929*. Fremantle City Council, Western Australia.
- Lee, J. (1979) *This Is East Fremantle*. Publication Printers, Western Australia.
- Murray, K.O. (1949) From Bar To Diesel On The Swan in *The West Australian Historical Society Journal*, volume 4, parts 1 & 2.
- Reece, R. & Pascoe, R. (1983) *A Place Of Consequence : A Pictorial History Of Fremantle*. Fremantle Arts Press, Western Australia.

3.1.10 Gosnells

Land use	Historic site and/or water use	Date	Map ref	Source of information
2 3 4 4 2 2 5 7 7	Market Gardens of H.S. Packer & G.C. Hersey Dam on river near Nicholson Rd to keep salt back. Oil driven water pumps provide first overhead irrigation of * two acres * seventy acres Wineyard Water Bore Rupert St market gardens, 7 pumps, 5 domestic wells. Murphy's Creek market gardens, 4 pumps, 5 domestic wells, 1900. 2 pumps in 1930. Murphy's Creek enlarged to drain East Cannington by Road Board. Poison passed into river from chemical factory at Thornlie Personal observation of water quality deterioration and fish deaths .	1906 1908 1906 1936 1900 1900 1958 1955-95	Go1 Go2 Go3 Go4	Mr E.M. Packer 31 Verna St GOSNELLS 6110 Ph: 398 3900
2 4 5 7 7	Jabez White developed farm and established flour mill. First artesian bore put down by H. Passmore and a team of convicts near the bridge over the Canning River at Gosnells. Swamp area bounded by Tonkin Hwy, Kelvin Rd and Dale Place drained early 1950's. 1958 aerial survey maps show wetlands within the City boundary, most of which have since been filled in. Bore put down by Passmore capped around 1913 due to the highly mineralised water flowing into the river to the detriment of the citrus orchards.	c1862 c1872 1950's	Go5 Go6 Go7	Mrs M. Lefevre Lot 103 Hardinge Rd ORANGE GROVE 6109 Ph: 459 1969
6	Declaration of Bickley Brook catchment area.	1912		S. O'Brien Local History Librarian, Gosnells Library, 2240 Albany Hwy GOSNELLS 6110 Ph: 398 1210
8	Mason & Bird Timber Tramway, Hardinge Rd, Carmel. Remains of the old Boy Scout Camp. Hardinge Rd, Carmel. Remains of the Boys Brigade Camp. Hardinge Rd Carmel. Munday Brook Bridge and convict built roadway., Hardinge Rd, Carmel. Devil's Pinch, Hardinge Rd Carmel. Old Gardens, Hardinge Rd Carmel. Kaolin Pits, Hardinge Rd Carmel. Site Of Old Mill Town, Hardinge Rd Carmel Site Of Mason's Mill, Hardinge Rd Carmel.	1872 1960's 1871 1960's 1883 1876	Go8 Go8 Go8 Go8 Go8 Go8 Go8 Go8	HCWA (1988m)
2 2 6 6	Maddington Homestead, Lot 65 Olga Rd. Kenwick Pioneer Cemetery, Albany Hwy Kenwick. Brixton St & Associated Wetlands, 126 ha, Kenwick. Ellis Brook Valley Reserve, Martin, AHC DB No 018105	1836	Go9 Go10	NTWA, AHC AHC AHC AHC

Bibliography

HCWA (1988m) Mason & Bird Heritage Trail. Heritage Council of Western Australia, Western Australia.
 McDonald, G. (1988) The Gosnells Story. City of Gosnells, Western Australia.

3.1.11 Kalamunda

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	First exploration mid 19th century.	1860+		Kalamunda & Districts Historical Society KALAMUNDA 6076
2	Little or no agriculture, timber followed by orchards and strawberries.			
3	Rainwater tanks and wells until 1954 when scheme was connected	1954		
4	Orchards had own wells and/or reservoirs, some drew from streams (this applies today)			
6	Refer to Roads Board/Shire Council			
8	Extensive timber industry 1860-1940 Water for steam engines from streams	1860-40		
3	Victoria Reservoir	1891		
3	Mundaring Weir	1903		
2	"Lesmurdie House" and orchard built by A.Sanderson.	1898		
2	Owen property - orchard/poultry Canning Rd Carmel.	1893		
2	"Heidelberg" orchard, Bickley by G. Palmateer.	1893		
2	"Ridge Hill Farm", Gooseberry Hill by J. Weire.	c. 1900		
2	"Orangedale", Walliston by J. Wallis.	1883		
2	"Carmel College", Carmel.	1902		
2	Dawsons's Nursery/Garden Centre, Forrestfield.	1914		
3	Munday's Brook diversion channel and bypass to Victoria Reservoir.	c. 1896		
8	"The Dell", site of Port & Honey's Timber Mill, Mundaring Weir Rd.	c. 1900		
8	"Canning Mills" Site.	1889		
2	Returned Soldiers Settlement Scheme, along Piesse Brook from Pickering brook to where it is crossed by Mundaring Weir Rd	1918		HCWA (1988c)
8	Mason Mill site, Masons Mill Rd, Carmel. Situated by Bickley Brook, used steam powered circular saw.	1860's-1882		
3	Victoria Reservoir at Munday's Brook opened, 30 Sept.	1891		S. O'Brien Local History Librarian, Gosnells Library, 2240 Albany Hwy GOSNELLS 6110 Ph: 398 1210
7	Reports of pollution from Gibb's Forest Inn and the Mills entering Munday's Brook, detection of typhoid in Brook	1892		
2	Stirk Cottage, Kalamunda Rd.	1881	Ka1	NTWA, AHC
2	Uniting Church, Railway Rd, Kalamunda.	1918	Ka2	
2	Kalamunda Agricultural Hall, Canning Rd, Kalamunda.	1896	Ka3	
6	Gooseberry Hill National Park, 33 ha, 4 km NW Kalamunda.			
6	Kalamunda National Park, 375 ha, 1 km NE Kalamunda.			
6	Lesmurdie Falls National Park, 56 ha, 3 km SW Kalamunda.			

Bibliography

- Harper-Nelson, J. (Ed) (1978) A Line On Kalamunda. The Nine Club, Western Australia.
- HCWA (1988c) Cala Munda Heritage Trail. Heritage Council of Western Australia, Western Australia.
- McNamara, F.J. (1961) Kalamunda Of The Dreamtime. Paterson Brokensha, Western Australia.
- Sanderson, H. (1979) Lesmurdie, A Home In The Hills. The Nine Club, Western Australia.
- Slee, J. (1973) Kalamunda The First 75 Years : A Short History. Kalamunda Shire Council, Western Australia.
- Slee, J. (1979) Cala Munda : A Home In The Forest. Shire Of Kalamunda, Western Australia.

3.1.12 Kwinana

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Water used for farming and domestic use from Long Swamp.	1830-20	Kw1	Mr Leslie Greenham 6 San Miguel Rd
2	Lugg's Dairy Farm, Wellard Rd.	1920's?	Kw2	HOPE VALLEY 6167 Ph: 410 1365
2	Leda West, (Inc Sloanes Reserve), 60 ha immediately south of Kwinana Town on Wellard Rd, including Sloanes Cottage.		Kw3	NTWA, AHC
2	Postan's Cottage, Lot 241, Hope Valley.	1860	Kw4	NTWA
2	Smirk's Cottage, Beacham Cr, Medina.	1905	Kw5	NTWA, AHC
2	Key cottage, Lot 49 Wellard Rd.	1841		NTWA
2	Greenkeeper's Cottage, Lot 8 Wellard Rd.	1890's	Kw6	NTWA, AHC
2	Sloanes Reserve or "Woodlands", part of farm off Wellard Rd.	1911	Kw3	NTWA, AHC
6	Bollard Bulrush Swamp, 400 ha, 10 km south east of Kwinana.		Kw7	AHC
6	Modong Nature reserve, 154 ha, 8 km east of Medina.			AHC
6	Leda Area, 250 ha, 8 km east of Rockingham.			AHC
6	Wandi Nature Reserve, 30 ha, Wandii.			AHC

Bibliography

- McKenna, J. (1962) Settlement And Development Of Kwinana. Teacher College Thesis.
- Russel, L. (1979) Kwinana Third Time Lucky. Shire Of Kwinana, Western Australia.

3.1.13 Melville

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Point Heathcote, freshwater springs.	1827	Me1	Anne Reid
1	Early land grants on river, Bicton - Bullcreek.	1830-		Research Secretary
2	Stock grazing on river flats, poultry farmers around Alfred Cove south		Me2	Melville Historical Society
3	Wells prior to Road Board,(1901). Water development continues with new suburbs, reservoir in Melville.	1950's- 1995	Me3	6 Hill Pl ATTADALE 6156 Ph: 330 2642
4	Blue Gum Lake used for market garden.	1920's?	Me4	
8	Piney Lake- Nursery for Sommerville plantation.	1926-27		
5	Some land drainage around Bullcreek.		Me5	
6	Beeliar Wetlands Park, (Blue Gum, Booragoon & Piney lakes).			

3.1.13 Melville (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
6 6 7 8 1 2 8 2 5 5 7 9	Bullcreek/Yagan Park. Myaree Marmion Reserve. Blue Gum Lake good for watering stock on way to Midland. Much felling of big timber around Blue Gum, Piney and Booragoon Lakes. Stirling found springs at Point Heathcote and planted a garden to test the soil. All early pioneers from Duffield at Bicton to Bateman at Bullcreek used the river for timber and produce transport and as a means of travel. Shipbuilding yards were located on river, at least two Ferries began early this century. River area became a holiday destination with camping sites at Point Walter and Applecross. Massive changes in foreshore due to infilling. Removal of foreshore vegetation. Fishing patterns have changed. Oyster Beds at Bicton.	1910-20	Me6 Me7 Me8	
1 2 2 2 2 8 8 8 8 2 2 6 2	Governor Stirling explored the area in 1827 and considered it to be the best site for Perth Land grants to John Duffield and Alfred Waylen. Point Dundas & Majestic Hotel. Raffles Hotel. Bateman's Landing & Homestead, Pulo Rd. Attadale Jetty Site, end of Stock Rd, (buried by land reclamation) Brick Landing Site, Attadale Reserve, (buried by land reclamation). German Jetty Site, Melville Beach Rd. Original Applecross Jetty site, Jeff Joseph Reserve. Coffee Pt Boatyard. Bicton Jetty Area, Rob Campbell Park. Blackwall Reach Point Walter reserve. Alfred Cove.	1827 1830 1897 1896 1886 1900 1911 1890's 1890's 1896 1907	Me9 Me10 Me11 Me8	HCWA (1988n)
	Wireless Hill Museum Group & Park, 48 ha, Canning Hwy. Heathcote Hospital Precinct, Duncraig Rd Applecross. "Grasmere", 12 Pulo Rd Brentwood. Alfred Cove/Pt Waylen area, 150 ha, AHC DB 017818. Applecross Primary School, Kintail Rd. Bateman House, Spinaway Cr Brentwood. Blue Gum Swamp, 8 ha, Melville.	1912 1869 1886 1913	Me12 Me1 Me13 Me14 Me15	NTWA, AHC NTWA, HCWA NTWA, AHC AHC NTWA, AHC, HCWA AHC AHC

Bibliography

- Cooper, W.W. & McDonald, G.M. (1989) A City For All Seasons. City of Melville, Western Australia.
- HCWA (1988n) Melville Historical Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988) Wireless Hill Park Heritage Trail. Heritage Council of Western Australia, Western Australia.
- Uren, M. (1975) The City Of Melville, From Bushland To Expanding Metropolis. City of Melville, Western Australia.

3.1.14 Mosman Park

Land use	Historic site and/or water use	Date	Map ref	Source of information
3	Buckland Hill Reservoir.	1925	Mo1	HCWA (1988y)
2	Minim Cove Spring (buried by tip activities).			
2	Town of Mosman Park Historic Buildings Policy (precinct)			NTWA
2	Buckland Hill, Chidley Point, Mosman Bay Area.			AHC
2	Leighton Battery, Stirling Hwy Mosman Park.			AHC
6	Mosman Bay, 5.12 ha, Mosman Park.			AHC

Bibliography

Downey, H.S.G. (1971) Mosman Park, Western Australia. UWA Press, Nedlands.

Tuetteman, E. (1991) Between River And Sea : A History Of Mosman Park, Western Australia. Town of Mosman Park, Western Australia.

3.1.15 Mundaring

Land use	Historic site and/or water use	Date	Map ref	Source of information
3	Chidlow's Well. cnr Thomas & Old Northam Rd.	1830's	Mu1	HCWA (1988v)
8	Wooroloo Steam Sawmill, Wooroloo.	1890's		
8	Lacey's Enterprise Steam Sawmill, Sawyers Valley.	1880's		
3	Mahogany Creek, watering place & barracks.	1839		
3	Mundaring Weir	1903		
3	Nyaania Creek diversion for railway.	1883		
2	Jane Brook Bridge, John Forrest National Park. (original bridge site of 1895)	1925	Mu2	HCWA (1988a,j,k)
2	National Park Station site, John Forrest National Park.	1936		
2	Main Camp Site, on Jane Brook during construction of the Mahogany Creek deviation	1894		
2	Deep Creek Bridge now buried under an embankment.	1890's		
3	Bilgoman Well at tea-tree swamp site.	1846		
2	Weir Hotel, Mundaring weir,	1900's	Mu3	
3	No 1 Pumping Station- O'Connor Museum.		Mu4	
3	Chauncey's Spring, Fagan St, Sawyers Valley.	1873		
6	Blackboy Hill Commemoration Site, 5514m ² , Innamincka Rd, Greenmount. Historic - First World War Army Units formed here.			NTWA, AHC
3	O'Connor Museum, Mundaring Weir Rd Mundaring.	1902	Mu4	NTWA, AHC, HCWA
2	Old Weir Hall, Mundaring Weir Rd Mundaring.	1906		NTWA, AHC
2	"Holmesdale", Darlington Rd Darlington.	1890	Mu5	NTWA
2	"Belle View" Farm, Pascoe St Bellevue.	1887	Mu6	NTWA
2	Former Smiths House, Harold St Glen Forest.	1880's	Mu7	NTWA, AHC
2	"Springside" former McGlew Homestead, Springside Cr, Glen Forest	1844	Mu8	NTWA
2	Clayton Farm, Clayton Rd Helena Valley.	1878	Mu9	NTWA, AHC
2	Traveller's Inn Ruins, Gt Eastern Hwy / Gt Southern Hwy, The Lakes.	1848	Mu10	NTWA, AHC
2	Mahogany Inn, Gt Eastern Hwy, The Lakes.	1839	Mu10	NTWA, AHC
2	Tudor Park Stud, Flynn Rd Chidlow.			AHC

3.1.15 Mundaring (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Hall, McGlew Rd Glen Forrest.			AHC
2	Katherine's Place, 11 Old York Rd Greenmount.		Mu11	AHC
6	Beechina Reserve, 59 ha, 4 km east of Chidlow.			AHC
6	Greenmount National Park, 56 ha, Greenmount.			AHC
6	Wooroloo Woodlands, 250 ha, 12 km west of Wooroloo.			AHC
2	Eastern Railway - Three Bridges in John Forest National Park.			HCWA
2	Eastern Railway Tunnel near Curve Rd Swan View.	1895		HCWA

Bibliography

- Elliot, I. (1983) Mundaring : A History Of The Shire. Shire of Mundaring, Western Australia.
- HCWA (1988a) Bilgoman Well Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988h) Guildford To York Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988j) John Forest Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988k) Kattamorda Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988v) Railway Reserves Heritage Trail. Heritage Council of Western Australia, Western Australia.
- Mills, J. (1978) Bunnings The Timber People : A History Of Bunnings Ltd. Bunnings Ltd, Western Australia.
- Mundaring Primary School. (1988) Down Memory Lane : A History Of The Mundaring To Mundaring Weir Spur Line. Mundaring Primary School, Western Australia.
- Williams, L. (1957) History Of Mundaring. Teacher College Thesis.

3.1.16 Nedland

Land use	Historic site and/or water use	Date	Map ref	Source of information
6	Shenton Park bushland, Stubbs Tce, 20 ha, historical associations.			NTWA
2	Gallop House, Birdwood Pde Dalkeith.	1877	Ne1	NTWA, AHC, HCWA
2	Sunset Hospital and Grounds, Birdwood Pde Dalkeith. Historical - early Army Depot, then poorhouse, then old men's home then hospital.	1904	Ne2	NTWA
2	Swanbourne Hospital Conservation Area, Davies Rd, Mt Claremont	1900's		NTWA, HCWA
2	Nedlands Marina, Former Baths, Swan River foreshore.	1901	Ne3	NTWA
2	Gardens of UWA, Nedlands.			AHC
6	Norfolk Island Pine, AHC DB No 015823, Karrakatta.			AHC
2	"Hot Pools" - Nedlands Foreshore, near Tawarri.			Jim Elliot City of Nedlands Ph: 386 6900

Bibliography

- Surman, R.J. (1962) A Short History Of Nedlands. Teacher College Thesis.
- Todd, C. (1960) A Short History Of Nedlands And Dalkeith. Teacher College Thesis.
- Williams, A.E. (1975) History Of Nedlands. Royal West Australian Historical Society, Perth, Western Australia.
- Williams, A.E. (1984) Nedlands : From Campsite To City. City of Nedlands, Western Australia.

3.1.17 Peppermint Grove

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Vlamingh's party landed at Cottesloe Beach and walked cross to the river, probably at the foot of Keane St, calling the water body Black Swan Lake, to be changed when they discovered the mouth of the Swan.	1697		Barbara Evans & Margaret Evans 60 The Esplanade PEPPERMINT GROVE Ph: 384 2927
2	Swan location 84 granted to John Butler in 1832 for a farm and granted a licence for an Inn.			
2	Later there is limestone quarrying in the area.			
3	Water supply originally from Swanbourne.			
3	Many private bores. originally windmill driven, now electric.			
7	Of recent years many bores have gone salty due to water table changes.			
3	In earlier days a spring located at foot of Keane St?			
6	Lover's Walk - Cliff below Esplanade from Zigzag to Leake St.	1895?		
7	In the years 1915-1918, water in the bay was very much fresher in winter.			
8	Private woodcutters were active here in last century.			
9	Commercial and hobby fishermen used this area intensively before subdivision			
7	Freshwater was always available on the beach (of the river) by digging a small hole as the kangaroos and brumbies did.			
3	A spring was also located in the river at the Karrakatta Bank off Claremont.			
3	Shire well in Manners Hill Park, cnr Bay View Terrace and Johnson St, water obtained at 10 ft			
3	An underground stream flowed from shire well site down to the lane into Keane St, opp Bay View Tce			
3	Well and windmill on Butler's property at Keane St opp Bay View Tce with water at 20 ft.			
3	Vegetable gardens in this vicinity, definitely where Irvine St is now and just beyond View St to the west, before the subdivision of the 1890's.	1890'S		
2	Cave near Scotch College boatshed.			
2	"The Cliffe", Bindaring Pde Peppermint Grove.	1894	Pg1	NTWA, AHC
2	Cottesloe Primary School, Stirling Hwy.	1897	Pg2	NTWA, AHC, HCWA
2	Old Cottesloe Police Station, Stirling Hwy.	1908	Pg3	NTWA, AHC
2	Coppin's Store, 502 Stirling Hwy.			AHC
2	Manners Hill Park Pavilion, Keane St.		Pg4	AHC
6	Keanes Point Reserve, 2 ha, Peppermint Grove.			AHC
2	Royal Freshwater Bay Yacht Club, Peppermint Grove	1892	Pg5	HCWA (1988d)
2	Manners-Hill Park, Keane St.			

Bibliography

- HCWA (1988d) Claremont Heritage Trail. Heritage Council of Western Australia, Western Australia
- Keen, C.J. (1984) An Architectural Guide To Subiaco : Through Peppermint Grove To Fremantle. Royal Australian Institute of Architects.
- Pascoe, R. (1983) Peppermint Grove : Western Australia's Capital Suburb. Oxford University Press, Melbourne.

3.1.18 Perth (Vincent, Shepparton, Cambridge, Perth)

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	St George's College Campus Gardens, 0.5 ha, in grounds of UWA. Historical - association with Sir Winthrop Hackett and Sir J Talbot-Hobbs.			NTWA
2	Stirling Gardens, (Government Gardens), 0.9 ha, St George's Tce. Historical - The first horticultural development of the colony.			NTWA
3	Low Level Sewage Pumping Stations, Swan River Foreshore, (buildings)			NTWA
3	Pump No 1, Causeway/Riverside Dve.	1914		NTWA
3	Pump No 2, Langley Park near Hill St.	1914		NTWA
3	Pump No 3, Mounts Bay Rd/Mill St.	1913		NTWA
2	Former Stable Block, Swan Brewery Complex, Mounts Bay Rd.		P1	NTWA, AHC
2	Old Swan Brewery Precinct, Mounts Bay Rd.		P1	HCWA
3	Governor Kennedy's Fountain, Mounts Bay Rd.	1861		NTWA
2	WA Rowing Club Boatshed, on Swan River near Barrack St.	1905		NTWA, AHC, HCWA
2	St George's College, UWA, Mounts Bay Rd Crawley.	1930		NTWA
2	Old Zoology Building, UWA, Mounts Bay Rd Crawley.	1923	P2	NTWA
2	Plane Trees, Mounts Bay Rd.			AHC
6	Kings Park and Botanic Garden, Kings Park Rd.			AHC
6	Bold Park and Adjacent Bushland, 450 ha, City Beach.			AHC
6	Matilda Bay Reserve, AHC DB No 010761, Perth.			AHC
2	East Perth Power Station, Summers St.		P3	HCWA
2	Queen's Gardens, cnr Hay and Plain Sts. These gardens were originally the East Perth Clayfields Reserve and in 1899 the council landscaped and transformed the claypits into lily ponds.	1899		HCWA (1988t)
1	Claise Brook. The camp site of Willem de Vlamingh and his party in 1687	1687		
1	The Brook was named by Stirling in 1827 after the surgeon on board 'H.M.S Success', F.R. Clause	1827		
7	Claise Brook's fresh waters once flowed from a wide lagoon known as Tea Tree Lake which was connected to a chain of lakes which connected to Lake Monger, the Hyde Park lakes being the only significant ones remaining.			
5	WACA Ground and Gloucester Park, Waterloo Cr. This area was originally a large swamp surrounded by saltbush	1880's		
5	Wellington square, originally one of Perth's swamps it was drained and established as a public reserve in the 1830's.	1830's		
5	Langley Park , was created by land reclamation in response to the need for public open space near the city.	1921-35		
2	Lake Monger and surrounding reserve. Used recreationally by early settlers for boating and swimming and also for waterbird hunting.			Ms S. Linehan Town of Cambridge Ph: 347 6055

Bibliography

- Appleyard, R.T. & Manford, T. (1979) The Beginning : European Discovery & Early Settlement Of The Swan River WA. UWA Press, Western Australia.
- Bourke, M. (1987) On The Swan. UWA Press, Western Australia.
- Hasluck, A. (1969) Unwilling Emigrants : A Study Of The Convict Period In Western Australia. Angus & Robertson, Sydney.
- HCWA (1988t) Perth Heritage Trails. Heritage Council of Western Australia, Western Australia.
- Hunt, I. (1979) Westralian Portraits. UWA Press, Western Australia.
- Moore, G.F. (1978) Diary Of Ten Years Of An Early Settler In Western Australia. UWA Press, Western Australia

3.1.19 Rockingham

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Settlement on Garden Island	1829		Rockingham
2	Settlement in East Rockingham area mainly around freshwater swamps.	1850's		Historical Society (Inc) PO Box 504 ROCKINGHAM 6158 Ph: 592 3455
2	Farming at East Rockingham.	1850's		
2	Peel Estate Group Settlement Scheme.	1920's		
3	Wells sunk by the early settlers			
5	Drains dug in the Peel Estate and Serpentine River area.	1920's		
6	Lakes Coo loongup, Walyungup and Richmond are all gazetted public open space.			
8	The timber industry of the Jarrahdale-Rockingham area is well documented in the book, "The Sea & The Forest".			
9	See book, "Flora & Fauna of the Rockingham Foreshore Island & Cape Peron."			
3	Stirling's Well, Garden Island			Rockingham & Districts Tourist Authority
1	William de Vlamingh expedition along coast.	1696		HCWA (1988s, w)
2	French expedition under the command of Nicholas Baudin names Cape Peron, Garden Island & Carnac Island	1800's		
2	Ship 'Rockingham' runs aground.	1830		
2	Peel attempts to establish settlement.	1830		
2	Rockingham town gazetted.	1847		
2	Districts first families settle in East Rockingham area along a fertile strip of swampy country several miles from the coast.	1850's		
2	Mead Home, Mead Rd. Site originally chosen due to proximity to swamp.	1895	R1	
2	Lucy Saw Home originally known as 'Lakeside'.	1920		
2	Lake Coo loongup, favoured picnic spot.	1920's		
9	Duck shooting at Lake Coo loongup.	1920's		
2	"Day Cottage", Day Rd East Rockingham.	1885	R2	NTWA, AHC
2	Chesterfield Inn, Rockingham Rd East Rockingham.	1856	R3	NTWA
2	"Bell Cottage", Mandurah Rd Baldivis.	1880's	R4	NTWA, AHC
2	Cape Peron Battery Complex, Point Peron Rd Rockingham.		R5	AHC
6	Beenyup Swamp, 15 km south east of Rockingham.			AHC
6	Folly Pool, 50 ha, 15 km south east of Rockingham.			AHC
6	Lake Richmond area, 80 ha, Rockingham.			AHC
6	Lakes Coo loongup & Walyungup & Surrounds, 2700 ha, 6 km south east of Rockingham.			AHC
6	Maramanup Pool, 50 ha, 18 km south east of Rockingham.			AHC

Bibliography

- Fall, V.G. (1972) The Sea And The Forest. A History Of The Port Of Rockingham, Western Australia. UWA Press, Western Australia.
- HCWA (1988s) Old Rockingham Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988w) Rockingham-Jarrahdale Heritage Trail. Heritage Council of Western Australia, Western Australia.
- MHL (1995?) Rockingham. Museum and Historical Libraries Pamphlet, Western Australia
- Taggart, N. (1984) Rockingham Looks Back. A History Of The Rockingham District 1829-1982. Rockingham District Historical Society, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.1.20 South Perth

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Peninsula set aside as a suburban extension of Perth by Stirling.	1829		HCWA (1988x)
2	Artesian Bore at Zoological Gardens, (frequented as mineral baths 1930's-1950's)	1898	Sp1	
2	Old Mill, on river at Mill Pt Close.	1835	Sp2	
2	Miller's Pool at Old Mill site now reclaimed land.	1938		
2	Site of Haddon Hall, South Perth Esplanade	1897		
2	Mends St Jetty, (original built).	1894		
2	Como Beach & jetty, popular holiday resort.	1890's-1940's		
2	Site of Manning Homestead & Dairy, South Perth foreshore.	1859		
2	Racecourse & Polo Ground, South Perth foreshore.	1890's - 1940's		
2	Coode St Jetty.	1903		
2	Chinese market gardens, Sir James Mitchell Park.	1880's	Sp3	
9	Fishing Point Belches, Canning Bridge, camping near the Old Mill.		Sp2 Sp4	
8	Horse Ferry, Mill Pt Rd to Mt Eliza.	1830's	Sp2	
8	Occasional private steam ferries to Perth.	1860's		
9	Proposed commercial fishery.	1834		
2	Vineyard, Charles Tondut.	1849		
8	Ferry service from Mends St, 'Duchess'.	1898		
2	Clontarf Boys Home and jetty, previously a landing area for timber and produce trades. Dairy, piggery and poultry farming as well as cropping at Boys Home.	1901	Sp5	
8	Piggeries established on South Perth foreshore (prohibited by law 1924).	early 1900's		
2	Boat houses on foreshore.	1900's		
3	Freshwater found at Clontarf.	1900's		
7	Mosquito problems at Millers Pool and along river edges led to a proposal for infilling wetland areas.	1920's		
7	Major flooding of Mill Pt area.	1926-29		
2	Depression camps at Canning Bridge.	1930's		
7	Algal bloom at Como Beach makes swimming unpleasant.	1940's 50's		

3.1.20 South Perth (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Narrows Bridge.	1959		
2	Canning Bridge, original built 1849.	1938		
2	Mt Henry Peninsula Quarry.	pre 1900's		
1	Aquinas Bay swimming area.	1930's		
1	Willem de Vlamingh believed to have landed on the Peninsula.	1700's	Sp2	
2	Pensioner Guard sites allocated but not taken up.	1850	Sp7	
5	Filling in of Melville & Perth waters foreshore.	1930's-	Sp6	
		1960's	Sp3	
7	Reports of algal smells on Melville water side of river.	1940's	Sp6	
2	Neil McDougall Farm Complex, Clydesdale St Como.	1920	Sp8	NTWA, AHC
2	The Old Mill (Shenton's Mill), Mill Point Rd South Perth.	1837	Sp2	NTWA, HCWA
2	Post Office, Mends St South Perth.		Sp9	NTWA
2	Cygnat Theatre, Preston St Como.	1938	Sp1 0	NTWA, AHC, HCWA
6	Canning River Wetlands (Mount Henry to Clontarf), 40 ha, Manning.			AHC
6	Milyu Nature Reserve (M60), 94 ha, 1 km west of South Perth.			AHC
6	Reserve 33803, AHC DB No 010663, South Perth.			AHC

Bibliography

- Crowley, F.K. (1962) Westralian Suburb : The History Of South Perth Western Australia. Rigby Publishing, WA.
- Gothard, J. (1988) Across Perth Water. Reminiscences Of South Perth. City of South Perth, Western Australia.
- HCWA (1988x) South Perth Heritage Trail. Heritage Council of Western Australia, Western Australia.
- Joynt, S. (1979) South Perth, The Capitals Suburb. City of South Perth.

3.1.21 Stirling

Land use	Historic site and/or water use	Date	Map ref	Source of information
1 2 2 2 2 2 2 2 2	Historical use of Star Swamp area. - Star swamp on Surveyor Cowle's map. - Settled by pastoralists. - Drovers watering point. - Camel quarantine station. - Orchards, remaining olive tree, Hope St. - Stock route along east side of swamp. - Dairy farm watering point. - Marl quarry - Light horse division used swamp & well on Hope St.	1869 1860's 1860's- 1900's 1890's 1870- 1910's 1850's 1915 1919 1940's	St1	HCWA (1988z)
1 2 3 8 3 3 3 3 3 3 3 3 3	Stock route from Carnarvon and Greenough. Okely farm, Carine dairy. Mt Flora MWSS & DD, North Beach domestic supply. Lime Kilns fired with timber from land cleared around Lake Gwelup. Wells - Stone well, Hope St, North Beach - Sorrento St, North Beach - Malcolm St, North Beach - Near North Beach jetty - Terrace St, near Mary St., Waterman - Elliot Rd, Trigg - West Coast Highway, near Mettam's Pool - West Coast Highway, near Hammersley Home - North Beach Rd, near Cain St, North Beach Whaling water supply, Beach Rd., Waterman	1874 1930's 1942	St1 St2 St3 St4 St5 St6 St7 St8 St9 St10 St11 St12 St13 St14	Lynda Arnold North Suburban Historical Society c/- 26 Whitworth Ave GIRRAWHEEN 6064 Ph: 342 5091
2 3 5 2 3	Area by St Anne's, Mt Lawley was & still is freshwater, wetlands used as garden by early settlers, (see Chauncy map 1844). Early wells on Maylands Peninsula used domestically by early settlers- some still exist, refer detail to Hardey family. Gibney park, Maylands was wetlands and used as Chinese gardens, since drained & filled. Freshwater areas nominated by Stirling and shown on early maps as 'garden', thought to be Chinese Freshwater Springs.	1829- 1850 1830- 1900 1850- 1930	St15 St16	Frank Greenslade (President) Maylands Historical Society PO Box 6 MAYLANDS 6051 Ph: 271 4284
2 2	Tranby House, Johnson Rd Maylands. Kelvin St Lookout, cnr Swan View Tce & Kelvin St Maylands.	1839	St17	HCWA (1988bb)
6 6 6	Star Swamp Bushland Reserve, 96 ha, bordered by Hope St, North Beach Rd, Marmion Ave and Beach Rd . Trigg Dune Reserve, 118 ha. Inglewood Triangle, 3 ha, bounded by Eighth Ave, Walter Rd and Hamer St		St1	NTWA, AHC NTWA, AHC NTWA

3.1.21 Stirling (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
6	Dianella Bushland, 26 ha, between Morley Dve and Yirrigan Dve.			NTWA
2	Tranby House, Hardy Rd cnr Johnson Rd Maylands.	1836	St17	NTWA, AHC, HCWA
2	Maylands Brick Works, Swan Bank Rd Maylands.	1927		NTWA, AHC
2	Wiinschl Residence and Grounds, 39-41 Peninsula Rd, Maylands.			AHC
6	Lake Karrinyup Country Club, North Beach Rd Karrinyup.			AHC
2	Marine Research Laboratories, West Coast Hwy.			AHC
6	Swan River Foreshore, Maylands, AHC DB No 017879.			AHC
2	Herdsmen Lake Settlers Cottage, 99 Pearson St Churchlands.			HCWA
6	Herdsmen Lake, 300 ha, 6 km west of Perth.		St18	AHC

Bibliography

- Eastern, L.A. (1971) Stirling City. UWA Press, Western Australia.
- Gordon, R. Shearwood. (1988) Original Crown Grants (1833-1844) And Localities Within The Stirling City. Shearwood, Western Australia.
- HCWA (1988z) Star Swamp Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988bb) Swan River Heritage Trail. Heritage Council of Western Australia, Western Australia.
- Newell, L. & Weller, H. (Eds) (1980) Recollections From A Shoreline. Artlook Press, Western Australia.

3.1.22 Subiaco

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Benedictine monks purchase land around Lakes Monger and Herdsmen.	1840's		HCWA (1988aa)
2	Farming on monks land included orchards, vineyards, olive groves and gardens.	1850's		
2	European family settlement (not including Crawley).	1886		
2	Shenton Park lake-		Su1	
	- owned and used by James Dyson for stock watering place including camels.	1870's		
	- popular recreational area and playing fields (cricket).	1897		
2	Lake & gardens at Sir Charles Gardiner hospital was part of dairy & orchard belonging to Frederick's	1890's		
6	Matilda Bay, public recreational area.	1909	Su2	
6	Pelican Pt, bird sanctuary.		Su3	
2	Qantas Catalina Memorial, site of World War 2 base.	1939-45	Su4	
6	J.H. Abrahams Reserve.	1980	Su5	
2	Nedlands Baths and Jetty and Nedlands Park Hotel.	1909	Su6	
2	St Thomas More College, Mounts Bay Rd.	1958	Su7	
2	"Crawley House", Hackett Dve Crawley. Former Shenton House in UWA Campus	1880	Su8	NTWA, AHC
2	Subiaco Declared Conservation Area bounded by Hamersley Rd, the right of way west of Rupert St, the right of way south of Heytesbury Rd and Townsend Rd			NTWA

3.1.22 Subiaco (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
6	Pelican Point M62, 50 ha, 1.5 km south west of Nedlands.			AHC
2	St Georges College Gardens, Mounts Bay Rd Crawley.			AHC
2	St Georges College, Stirling Hwy Crawley.		Su9	AHC

Bibliography

HCWA (1988aa) Subiaco Heritage Trail. Heritage Council of Western Australia, Western Australia

Molynuex, I. & Assoc. (1985) Survey Of The National Estate In Subiaco, V1&2. Molyneux & Associates, Western Australia.

Spillman, K. (1985) Identity Prized : A History Of Subiaco. UWA Press, Western Australia.

Van De Straaten, M. (1959) A History Of Subiaco From First Settlement To Depression. Van De Straaten, Western Australia.

3.1.23 Swan

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Stirling exploration party sail up Swan River.	1827		HCWA (1988cc)
6	Fishmarket Reserve, Swan St.			
2	Woodbridge', home of Charles Harper.	1883-85	Sw1	
2	St Mary's Church, Yule Ave.	1868	Sw2	
2	Houghton Homestead, Dale Rd.	1863	Sw3	
2	All Saints Church, Henry St, also site of upper most camp of Stirling's exploration party	1839-40	Sw4	
2	Town Wharf, Meadow St.	1827		
3	Government wells-			Mrs Thelma King 571 Chittering Rd SOUTH CHITTERING 6084
3	- Muchea Store, Brand Hwy.			
3	- Turner Rd.			
2	Early grazing and small food crops.	1829 -		Mrs M.J. Hammersley Swan Guildford Historical Society Meadow St GUILDFORD 6055 Ph: 274 1060
2	Fruit growing became important.	1870 -		
3	Guildford town, mostly wells, very few springs.			
3	Artesian bores put down.	1895		
3	Coolgardie scheme reticulates town.	1905		
4	Plentiful springs on west bank, black soil swamps used for summer crops, no irrigation until 1885.	1885		
5	Only drains usage was to carry artesian water for irrigation.			
6	Swan River used for transport.			
6	Small water courses part of properties.			
7	Quality of water from bores was very constant until excessive draw from mid 70's began to affect quality.			
9	Swan river fishery used from 1829 onwards. Early settlers used shellfish and water birds.			
1	Gidgegannup exploration, Bland, Agett & Trimmer.			Noela Sheperd Halcyon Hill Lot 4 Roland Rd GIDGEGANNUP 6083 Ph: 295 4202
2	Timber getters.	1903+		
2	Farming - citrus orchards.	1930+		
3	12 Mile spring, cnr Roland/Toodyay Rds.		Sw5	
3	Gidge Springs, cnr Rene/Spring Rds.		Sw6	

3.1.23 Swan

Land use	Historic site and/or water use	Date	Map ref	Source of information
3	Cookes Brook, near Lilydale/ Toodyay Rd.		Sw7	
3	Baylup Springs, near Utah/Toodyay Rd		Sw8	
6	Water reserves around 12 Mile Spring.			
7	12 Mile Spring was 'yuk'.			
7	Noble falls was always salty except in winter. (Anecdotal records result of oral interview conducted by Noela Sheperd with Alan Anderson, resident 1930-80).			
8	Dykes mill, Susanah Brook.	1903		
8	Dalgarup Mill, 12 Mile Spring.	1903		
8	Smiths mill, Wooroloo Brook, used water from Baylup.	1942-1950?		
2	Belhus Estate Conservation Area, West Swan Rd including:-			NTWA, AHC
2	- Ellen Brook Bridge	1860	Sw9	NTWA
3	- Mill Race and Dam and the valley in which they lie.	1830		NTWA
2	"Oakover" Vineyards, gardens and river meadows, Dale Rd. Historical - Vineyards date back to 1843 and there are fine olive and oak trees.	1843	Sw3	NTWA, AHC
2	"Oakover House" Group, Lot 13 Dale Rd Middle Swan.	1860	Sw3	NTWA, AHC
2	"Swanleigh" Grounds inc Jane Brook, Yule Ave Middle Swan.		Sw2	NTWA, AHC
2	Chaplain's House, Swanleigh, Yule Ave Middle Swan.	1850's	Sw2	NTWA
2	St Mary's Church and Graveyard, Yule Ave Middle Swan.	1869	Sw2	NTWA, AHC
2	Swanleigh Youth Hostel, Yule Ave Middle Swan.	1874	Sw2	NTWA
6	Swan Valley Landscape Conservation Area, 105 km ² , comprising The Swan River, the surrounding alluvial lands, the Swan Valley Vineyard area, the Darling Scarp and foothills.			NTWA, AHC
2	Ellen Brook Estate, (Northern part), 980 ha, Lexia, Maralla and Millhouse Rds.			NTWA
2	Guildford Historic Townsite comprising the Guildford Townsite between the Swan & Helena River delta.	1829	Sw10	NTWA, AHC
2	Meadow St Conservation Area including:			NTWA
2	- Barker's Bridge.			NTWA
2	- Banks of Swan River including Landing Space.			NTWA
2	- "Garden Hill" Seminary and Grounds.		Sw10	NTWA
2	- Vista to Helena River.			NTWA
2	Meadow St/Stirling St Square Landscape Space, visual length of Meadow St from Swan River to Helena River Stirling Square and its visual connection to the Swan River via Kings Meadow			NTWA
2	Primary School, Helena St Guildford.	1865	Sw10	NTWA, AHC
2	Turner's House, 16 Helena St Guildford.	1910	Sw10	NTWA
2	Jeck's Cottage, Helena St Guildford.	1850	Sw10	NTWA
2	"Stathalbyne" Residence, 63 Helena St Guildford.		Sw10	NTWA
2	"Fairholme", 39 Market St Guildford.	1910	Sw10	NTWA, AHC, HCWA
2	Old Fairholme, Market St Guildford.	1870	Sw10	NTWA, AHC, HCWA
2	Welbourne House, 43 Market St Guildford.	1840	Sw10	NTWA, AHC, HCWA

3.1.23 Swan (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	"Garden Hill" including grounds and trees now St Charles Seminary, Meadow St Guildford.	1890's	Sw10	NTWA, AHC
2	Former "Bebo Moro", 224 Swan St in grounds of St Vincent's Hospital, Guildford	1843	Sw10	NTWA
2	Guildford Grammar School Chapel, 11 Terrace Rd Guildford.	1914	Sw10	NTWA
2	Former Padbury Store, 116 Terrace Rd Guildford.	1870	Sw10	NTWA
2	Cottage, rear 116 Terrace Rd Guildford.	1885	Sw10	NTWA
2	"St Winnols", Lot 28 Caversham Ave Caversham.	1898	Sw11	NTWA
2	"Mandalay", Former Sandalford Farm, Middle Swan Rd Caversham.	1870's	Sw12	NTWA, AHC
2	Former Houghton Homestead, Lot 103/7741 Dale Rd Middle Swan.	1863	Sw3	NTWA, AHC, HCWA
2	Houghton Winery, Lot 15 Dale Rd Middle Swan.	1859	Sw3	NTWA, AHC
2	Midland Junction Town Centre Conservation Area bounded by Gt Eastern Hwy to the south, Spring Park Rd to the west, Gt Northern Hwy to the north-east and Helena St to the east.	1890-1910		NTWA, AHC
2	"Woodbridge", Third Ave Midland.	1885	Sw1	NTWA, AHC
2	"Millendon" House, Olive Rd cnr Memorial Ave, Midland.	1834	Sw13	NTWA, AHC
2	All Saints Church and Graveyard, Henry St Henley Brook.	1840	Sw4	NTWA AHC
2	Strelley Farm Buildings, Dale Rd Middle Swan.		Sw3	AHC
6	Bullsbrook Reserve, 120 ha, 5 km north east of Bullsbrook.			AHC
6	Pearce Aerodrome, 450 ha, 0.2 km north east of Bullsbrook.			AHC
6	Bushmead Rifle Range Area, 120 ha, Helena Valley.			AHC
6	Talbot Rd Reserve A2395, 2300 ha, Swan.			AHC
6	Ellen Brook Nature Reserve, 67 ha, 2 km north northeast of Upper Swan.			AHC
6	Twin swamps Reserve, 155 ha, 5 km north of Upper Swan.			AHC
6	Walyunga National Park, 1790 ha, 5 km north east of Upper Swan.			AHC
6	John Forrest National Park, 1577 ha, 1 km east of Swan View.			AHC
6	Ellenbrook National Estate Area, 2000 ha, 4 km west northwest of Upper Swan			AHC
2	Hand carved jarrah trough at the base of a spring fed waterhole which forms a freshwater creek. Lot 8247 Sawpit Rd Bullsbrook.	1900		Michael Ross Shire of Swan Ph: 274 9908
2	Convict Depot ruins adjacent to creek. North side of Toodyay Rd, 2kms west of Red Hill Waste Disposal Site. Situated within Toodyay Rd Reserve.	1850's		
3	Former Guildford Town Bore on Reserve 6449 Lot 144 Helena St Guildford. Located on part of the southern portion of the original Stirling Square. The site contains the early Guildford water supply, convict built well and artesian water supply. It is believed to be the oldest and deepest public artesian bore still in use today.	1898	Sw10	
3	Well on TL32 No 4 James St Guildford. The land was originally owned by the Devenish Inn (No 10) the first hotel built in Guildford (c 1850) and was used for brewing beer.	1850's		

Bibliography

Appleyard, R.T. & Manford, T. (1979) The Beginning : European Discovery & Early Settlement Of The Swan River WA. UWA Press, Western Australia.

Bourke, M. (1987) On The Swan. UWA Press, Western Australia.

Hasluck, A. (1969) Unwilling Emigrants : A Study Of The Convict Period In Western Australia. Angus & Robertson, Sydney.

HCWA (1988cc) Swan Valley Heritage Trail. Heritage Council of Western Australia, Western Australia

Gibbons, L. (1929) Guildford 1829-1929. A Century Of Progress. Guildford Municipality, Western Australia

Hunt, I. (1979) Westralian Portraits. UWA Press, Western Australia.

Moore, G.F. (1978) Diary Of Ten Years Of An Early Settler In Western Australia. UWA Press, Western Australia

Uren, M. (1948) Land Looking West. Oxford University Press,.

3.1.24 Wanneroo

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Lake Joondalup-Craigie Lake/Soldiers Lake - watering point on the northern stock route, then used as Market gardens.	1840's -		Kinnealy (1994) & Bob Ruscoe, City of Wanneroo
3	- springs were located on the eastern side. Now dried up or built over.			
5	- cave drainage system on west side of lake.			
3	- wells dug on side of lake.			
	Lake Goollelal - Welshes Lake/Alder Lake			
2	- vegetable gardens established next to lake.	1844-52		
2	- site of first Brumby roundup	1930's		
2	- then dairies, piggeries, vineyards, market gardens.			
7	- flooded in 1919	1919		
3	- seeps but no springs.			
3	- bore put down then plugged	1940's		
	Jandabup Lake - Big Dundobar Lake			
2	- eastern side land uses have included cattle, piggeries, market gardens and woodcutting and dairies.			
8	- northern side cleared and burnt for pine planting.	1950's		
2	- western side not cleared until 1960's.	1960		
7	- flooded 1945, 1960's.			
3	- small spring on north east corner of lake, (fresh).			
	Yonderup Lake			
2	- used as market gardens, beds elevated for drainage.			
5	- underground streams and springs fed lake.			
	Nowergup Lake - Narago Lake			
7	- known for beautiful water quality, remained clear and sweet until very recently.			
2	- eastern side used as market garden and piggery.			
3	- western side original watering point on stock route.			
3	- springs located on eastern side near piggery and on southern most corner.	1940's		
	Camel Swamp, to east of Nowergup.			
5	- dried up and not returned.	1950's		
	Coogee Springs & Swamp			
2	- subdivided and surrounded by market gardens and cattle			
5	- lake to the north filled in.	1950's		

3.1.24 Wanneroo (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
1 7 3 3 2 2 3	- Probable visit to Doogarch Cave by G. Grey - lake bed dried to a depth over 2m. - spring at Georgemma PI now closed over. Neerabup Lake - Pappas Swamp - good quality springs fed into it. - area used for lime burning - area surrounding lake used as market gardens, cattle and pig farming. - springs on east side, (3), flowed continuously earlier this century, no longer running.	1838 1956-60		
	Gnangara Lake - used extensively as recreational area. - mined for diatomaceous earth and sand. - cattle and market gardens in area. - springs on eastern side, now dried up.			
2 2	Mariginiup Lake - stopping place for travellers on the south-eastern stock route - area around used as market garden, chicken farm and dairies.	1888		
2 3	Pippidinny Swamp & Beonaddy Swamp - cattle and market gardens. - Pippidinny Swamp had spring on north side now dried up.	1916-		
7 5 3 3	Loch McNess - Yanchep Lake - Water always fresh and levels stable. - Lake was dredged - Spring in cave just north of 'Beach House' was used to supply drinking water to early settlers - Springs fed from underground caves, at Gloucester lodge and in front of Loch McNess which has now been filled in.	1930's		
1 1 2 2 2 2 2	John Butler led small party in search of lost cattle. Area surveyed by George Grey. Townsite gazetted Wanneroo. Hawkins Park, stock route. Quarry Lookout, Edgewater. Perry's Paddock, Ocean Reef Rd, recreational area. Chitty House, 1351 Wanneroo Rd. Ashby House, Wanneroo Rd.	1834 1838 1907 1865 1920's 1900's 1870 1910	Wn1 Wn2 Wn3 Wn4 Wn5	HCWA (1988)
6 6 2 2 6 2 2 2	Koondoola Regional Open Space, 136 ha, Alexander Rd between Beach Rd and Marangaroo Dve. Hepburn Heights/Pinnaroo Park, 170 ha, Padbury. Luisini Winery Group, Lot 82 Wanneroo Rd Kingsley. "Cockman House" Cottage, Lot 100 Ocean Reef Rd Woodvale. Yanchep National Park Reserve, approx 50 km north of Perth. McNess House, Yanchep National Park. Concrete Bunkers, Yanchep National Park. Yanchep Inn & Garden, Yanchep National Park.	1921 1860 1930- 1932 1936	Wn6 Wn7 Wn8	NTWA, AHC NTWA, AHC NTWA, AHC NTWA, AHC AHC, HCWA AHC, HCWA AHC, HCWA

3.1.24 Wanneroo (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Gloucester Lodge including Garden & Pool, Yanchep National Park.	1933		AHC, HCWA
2	Administration Building, Yanchep National Park.	1930		AHC, HCWA
2	Ghost House & Chauffeur's Room, Yanchep National Park.	1930		AHC, HCWA
2	Tram Cottages, Yanchep National Park.	1932		HCWA
6	Neerabup National Park, 1195 ha, 4 km east Quinns Rock.			AHC
6	Nowergup Lake Fauna Reserve, 116 ha, 5 km NE Quinns Rock.			AHC
6	Caraban Management Priority Area, 3000 ha, 10 km north-east of Two Rocks			AHC
6	Two Rocks Open space, 2000 ha, 2 km north of Two Rocks.			AHC
6	Jandabup Lake nature reserve, 232 ha, 4 km east of Wanneroo.			AHC
6	Lake Joondalup Reserves, 470 ha, 1 km Wanneroo.			AHC
6	Reserve 3446, AHC DB No 010765, Wanneroo			AHC
6	Wanneroo Research Station, 39 ha, 4 km south-west of Wanneroo.			AHC
6	Wanneroo Wetlands Eastern Chain (M8), 3500 ha, 3 km east of Wanneroo			AHC

Bibliography

- Chambers, A. (1991) The Pioneers : A Story Of Wanneroo 1834-1985. City Of Wanneroo, Western Australia.
- Daniel, G. & Cockman, M. (1979) The Story Of Wanneroo. Shire Of Wanneroo, Western Australia.
- DeBurgh, W.H. (1986) The Old North Road. UWA Press, Western Australia.
- HCWA (1988) Lake Joondalup Heritage Trail. Heritage Council of Western Australia, Western Australia.
- Kinnealy, S. (1994) Oral Histories Of Wanneroo Wetlands. Western Australian Water Authority, WA.

3.2 COUNTRY LOCATIONS

3.2.1 Beverley

The Shire of Beverley is 131 km east southeast of Perth and covers an area of 2310 km² of which only the western quarter is within the study area. The current population is around 1430 and local industry consists of sheep, cattle and cereal farming, and a timber mill (WAMA 1993). The Shire includes the Avon, Dale and Darkin Rivers.

History

Robert Dale first led an expedition into the Avon valley area in 1830 and it was on his third expedition in 1831 that he led his party into the present location of Beverley. He was under orders from Governor James Stirling to examine the country to the extent of 50 miles north and south of Mt Blakewell. On this expedition he discovered the Dale River, as it was later named, and passed along the tract of land between the Avon and Dale rivers which would later become the Avondale Estate (Jones & Johnston 1994).

In November of 1835 another expedition involving Governor Stirling and the Surveyor General John Septimus Roe, followed an alternative route from Albany to Perth via York and passing through the location of Beverley between Christmas and the New Year. Thomas Watson then surveyed a land grant for Stirling in the following year and determined the western limit of the Beverley townsite reserve (Jones & Johnston 1994). The town of Beverley was founded in 1838 and was named by Charles Simmons, the Surgeon General, after Beverley in England (Beverley Tourist Board 1995?). In 1843 the boundaries of Beverley were marked out by Surveyor Seale. The district had already been farmed for some time by a large number of landholders, mainly for sheep and to a lesser degree wheat. The first semblance of a business centre for Beverley was at the fork of the roads at Seaton Ross where a Mr Edwards erected a mud-bat store. In 1864, the Seaton Ross bridge was erected near Edwards Crossing using convict labour. Soldiers Barracks were erected for both public protection and to oversee the convict labour on the Dale River and at Turkey Cock Creek on St Aubyns Estate (Thomas 1946).

Beverley district in its virgin state was timbered with mainly Jam and York Gums, with Morrel, Salmon and White Gums in parts, while on the hills, grew large quantities of Sandalwood. The latter providing valuable income to the early settlers. The Avon and Dale Rivers provided plentiful game in season and in places there was good fishing. Beverley township was linked with the Mundaring-Goldfields Water Scheme in 1908. (Thomas 1946).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	St Paul's Church, cnr York & Beverley Rd, 5 km north-west of Beverley (near Edwards Crossing).	1859	Be1	NTWA, AHC
2	Dead Finish Hotel, Hunt Rd.	1872	Be2	NTWA, AHC
2	99 Vincent St, residence.	1898	Be2	NTWA, AHC
2	Post Office, Vincent St.	1909	Be2	NTWA
2	Railway Station, Vincent St. Brookton Hwy Forest area, 21 600 ha, AHC DB No 009943, Beverley.			AHC AHC
2	Avondale Estate, Waterhatch Rd Beverley.	1850's	Be2	Jones & Johnston (1994)
2	Hell's Gates ruin at Carbegan Springs which was also an Aboriginal watering hole.			Thomas (1946)
2	Old Seaton Ross bridge near Edwards Crossing.	1864	Be3	
2	Soldiers Barracks, on the Dale River and Turkey Cock Creek			

Bibliography

- Beverley Tourist Bureau (1995?) Beverley Top of the Avon Pamphlet, (np)
- Jones, H & Johnston, D. (1994) The Story Of Avondale. Department of Agriculture, Western Australia.
- Thomas, A.T. (1930) Beverley In Picture And Story. Beverley Times, Western Australia.
- Thomas, A.T. (1946) The History Of Beverley 1946. Van Heurk & Thomas, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia

3.2.2 Boddington

The Shire of Boddington is located 123 km southeast of Perth and covers an area of 1932 km² of which the entire area is within the study region. The population is around 1300 and includes the localities of Ranford and Boddington. Local industries include farming (sheep, cattle, cereal crops), timber (including a pine plantation), and mining for bauxite and gold (WAMA 1993). It includes sections of the Hotham, Bannister, Williams and Murray Rivers.

History

Thomas Bannister would have been the first to traverse the area encompassed by Boddington Shire on his journey of 1830 from Swan to King Georges Sound (Albany). Four years later Alfred Hillman led an expedition through the area and climbed and named Mt Wells, crossing the Hotham River near Farmer's Crossing, (downstream from Bannister's crossing)(Ferrel 1992).

After the arrival of convicts in 1850, there existed a labour force for public works. Depots were set up at intervals along the route of the Perth to Albany road to supervise convict road gangs and a station was developed at Bannister River at the site of Bannister's Crossing in the Williams Shire. This development would have encouraged settlers to take up land within the boundaries of the present Boddington Shire (Ferrel 1992).

Early settlement in the 1860's, included families with the names Batt, Farmer, Fawcett and Pollard. Settlement focussed on the local waterways with the Fawcett's establishing a holding at Mokine, near freshwater springs. Horses were released on their property for breeding and the spring site was fenced off and a stockyard created so that horses had to enter through the stockyard to obtain water, enabling them to be recaptured when needed (Ferrel 1992).

Other landholdings occurred along the Maradong Brook and Hotham River with the Farmer family settling on the Hotham at the present Clover-Glen farmsite. Thomas and Eliza's house of the 1870's sits on the left bank of the river (Ferrel 1992).

The townsite of Boddington was surveyed in preparation for the completion of the railway and gazetted in September 1912. Early industries were largely farming based, later the timber industry became important with mills established at Chadora, Pindalup, Wuraming and Hakea following the construction of the railway soon after 1910. The Tullis Mill was opened by Bunnings in 1936 (closed since 1952). Several other mills were also established and the timber industry led to the establishment of a Bunnings timber farm on the former Sinclair Estate which has been progressively reforested with pines since 1956 (Ferrel 1992).

Bauxite has been known in the area since 1912, but permission to mine was not given until 1980. Since 1985, bauxite mining is has become well established along with gold mining, Boddington gold mine being the second largest producer of gold in Australia (Ferrel 1992).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Gibb's Pool, Marradong, swimming.			Ferrel (1992)
2	Boddington's Pool, near present townsite, shepherds watering hole used by Henry Boddington, after whom town is named	1880's		
2	Boddington's Troughs near Bowalling, lasted till 1900's, trenches dug at site of spring for sheep watering.	1880's		
2	Ford near Hall's, downstream from Boddington's Pools, common river crossing, later Boddington siding situated nearby.			
8	Chadora Mill, near Oak Brook.	1910		
8	Tullis Mill.	1936-52		
2	Industrial Extracts Ltd, Hotham River Pool, 1.5 km east of township, used water pumped at 20 ft below water surface, heated water returned to water surface used for factory condensers. Factory also had and used a good supply of underground water.	1935		
3	Reticulated water supplied to town.	1952		
3	Town wells.	1900's		
3	Town weir on Hotham River.	1980	Bo1	
2	Early oil exploration bores- - Boggy Brook - House Brook	1925		
9	Cobbler, Perch utilised as food and sport.	1930's		
7	Water brackish.	1930's		
2	Footbridge crossing from Keen's property, often used for local gatherings.			

Bibliography

- Ferrel, J. (1992) Becoming Boddington. Shire of Boddington, Western Australia.
- Jackson, J.L. (1993) Frowning Fortunes: The Story Of Thomas Bannister And The Williams River District. Hesperian Press, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia

3.2.3 Boyup Brook

The Shire of Boyup Brook is located 270 km south-southeast of Perth and covers an area of 2838 km² of which only the northwest portion passing north of Wilga is within the study region. The population is 2060 and suburbs/localities include Boyup Brook, Wilga, Mayanup, Dinninup and Kulikup. Local industry consists of farming (cattle, sheep, grain and pig) and timber (WAMA 1993). The Shire includes sections of the Collie, Blackwood and Tweed Rivers.

History

The Blackwood River Valley begins in the northeast of the Boyup Brook Shire, after the Arthur River is joined by the Beaufort and Balgarup Rivers and becomes the Blackwood (BBTA 1995?a).

The area was first explored by Augustus Gregory in 1845 while surveying the Blackwood River, although previous explorations by Thomas Turner and J. Molloy may have passed through the area following the Blackwood. Augustus Gregory carved his initials and the date on a large Jarrah tree near the river on what is now Gibbs Rd and the stump is still evident with his mark (BBTA 1995?a).

The area was then settled in 1854 when a track was blazed by John Hassell from Albany and followed by Commander and Mrs Scott, who settled by a permanent pool at Norlup on Scott's Brook (BBTA 1995?b).

In 1861, James George Lee Steere came from Bunbury and took up a small freehold selection which he named 'Jayes' and a 100 000 acre grazing lease. He employed shepherds to mind his flock on this huge area and small sections of his original post and rail fence are still found in the bush, although the lease was eventually thrown open to settlers and most of it cleared. Jayes became the first centre of local government in the district (BBTA 1995?b).

In 1871, William Forrest, brother of Lord John Forrest, took up land which he called 'Dwalganup'. By 1892, there were nineteen families here and in 1900 a school was built which marked the beginning of a town. In 1909, the railway from Donnybrook was extended to Boyup Brook and then to Kojonup in 1911 (BBTA 1995?b).

The early settlers eked out a living by farming and timber cutting with many early timber workers carting sandalwood from the Kojonup/Williams area. They would travel by horse and dray to Bunbury via 'The Old Sandalwood Track' through the McAlindan area, now famous for Merino sheep. Boyup Brook received no convict labour and the buildings were mainly built out of wood or homemade brick (BBTA 1995?a, 1995?b).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Gregory Tree Historic Site, Gibbs Rd.	1845	Bb1	Boyup Brook
2	Norlup Pioneer Homestead, Scott's Brook Rd.		Bb2	Tourism Association
8	Wilga Timber Mill site, Camballan Rd.		Bb3	Ken Ritson PO Box 26
2	Sheep washing in river at Jayes Bridge, Blackwood River.	1880-90	Bb4	BOYUP BROOK 6244
2	Drinking, washing, bathing at "Daneholme", Blackwood River.	1906-35	Bb5	Ph:(097) 651074
2	"Norlup", Domestic and stock, Scotts Brook	1854	Bb2	
3	Railway dam	1910?	Bb6	
3	Town Dam	1935?	Bb7	
4	Apple orchard - irrigation dam	1960-75	Bb8	
5	"Daneholme", drains to prevent waterlogging.	1926	Bb9	
7	Blackwood River generally clear and fresh until the floods of 1955 when deterioration became rapid, (silt & salt).	1955		
9	Fishing on the Blackwood River:			
	-Marron until 1980	1980		
	-Perch until 1965	1965		
	-Cobbler - 1995	1995		
2	Bathing at Sheep Wash after fire fighting	1864	Bb2	
2	Bathing at Sheep Wash after fire fighting	1965	Bb2	
7	Nannamillup - well	1862-70	Bb6	
7	Moorelup Creek - water undrinkable	1883		
2	"Condinup"		Bb7	NTWA
2	Flax Mill		Bb7	NTWA
2	"Norlup", House and School room Lot 199, Nelson Loc 39 7 km east Mayanup	1874-5	Bb2	NTWA, AHC
2	"Rose Cottage"		Bb7	NTWA
2	Ritson Property			NTWA
8	Wilga Sawmill		Bb3	NTWA
2	Boyup Brook Tourist Centre, Abel St Boyup Brook.		Bb7	AHC
	Nollajup Management Priority Area, 661 ha, 10 km south west Boyup Brook.			AHC

Bibliography

- BBTA (1995?a) Boyup Brook Tourist Guide. Boyup Brook Tourist Association, Western Australia
- BBTA (1995?b) Welcome to Boyup Brook. Pamphlet, Boyup Brook Tourist Association, Western Australia
- Schorer, A. (1968) History Of The Upper Blackwood. Southwest Printing & Publishing Co, Bunbury Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.
- Wooding, D.J. (1969) The History Of Settlement And Agriculture In The Boyup Brook District. Thesis .

3.2.4 Bunbury

The City of Bunbury is located 184 km south of Perth and covers an area of 61.2 km² entirely within the study region. The city includes the suburbs and localities of Bunbury, South Bunbury, Withers, Mangles, Glen Padden, Crosslands, Carey Park, Wollaston, Picton, Sandridge Park, East Bunbury and Rathmines. Local industry includes silicon smelting, meat works, mineral sands mining and fishing (WAMA 1993). The Ferguson meets the Preston River within its boundaries and drains into the bays within the city.

History

After establishment of the Swan River Colony in 1829 by Captain James Stirling, large land grants often held by absentee owners forced later settlers to look beyond the Swan Coastal Plain. Governor Stirling proposed settlements at Port Leschenault (Bunbury), the Vasse (Busselton) and Augusta to ease demand for land. An expedition on the first of March 1830 navigated the Collie River to the Darling Range and its members claimed large land grants, with Stirling claiming more than 20 000 acres. Stirling's Port Leschenault grant took up the fertile land behind the new townsite, which was small and dominated by sand dunes, mangrove fringed tidal flats, creeks and lagoons. However, the first settlers did not arrive until 1838 when Stirling brought the Scott family to Bunbury, who became the first farmers of the area (HCWA 1988b).

The Bunbury townsite was gazetted in 1841, but due to Stirling's large land grants colonists had to struggle with a small townsite on poor marshy soil and sand dunes with virtually nowhere to graze cattle or grow crops. Hopes were raised with the organisation of the Australind Settlement Scheme in 1841, but by 1843, the scheme had been abandoned. (HCWA 1988b)

William Forrest bought 640 acres of land on the Preston River in 1847. The Ferguson River joined the Preston on his property and it was at this site that he embarked on a project to build a water driven flour mill. He diverted the Preston River across the Ferguson to form a dam. He then built a mill race from the dam 12 ft wide and half a mile long to run into the mill pond, which was deep and held many thousands of gallons of water. The approaches to the dam were lined with stones and all timber used was cut from the property (Fowler 1961).

The arrival of convict labour between 1851 and 1868 boosted the population and stimulated the economy. With the subsequent boom in timber cutting, spurred by railway construction, and the stimulus of the goldrushes in the 1880's and 90's, Bunbury developed from an outsettlement of the Colony to a fully fledged town by 1900. A succession of State Premiers, particularly locally born John Forrest (1890-1901), facilitated large scale public works such as C.Y. O'Connor's harbour scheme, more railways, water works, and agricultural expansion. (HCWA 1988b)

Bunbury's growth continued steadily throughout the 20th century and it became one of the State's busiest ports for the exportation of timber, agricultural products, alumina, and mineral sands.

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
5	Watercourses in the city area have been considerably altered. Preston River has had three major alterations to its natural course with 29 different courses being identified by geologists in the delta area of the river.		Bu1	P.A. Barnes Secretary Bunbury Historical Society King Cottage Museum 77 Forest Ave BUNBURY 6230 Ph: 097 217 546
2	Meridith Creek was an important water course for early settlers with the first survey peg placed by Surveyor Watson at the mouth of the creek in the 1830's. The creek is now controlled by piping some two km back from the mouth.	1830's	Bu2	
3	Ship's Well identified in Surveyor Henry Ommaney's notebook of the 1840's located near today's Fisherman's Jetty.	1840's	Bu3	
3	Ommaney's notebook also indicates the extent of freshwater in the town; - The 'Duck Pond' - Extent of inlet onto town centre - Pond at north end of Victoria St	1840's	Bu4	
5	Big Swamp, Five Mile Brook used to drain into here, once used as rubbish tip, now a bird haven		Bu5	
5	Five Mile Brook' diversion from Big Swamp to ocean 16 km south of the city.		Bu6	
5	Reclamation and dredging has completely altered Bunbury's waterways with most of the changes taking place between 1969 and 1976.			
9	Fish life in the Lower Leschenault Inlet has changed dramatically.			
5	Queens Gardens founded on Point Collinson and reclaimed land.	1900's		
2	Old Railway Station & Bicentennial Square, Carmody Place.	1904	Bu7	
2	Stirling St Historic Precinct.		Bu8	
2	The Residency and Chadd's Store, Corner of Moore & Stirling streets.	1896	Bu9	
2	82 & 84 Stirling St.	1875	Bu8	
2	Bunbury Townsite Peg No 1, Commemorative Cairn.		Bu10	
2	131 & 137 Stirling St .	1890-10	Bu8	
2	F.W. Steer's First House, 153 Stirling St.	1907	Bu8	
2	Parade Hotel, Austral Parade	1894	Bu11	
2	Leschenault Homestead, Estuary Dve.	1844-74	Bu12	
2	St Mark's Anglican Church & Churchyard, (reconstruction), cnr of Flynn St & Charterhouse Cl.	1842	Bu13	

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Inlet Promenade	1907	Bu14	
2	Queens gardens			
2	Frank Buswell Foreshore			
5	Big Swamp, modified wetland, Prince Philip Dve.			
2	Clarke's Bunbury Vineyard 1890-1900's, Southern end of Big Swamp.			
2	Moreton Bay Fig, at St Mark's Anglican Church site.			
2	School site, near present railway bridge at Picton, a clump of acacia's remain.	1847		Fowler (1961)
2	William Forrest's water mill near junction of Ferguson and Preston Rivers.			
2	Old Railway Station & Bicentennial Square 1904	1904	Bu7	NTWA, AHC
2	Leschenault Homestead 1844-1874, Estuary Dve.	1844	Bu12	NTWA, AHC, HCWA
2	The Residency and Chadd's Store 1896	1896	Bu9	NTWA, AHC, HCWA
2	Corner of Moore & Stirling streets	1875	Bu8	NTWA, AHC
2	82 & 84 Stirling St Bunbury.		Bu8	
2	Three Dwellings, (former boarding house), No's 155, 157, 159 Stirling St.		Bu8	
2	St Mark's Church, Flynn St Picton.	1842	Bu13	NTWA, AHC
2	Forrest's House, on Preston Rd south of intersection with Victoria Rd on banks of Preston River.	1849		NTWA, AHC
2	Former Picton Inn or Morgan's Inn, Kaeshagen St Picton.	1852		NTWA, AHC
2	Carmody Place			NTWA
2	Flynn St & Charterhouse Cl.		Bu13	NTWA
2	Cathedral Ave & Wetlands			NTWA, AHC
2	CBH Grain Silos, The Strand.	1937		HCWA

Bibliography

Fowler, I.C. (1961) Pioneering And Development Of The Capel Area. (np)

HCWA (1988b) Bunbury Heritage Trail. Heritage Council of Western Australia

Molyneux, I. (1978) Bunbury National Estate Study. Molyneux, South Perth, Western Australia.

Saunders, T. (1975) Bunbury, Some Early History. Roebuck Books, Canberra.

WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia

Wollaston, J.R. (1948) Picton Journals. Pitman, Perth, Western Australia.

3.2.5 Capel

The Shire of Capel is located 212 km south of Perth and covers an area of 554 km² of which a small portion roughly following the north-eastern Shire boundary is within the study site. It includes the localities of Capel, Boyanup and Gelorup, and has a population of 5 389. Local industry includes mineral sand mining, beef and dairy farming, fruit growing, vineyards, and aquaculture (WAMA 1993). The Preston and Capel Rivers and Ginidup Brook are located within its boundaries.

History

Baudin's expedition of 1801 in the 'Geographe' went ashore at Minninup and planted vegetables south of the Capel River (V. Krantz, pers comm). While exploring the south-west in 1827 and again in 1836 Lt H.W. Bunbury came upon the river that was later to be known as the Capel River. It was named by one of the initial settlers in the region, John Bussell after his English cousin (Fowler 1961).

First settlement did not occur until 1840-1850 when a small number of settlers chose grazing properties. A Mr Childs was amongst these settlers and his property became known as Minninup (Fowler 1961). The coastal areas of the Shire and the areas along the Capel, Ludlow and Preston Rivers and Gynadup Brook were the first to be taken up after the Australind settlement scheme failed, and settlers from Augusta moved north looking for easier land to clear and farm. Most settlers were small farmers with limited resources who took up small holdings near permanent water and gradually expanded their holdings over time. 'Peacocking' was a way of taking the 'eye' out of available land (usually a water hole, swamp etc). This would be purchased and land about then obtained with a lease for a low rent (V. Krantz, pers comm).

In the mid 1840's, a settler called R.G. Payne arrived in the area and settled at 'Lexton Park'. He built a water driven mill on the banks of the Capel River for grinding grain. The mill was distinctive, the entire mechanism built on the basis of a clock, each part carefully constructed from timber grown nearby. Payne went on to construct a 50 ton schooner which was used to trade between Hamelin Bay and Fremantle. By this time, farmers had begun to grow a variety of grains and vegetables as well as grazing sheep and cattle (Fowler 1961).

After 1866, the first bridge was built over the Capel River and a small township developed in the 1880's. The Inn was one of the first buildings constructed in 1883 and several acres surrounding were planted with flowers, fruit trees, and vines (Fowler 1961).

Although the river has always been known as the Capel River, the township and district was first designated Coolingup after the native name for the area. This was not changed until 1899, after the establishment of the railway line which reached the district in 1896, and the Capel Road Board was formed in 1907 (Fowler, 1961).

The arrival of the railway arrived in 1896 increased business opportunities for the local timber industry. Prior to this time timber had mainly been used only locally as transport to Bunbury was via a sandy bush track (Fowler 1961). Farmers also benefited from the rail line as they could now market their produce easily. Potatoes became a major farming crop with a large proportion of the river flats and swamplands being sown. Fruit growing began in the early 1900's and during the 1920's the Stirling Estate (10 000 acres) was opened for selection and a group settlement scheme commenced at Tutunup. However, before intensive farming could commence, extensive drainage was necessary as the bulk of the area consisted of very wet country over which the Capel river discharged its waters. It was during this period of extensive drainage (1903-10), that the stones from the partly finished church at Minninup were used to build a floodgate (Fowler 1961).

Perch and Murray cod were released into the river at the turn of the century and around 1920 the dairy industry showed signs of positive development. Mineral sand mining began in the 1940's (Fowler 1961).

Many of the orchardists undertook ventures of irrigation in the 1940's-50's, the water was obtained from the Capel river using large piping to distribute it through the orchard (Fowler 1961).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Baudin's expedition went ashore at Minninup - planted vegetables South of Capel River.	1801		Valerie Krantz 22 Mounts Bay Rd CRAWLEY 6009 Ph: 3861447 and Diana Chase 24 Congdon St SWANBOURNE 601 Ph: 384 6124
1	Governor Stirling in the 'Success' explored the Geographe Bay coast looking for good water & soil for settlers.	1827		
2	Settlers moved to areas with permanent water on or near the Capel/Ludlow & Preston Rivers ie. James Child settled at Mininup.	1843		
	- Samuel Rose - Dougup	1843		
	- James McCourt - Ludlow River	1851		
	- George Payne - Paynes Water Mill on Capel River	1851		
	- James Bessonnet & Thomas Hurst - Preston River	1846		
	- W.J Roberts and family - Capel River and Gignadup Brook.	1864		
4	Some irrigation of fruit trees on Preston and Capel Rivers from 1960's contact: L. Yates or J Senders (N. Boyanup)	1960's		
5	Charles Berber (an engineer) of Elgin designed a drains network to drain/water his paddocks	1900's		
5	Porter Matthers - designed drains network to drain/water his paddocks	1900's		
5	Stirling Drainage Board operated in Shire from early 1900's contact: Mr Ronald Maidment of Roe Rd, Capel.	1900+		
5	Cuts put through to sea to drain wetlands: Higgins and McCourt cuts.	1864/74		
7	Ref: Bunbury, H.W. (1930) Early Days in Western Australia. pp 138 - 40.			
8	Whistler family set up a timber mill on the banks of the Preston (Boyanup).	1890's		
2	Bessonnets grant: contact Gordon Farley, Nursing Home, Heyes St, Bunbury timber miller on Capel River aged 95 - very good memory.			
9	Local vegetation: contact Michael Tichbon on Gwindinup (South Boyanup)			
2	Minninup Homestead, Mangles Rd, Capel	1848	Ca1	NTWA, AHC
2	Payne's Water driven Flour Mill		Ca1	NTWA
2	"Paringa"		Ca1	NTWA
2	Tuart Forest Landscape Area extending on both sides of the Vasse River to the east of Busselton, extending to the coast of Wonnerup then to the Ludlow Forest following the border to the Minninup Forest.			NTWA
2	Minninup Wetlands at Stratham, 80 ha, 10 km from Capel.			AHC

Bibliography

Fowler, I.C. (1961) Pioneering And Development Of The Capel Area. (np)

Payne, H.W. (1984) The History Of The Descendants Of George Payne, Freeman Of The City Of London, Flour Miller, Late Of Capel WA. H.W. Payne, Bunbury, Western Australia.

WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.6 Chittering

This area lies approximately 80 km north of Perth and includes Muchea, Lower Chittering Valley, Wannamal and Bindoon. The Shire of Chittering covers an area of 1 188 km² and has a population of around 1960. Current industries include fruit growing, sheep, cattle and deer farming and mineral sand processing (WAMA 1993). The Brockman River flows through the Shire, and Lakes Needoonga, Chittering and Chandala (wetland) are within its boundaries.

History

The area was first explored in the 1830's, with the first house being built in the mid 1840's. The ruins of this house are located on the west side of the Brockman River just north of the present Bindoon Hotel. The house was known as 'Bindoon', a native name meaning where yams grow (Chittering Tourist Promotion Centre pers comm).

The Brockman River was named after William Locke Brockman who was the first European to take up land in the area. In 1843, he had surveyed land that was immediately south of Lake Chittering including a portion of the lake. This property became known as 'Lakeside' and the house he built (before 1900) still stands. George Fletcher Moore also selected a property in the area in the 1840's near Muchea on the west bank of Ellen Brook (Chittering Tourist Promotion Centre pers comm).

The settlers took up mostly small acreages in the valley for subsistence farming of growing fruit and vegetables, and running a few head of cattle. Distance from markets made the trading of produce difficult until the construction of the railway. The Midland to Gingin railway opened in 1891 and a siding was constructed to serve the Chittering area which became known as Muchea. There is a well in front of the present store in Muchea, apparently dug by Mr R.J. Payne and Mr Harry Hortin in 1901 which was used for watering horses that were used to cart chaff from Chittering (Chittering Tourist Promotion Centre pers comm).

Early industry included 'The Factory' which used machinery to separate gum from the outside of blackboys. This product was then used as a liquid polish for floors. The local men cut the blackboy chips, bagged it and delivered it to the factory (Chittering Tourist Promotion Centre pers comm).

In 1936, Catherine Musk donated one of her farms, 'Mt Pleasant Station' to the Christian Brothers and it became known as St Josephs 'Boys Town' for orphans and later as the Catholic Agricultural College (Chittering Tourist Promotion Centre pers comm).

Muchea attracted local attention in the 1960's, due to the tracking station that was located there, enabling the broadcast of John Glenn's historic space flight to be heard by the people of Perth. The station has now been dismantled (Chittering Tourist Promotion Centre pers comm).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
6	Lake Chandala, 500 ha, 7 km north of Muchea.			AHC
2	First settler's house ruins, on bank of the Brockman River, house was known as 'Bindoon'.	Pre 1857		Chittering Tourist Promotion Centre
2	William Locke Brockman, site of settlement at southern end of Lake Chittering and house built late 1800's.	late 1800's		
3	Muchea Well, in front of store, Muchea.	1901	Ch1	
2	Catholic Agricultural College, Bindoon.	1936	Ch2	

Bibliography

Cownie, S & Cownie, M. (1979) Perth And Suburbs, Buildings Classified And Recorded By The National Trust. Galleries Publications, Perth, Western Australia.

WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia

3.2.7 Collie

The Shire of Collie is located within the Darling Ranges about 200 km by road south west of Perth. It covers an area of 1 685 km² of which over two thirds is covered by scenic State Forest. The population is in excess of 9 000 and the Shire of Collie includes the suburbs and locations of Ewington, Allanson, Cardiff, Buckingham, Collie-Burn, Shotts, Mungalup and Worsley. The main industries of the Collie area are coal mining, power generation, forestry, alumina mining and farming (WAMA 1993). The Shire contains two major water supply reservoirs, the large Wellington Dam and the newly constructed Harris Dam on the Harris River. Included in the shire are sections of the Collie, Collie South, Bingham, Harris and Brunswick Rivers.

History

Lt Surgeon Alexander Collie and Lt Preston jointly discovered the Preston and Collie Rivers in 1829. The thick forest in the area is probably responsible for the slow rate of settlement in the area, as this would have made clearing for farming very difficult. Early occupancy of the Williams and Arthur River area spread westward as far as Darkan but was temporarily halted by the fringes of the forest. Some settlement took place on the western side of the forest on the Collie River flats but again halted at the forest edge apart from a few timber mills which worked along the fringes (Williams 1979).

The first settlers to pasture stock in the area included Gibbs, Pollard, Rose and Perrin. They and their shepherds moved into the area in the early 1880's, Gibbs grazing cattle on the Muja Flats, Rose grazing his cattle upstream from the present townsite and Pollard establishing a paddock on the Bingham River (Williams 1979).

Although coal was discovered in the Collie area in 1883, there was very little activity in the industry or the townsite until the Commissioner of Railways introduced the bill for the Collie Rail Spur. This was passed through Parliament and many enterprising businessmen took up leases totalling some 102 000 acres in the Collie Mining District. These men then sat back and hoped Collie would make the leases sufficiently attractive to bring in outside capital. The only company to proceed at all was the Collie West Company and in November 1897 six tonnes of coal was raised and sent to Perth for trial on government locomotives (Collie Tourist & Travel Bureau Inc pers comm).

Collie was declared a township in 1897 but the opening of the Collie-Brunswick rail line the following year saw real development of the town begin. In 1900, Collie was designated as a separate Roads Board District. The station was originally known as Collieville and later Colliefield before being shortened to Collie after Dr Alexander Collie. After the formation of the Roads Board, timber was cleared and mine tracks converted to streets. Building boomed and by the end of 1900, Collie had many new municipal buildings such as a Courthouse, School, Hospital, Post Office, Police Quarters and Gaol as well as banks and hotels (Collie Tourist & Travel Bureau Inc pers comm). These new facilities stimulated the timber industry which increased so rapidly that the government locked up much of the land for future forestry use and indirectly helped to preserve what is now a portion of the Wellington catchment (Williams 1979).

A depression in the war years of World War 1 was eased by the commencement of the Collie Water Scheme and in 1931 work commenced on the original Wellington Dam which was completed in 1934 and since raised twice (Collie Tourist & Travel Bureau Inc pers comm).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Collie Conservation Area - declared, bounded by Throssell St, Atkinson St, Cramton St and Patterson St.			NTWA
8	Buckingham's Mill Group, Coalfields Rd.		Co1	NTWA
2	Municipal Buildings, Throssell St, Collie.		Co2	AHC
2	Roundhouse for Railway Locomotives, Coalfields Rd Collie.	1920	Co2	AHC, HCWA
2	All Saints Anglican Church, Harvey St Collie.		Co2	AHC
2	Old Police Station, Throssell St Collie.		Co2	AHC
2	Railway Goods Shed, Collie.		Co2	AHC, HCWA
6	Lennard Management Priority area, 6600 ha, 20 km east of Collie.			AHC
6	Surface Management Priority Area, 15125 ha, 15 km north-east of Collie.			AHC
6	Westralia Management priority Area, 2100 ha, 2 km south-west Collie.			AHC
2	Former Collie Post Office, Throssell/Pendleton St.	1898	Co2	HCWA
2	Collie Court House, Wittenoom St.	1913	Co2	HCWA
2	Swinging Bridge, River Ave Collie. Original built in 1912 although the present one is a replacement after floods twice washed the bridge away	1912	Co2	Collie Tourist Centre
2	Arboretum, off Coombe St opposite Soldiers Park Collie.		Co2	
2	Recreational pools on the rivers include: - Minninup Pool - Honeymoon Pool - Long Pool - The Ferns		Co3	

Bibliography

- Johnson, L.W. (1956) A History Of The Collie Coal Mining Industry. Thesis.
- Stedman, C. (1988) One Hundred Years Of Collie Coal. Curtin Printing, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.
- Williams, H.W. (1979) One Day In Collie. Shire of Collie, Western Australia.

3.2.8 Cuballing

The Shire of Cuballing is located 192 km south-east of Perth and covers an area of 1250 km². The population is around 800 and the localities of Cuballing, Yornaning and Popanyinning are within its boundaries. Local industry consists of mixed farming, timber products and a large engineering trade (WAMA 1993). It borders the Hotham River and includes the 14 Mile Brook as well as numerous tributaries.

History

The Great Southern Railway link was completed in 1889 and brought a rush of settlers to Cuballing. At this time there were eleven residences listed. By 1905, the town had begun to grow strongly with many new buildings and residences constructed including the present Hotel, Post Office and WA Bank (Shire of Cuballing 1990).

Many early settlements followed the discovery of good and plentiful water supplies by men shepherding sheep from one place to another, the freshwater pool in Cuballing was one of these. The homes were generally built as close as possible to a good water source, sometimes a creek, and sometimes a soak. "It was amazing how good the gardens were in some places, with the people being able to completely keep themselves in vegetables." However, water was scarce on many farms and water carting was quite common (Shire of Cuballing, 1990).

Many pools were used as watering points for shepherds and campsites. Lolgray Soak was a popular stopping and meeting point for these settlers. Cuballing Pool was also popular as a stock watering point while Perry's Pool and Town Creek Pool were popular recreational sites. Perry's Pool was the site of the annual district picnic while Town Creek Pool was a natural swimming hole where the "water was always cold and fresh with plenty of leeches" (Shire of Cuballing 1990).

Once it became apparent that the railhead was to be established at Narrogin and not Cuballing there was a steady decline in people coming to settle in the area. After 1916 school enrolments slowly dwindled until in 1929 it closed for a time due to lack of numbers. The great depression of the 1930's also did not help to attract people and many farming families had to leave the area (Shire of Cuballing 1990).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Lolgray Soak, watering point & campsite.	to 1940	Cu1	Shire of Cuballing, (1990)
3	Many early settlements were made after the discovery of good and plentiful water supplies by shepherds including the freshwater pool in Cuballing.			
9	Perch and Gilgies utilised.			
2	Perry's Pool, site of annual picnic.		Cu2	
2	Town Creek Pool on Quartermaine's property with natural swimming pool		Cu3	
7	Water at Perry's Pool fresh, cold with leeches.		Cu2	
7	Floods, 1927, 1934, 1945/46, and 1955.			

Bibliography

- Gable, W. (1984) East Popanyinning, Cuballing. Rural & Isolated Schools, Western Australia.
- Gable, W. (1988) Schools Of The Cuballing Shire Region. W. Gable, Perth, Western Australia.
- Shire of Cuballing (1990) Reunion 1990, A Cuballing Keepsake. Shire of Cuballing, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.9 Dardanup

The Shire of Dardanup is located 185 km south of Perth entirely within the study region and covers an area of 518 km². It has a population of 6000 and includes the localities of Dardanup, Eaton and Burekup. Local industry consists of dairying, beef cattle, sheep, timber, abattoirs, brick works, particle board factory, pine and hardwood sawmill and resin plant (WAMA 1993). It is bordered by the Collie River to the north and partially bordered by the Preston River in the west. The Ferguson River, Joshua Creek, Crooked Brook, Henty Brooks and a part of the Wellington Dam are also within Shire boundaries.

History

The district was first settled in 1831, when 24 hectares were granted to Mr James Henty and 42 hectares to Colonel Lantour. In 1838, Mr Robert Charles Prinsep, the Advocate General for the East India Company of Calcutta, purchased land and commenced exporting horses and timber railway sleepers to India. The horse market collapsed in 1871 but the sleeper market continued until the railway line across India was completed (WAMA 1993).

Thomas Little took up land on the peninsula now located within the Harvey Shire and later moved and built what was to be known as 'Dardanup Park'. He had a perchance for helping the Irish and Catholics, possibly with the idea of creating his own Catholic community and set up many settlers as tenant households enabling them later to purchase holdings. In 1856, he had 14 tenant households each with areas under cultivation. Little himself also cultivated an extensive orchard and vineyards. Thomas Little also donated land for the Dardanup Church, the foundation stone for which was laid in 1854 (McGrath 1986).

Another residence was built on the banks of the Preston River and this was known as 'Moorlands'. After the Homestead Act of 1893, which allowed settlers a homestead block, many small tenant farmers took up holdings on the Preston and Ferguson Rivers, forming the basis of many of the present landholdings (McGrath, 1986).

When the Bunbury-Boyanup rail line was completed in 1891, the region of the Upper Ferguson was made accessible for settlement. This was the preliminary stage of railway construction into the south-west and the timber resources of the forests. (Gable, 1988). Private railway lines were constructed to transport the timber from the mills to the Dardanup railway siding. Timber has continued to be a large part of the areas industrial development (WAMA 1993).

Railway, forestry and timber mill workers were in the position to select land in the newly opened regions of the forest under the Land Settlement Acts. After the erection of a dwelling the families set about clearing their land while the wages of the husband/father provided their income (McGrath, 1986).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
6	Dardanup Park, AHC DB 009511	1854		NTWA, AHC
6	Dardanup Management Priority Area, 1500 ha, 10 km south-east of Dardanup.			AHC
2	Dardanup Church.	1854	Da1	McGrath (1986)
2	'Moorlands', on bank of Preston River.	1890's?	Da2	
8	Wellington Mills Timber Village, south-west of Wellington Dam.		Da3	Collie Tourist Centre
2	King Jarrah Tree, Ferguson Rd near Wellington Mill.		Da4	

Bibliography

- Foster, D.J. (1995) Patrick and Rose Slattery of Dardanup And Upper Ferguson, Western Australia. Harris, North Perth, Western Australia.
- Foster, D.J. (1995) Thomas and Bridget Harris Of Dardanup, Western Australia. Harris, North Perth, Western Australia.
- Gable, W. (1988) Upper Ferguson And Ferguson Mill Dardanup. Rural and Isolated Schools, Western Australia.
- McGrath, R. (1986) Thomas Little At Dardanup. Independent Study Contract.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.10 Donnybrook-Balingup

The Shire of Donnybrook-Balingup is located 213 km south of Perth and covers an area of 1541 km² of which only the northern half is within the study region. The population is 4300 and includes the localities of Argyle, Brookhampton, Balingup, Donnybrook, Lowden, Mumballup, Mullalyup, Kirup, Noggerup and Newlands. Local industry consists of sheep and cattle farming, fruit and vegetable growing, a VISY Board cardboard and Humes Pipes factory, and a substantial timber and tree farming industry. (WAMA 1993). About 53% of the Shire is under the jurisdiction of the Department of Conservation and Land Management, most of which is classified as State Forest (Sparkes 1994). The Preston and Capel Rivers are located within the Shire boundaries as well as the Balingup Brook and Blackwood River.

History

The name Donnybrook was used by the first settlers, five Irish immigrants who arrived in the area in 1842 after journeying along the Preston River in search of land to raise cattle and horses. Early attempts at farming were largely unsuccessful as the early settlers lacked the necessary equipment to clear the heavily wooded bushland. At that time, the name Donnybrook referred to immigrants' landholdings and the first township bore the name 'ÓMinninup'. Donnybrook was gazetted as a townsite in October 1894 (Donnybrook-Balingup Tourist Information Centre pers comm; Sparkes 1994).

Jarrah was a substantial factor for the development of the Donnybrook region and as the timber industry grew many timber mills were established around Donnybrook. There was a great demand for Jarrah for use as railway sleepers both within Australia and from overseas. Although the timber industry began slowly it expanded greatly with the arrival of the rail link from Boyanup in 1893 (Donnybrook-Balingup Tourist Information Centre pers comm; Sparkes 1994).

Another important local industry was mining which started in the 1897-1901 'Donnybrook gold rush'. There was renewed interest in gold in the 1930's and recently much survey work and repegging of old sites has been done (Donnybrook-Balingup Tourist Information Centre pers comm; Sparkes 1994). Mining of Donnybrook sandstone from 1899 played an important role in the towns history and was used in the construction of many Perth buildings including the Commonwealth Bank and General Post Office in Forrest Place and the Supreme Court building (Donnybrook-Balingup Tourist Information Centre pers comm; Sparkes 1994).

Demand for agricultural land resulted in the huge pastoral leases being broken up into smaller farm holdings. Cattle and sheep farming became established and orchards were also established around this time with the first apple orchards appearing in 1890. Donnybrook is well known as a producer of the 'Granny Smith' apple. Other fruit crops, vegetable and apple exports from the area began in 1909 (Donnybrook-Balingup Tourist Information Centre pers comm; Sparkes 1994).

Balingup was settled around 1860 although the town was not gazetted until 1898 after being connected to Donnybrook by rail in 1897. Prior to this Balingup was a staging post with a postal station receiving mail from Bunbury twice a week. Balingup was home to only a small timber mill and cheese factory and in 1970 the Balingup and Donnybrook shires amalgamated (Donnybrook-Balingup Tourist Information Centre pers comm; Sparkes 1994).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Explorers (G. Nash, J. Schoales, J. Bessonett) searching for land to raise horses and cattle journeyed along the Preston River	1842		Sparkes (1994)
2	Road links to Bunbury established by convict labour.	1852		
2	Rail links established.	1893		
8	Timber industry growth and new mill establishment.	1890's		
2	Apples industry.	1890		
2	Apple processing and jam factory established.	1909		
2	Gold discovered and mined for four years.	1897		
2	Sandstone quarried.	1900's		
2	Anchor & Hope Inn, South Western Hwy, Donnybrook.	1845	Db1	NTWA, AHC
2	Blackwood Inn, Old Mullalyup Inn & Barns (Old Mullalyup Inn Group,) South Western Hwy, Mullalyup.	1865	Db2	NTWA, AHC, HCWA
2	"Brooklands", Nelson Loc 8123/8124, Balingup/Nannup Rd, Balingup.	1904	Db3	NTWA, AHC
2	"Careyale", Cemetery Rd, Wellington Loc 189, Donnybrook.	1888	Db1	NTWA, AHC
2	Crendon Homestead, Upper Capel Rd, Donnybrook.	1885	Db1	NTWA, AHC
	"Eulamo", Balingup		Db4	NTWA
2	Ferndale, formerly Somerset House - cnr Balingup-Nannup Rd/Hay St.	1860's	Db5	NTWA
2	"Golden Valley" Homestead, Padbury Hill Rd, Balingup	1895	Db4	NTWA, HCWA, AHC
2	Grimwade		Db6	NTWA
2	"Hawterville" Farmhouse and Garden Setting, South Western Hwy, Mullalyup.	1895	Db2	NTWA, AHC
2	Old Brookhampton Hall - Brookhampton	1900	Db7	NTWA, HCWA, AHC
2	Old Brookhampton Farm - Brookhampton		Db7	NTWA, AHC
2	"Brookview", Old Brookhampton Rd.	1886	Db7	NTWA, AHC
2	"Southampton", Forest Lease 1122/40, Jones Rd, Balingup	1862-82	Db8	NTWA
2	Southampton Homestead - Jones Rd, Balingup	1862	Db4	HCWA, AHC
2	"Torridon", Newlands, Preston Ag Loc 4617	1873	Db9	NTWA
2	"Yabberup Hall", Preston Town Loc 6, Yabberup	1896	Db10	NTWA
2	"Paynedale", Goodwood Rd, Donnybrook, (Wellington Loc 590/1377).	1883	Db1	NTWA, AHC
2	Universal Brotherhood Homestead, Balingup.		Db4	NTWA
2	"Woodlands" Group, Boyup Brook Rd Lowden.	1885	Db11	NTWA
6	Powlalup Nature Reserve, 67 ha, AHC DB 009515.			AHC
2	St Peter's Anglican Church, Jayes Rd Balingup.	1898	Db4	AHC, NTWA

Bibliography

- Anon. (1905) The Blackwood District, Western Australia Illustrated. (Embracing Greenbushes Tinfield, Bridgetown The Apple Country, Donnybrook and Balingup, The Lower Blackwood, Also Bunbury And Busselton, Seaside Resorts Of The Southwest). Cochrane & Stowe, Perth, Western Australia.
- Sparkes, H. (Ed) (1994) Donnybrook Community Profile. South West Development Commission, Bunbury.
- Frost, A.C. (1976) Green Gold. Donnybrook-Balingup Shire, Western Australia.
- Frost, A.C. (1979) Baylya-balinga : A History Of Balingup WA. Donnybrook-Balingup Shire, Western Australia.
- Watkins, K.E. (1990) Timber And Two Up : An Informal History Of Mumballup And Noggerup. Watkins, Donnybrook, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.11 Gingin

The Gingin Shire is situated approximately 84 km north of Perth and covers an area of 3 325 km², the majority of which is within the study region. The population of the area is about 3000 and includes the townsites of Guilderton, Seabird, Ledge Point, Lancelin and Gingin (WAMA 1993). The Shire contains many lakes and wetlands as well as the Moore River, Gingin and Quinn Brooks and Red Gully Creek.

History

Gingin was first explored by George Fletcher Moore in 1836 and in the same year Captain Norcott and party explored the areas watercourses. First settlement occurred around 1850 (W.J. de Burgh pers comm) at Chereton with other early settlements at Lennard's Brook, Running Stream, Lake Bambun, Nullilla Brook and Breara Brook (H. Dewar pers comm). Pastoral leases were granted using the river, brooks and lakes for stock watering in 1850-51. Cattle, horses and to a lesser extent sheep have been grazed over the whole area since first settlement. (W.J. de Burgh pers comm). All the main watercourses were used such as the Gingin Brook and Moore River as well as swamps and lakes including three small freshwater swampy hollows near the beach between Lancelin and Ledge Point for watering stock (W.J. de Burgh pers comm).

An early travel and stock route known as 'The Old North Rd' forded the Brook at Neergabby and the river at Cowalla and wells were also known to have been sunk along this route (W.J. de Burgh pers comm).

Lake Bambun is a freshwater lake fed by numerous brooks and from 1990 - 1950 it was a popular recreational area for picnics and sporting events for the Gingin residents. Mechenburra and Beermullah lakes have been used for recreation more recently (Mitchell McCotter & Associates 1989).

The Houghton Winery (Moondah House), on Moondah Brook is a well known historical site built in 1880 (listed by the National Trust of Australia, WA) and other historical homesteads exist in the area such as Cowalla and Downa (W.J. de Burgh pers comm). The Brook is permanent and fresh and initially used for irrigation along with small schemes from bores and lakes ie. at Cowalla, 100 acres were irrigated from 1914 to the 60's. The water in the Moore River gradually became more salty with inland clearing and by 1965 was unusable except by stock (W.J. de Burgh pers comm).

There was an attempt by the Government to start a closer settlement to Perth in the 1920's and a native settlement was established at the mouth of the Moore River (W.J. de Burgh pers comm).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Freshwater Brooks, Gingin Brook & Lennards Brook used by early explorers	1840's	Gg1 Gg2 Gg3	Hazel Dewar 16 Weld St GINGIN 6503 Ph: 575 2367
2	Chereton - first settlement.	1850's- 1860's		
2	Early settlement at: - Shallow Wells. - Lake Bambun - Running Stream - Moore River - Nullilla Brook			
3	All water from brooks and shallow wells			
3	Bore water for town supply			
4	Irrigation from brooks			
4	Large scale irrigation from brooks, swamps & bores	1800- 1960?		
7	People always used this water without ill effect	1860's - 1980's -		
9	Trout & Marron introduced at various times			
1	G.F Moore and party would have used river water	1836		Mr W.J. de Burgh 3/26 Plantation Dve Swan Cottage Homes BENTLEY 6102 Ph: 472 3321
1	Exploration along water courses in same year by Captain Norcott and party.	1836		
2	First Settlement	1850		
2	Pastoral leases granted using river, brook and lakes for stock watering	1850-51		
2	Early travel route "The Old North Road" crossed The Brook at Neergabby and the river at Cowalla.			
3	The river and brook, each flowing at about 2 000 000 gallons per day were excellent for domestic and stock water	1850- 1950		
4	Irrigation, about 100 acres, at Cowalla. These were small schemes from bores and lakes.	1914- 1965		
5	Very little drainage work			
6	A large number of the freshwater lakes south of the river are now in the Moore River National Park.			
7	The water in the Moore River gradually became more salty with the clearing of the wheatbelt and became unusable except for stock by 1965	1965		
7	The Brook is permanent and fresh.			
9	No commercial use but gilgies, fish, ducks etc used for human food and mussels for pig food.			
2	"Moondah" House, kitchen and garden, Moolyabeenie Rd.	1880		
2	Beedaminnup Homestead, West Rd.		Gg5	NTWA, AHC
2	"Cowalla", West Rd.	1852	Gg6	NTWA, AHC
2	"Downa", West Rd.(House & graveyard)	1874	Gg7	NTWA

Historical sites (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Former Junction Hotel, West Rd.	1873	Gg8	NTWA
6	Banpanup Nature Reserve, 81 ha, 10 km south of Gingin.			AHC
6	Bindoon & Chittering Lakes, 230 ha, 19 km south-east of Gingin.			AHC
6	Bootine Reserve C9676, 30 ha, 16 km north-west of Gingin.			AHC
66	Gingin Brook, 120 ha, Gingin.			AHC
6	Lake Wannamal, 90 ha, Gingin.			AHC
6	Moore River National Park, 17 543 ha, 30 km north-west of Gingin.			AHC
6	Molecap hill Quarry, 1 ha, 1.5 km south of Gingin.			AHC
6	Reserve 24559 & Timbermill, 486 ha, 10 km north east of Gingin.			AHC
6	Reserve C31241, 337 ha, 10 km south west of Gingin.			AHC
6	Yeal-Gnangara Area, 25 00 ha, 10 km south west of Gingin.			AHC
6	Bartletts well, 117 ha, 25 km north west of Gingin.		Gg9	AHC
6	Beermullah Lake, 102 ha, 25 km north west of Gingin.			AHC
2	Gingin Post Office, Brockman St.	1886	Gg10	HCWA
2	Railway Station & Quarters, Jones St.	1891	Gg10	HCWA

Bibliography

- DeBurgh, W.J.(1976) Neergabby (Where The Brook And River Meet). A History Of The Moore River And Lower Gingin Brook, 1830-1960. Shire of Gingin, Western Australia.
- DeBurgh, W.J. (1986) The Old North Road. UWA Press, Western Australia.
- Mitchell McCotter & Associates (1989) Historical associations of wetlands in the Perth to Bunbury Region. Draft report to the Water Authority of WA, Western Australia
- Udell, H. (1980) History Of Gingin 1830-1960. Shire of Gingin, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.12 Harvey

The Shire of Harvey is located 140 km south of Perth and covers an area of 1 766 km², and occurs entirely within the study area. The population is approximately 15,000. The Shire includes the localities of Yarloop, Cookernup, Harvey, Wokalup, Bengier, Brunswick, Roelands, Australind, Binningup, Myalup, Leschenault, Parkfield, Wellesley, Beela, Mornington, Hoffman, Warawarrup and Uduc. Local industry consists of mixed farming, mining and timber (WAMA 1993). Several rivers are within the Shire boundaries including the Harvey, Brunswick, Collie and Wellesley Rivers and the Harvey, Logue Brook and Meredith Drains. The Logue Brook, Stirling and Harvey Weir Dams are also within the Shire.

History

In 1830, Peter Augustus Lantour obtained a 200 462 acre grant, for more than half of the Harvey district but this was later to be mostly resumed. The area now called Cookernup was first explored by Stephen Henty and Thomas Peel in 1835 when they were guided through the reaches of the Harvey River by Aborigines. The Harvey town area was originally named by Stirling as Korijekup (Coraigeca), taken from the Aboriginal Korridgeecup, meaning place of the red tailed black cockatoo (SH 1995).

Thomas Little, who would later settle in Dardanup, purchased 1832 acres on the peninsula flanking the western side of the Leschenault Inlet for cattle grazing and horse raising. He introduced water buffalo to the area in 1843 and herders built a hut on the northern end of the peninsula which was still standing in 1978 (McGrath 1986).

Prior to 1870, there was little activity in the inland region. The first recorded settler was Joseph Logue who arrived in 1849 and selected rich land on the banks of what became known as Logue Brook. Around 1886, John Bancells took up 100 acres on what is now known as Bancells Brook and the following year W.J. Eastcott settled nearby (HCWA 1988ff). A hunting lodge was built on the banks of the Harvey River in 1849/50 approximately one mile east of the present townsite, it was extended in 1883/84 and became known as 'The Homestead' (SH 1995).

The town of Yarloop was established as a mill town in the late 1890's near a railway siding on the South Western railway line which had opened in 1893. Initially it was a private timber town established by Millar's Timber Company on the east side of the railway track however swampy land on the west side was drained and made available for purchase. The Yarloop Milltown, railway workshops and sidings became the focal point of Millar's operations and continued into the mid 1900's and Bunnings Ltd still operate there today. As well as timber, farming played an important role in the area (HCWA 1988ff).

Immigration, the collapse of many farming ventures and the Depression lead to wide spread unemployment in the early 1930's. In 1930, one of the biggest community employment programmes began in Harvey. This was a government sponsored plan to divert the Harvey River to an outlet at the ocean near Myalup, which relieved the fear of flooding downstream and brought valuable agricultural land into production. The scheme employed between 2 500 and 3 500 men who lived in camps at Myalup and nearby Stonehouse. Although many other works were begun at this time the Harvey River Diversion Scheme employed more men than any other and this and other schemes at Collie and Waroona enabled irrigation to be extended and more land brought into production by allowing winter drainage and summer watering. Orchards were planted in the early 1900's and dairying expanded after the 1930's until it was estimated that these irrigation schemes supplied an area of approximately 76 000 acres (Harvey Tourist Centre pers comm).

Harvey was also the site of an Internment camp from 1940-1942 for mainly Italian immigrants. After Mussolini joined forces with Hitler, Italian migrants were classed as 'Enemy Aliens' and interned or man-powered. A camp was created at Harvey on the banks of the Harvey River, the site of which is now marked with a shrine, and held between 500 and 1000 persons, and 200 guards (HTC 1995).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	First farm in Brunswick was called 'Alverstoke', wheat, barley and potatoes were first grown here.	1842	H1	Mr Ross Warburton PO Box 74 BRUNSWICK JN 6224 Ph: 097 261035
3	Brunswick River	1842-1995		
2	Harvey Internment Camp on River	1941-42	H2	Harvey Tourist Centre Ph: 097 291 122
4	Harvey River Diversion and Drainage Scheme.	1930		
4	Harvey Weir			
3	Stirling Dam			
3	Logue Brook Dam			
7	Lake Preston, saltier than the sea has many fresh water springs around the edges.			
2	Gibbs Pool at the Harvey Weir used to be the local swimming hole prior to the construction of the town pool.			
2	Peninsula, western side of Leschenault Inlet, site of Thomas Littles grant.	1830's		McGrath (1986)
2	Herder's Hut, northern end of peninsula.	1840's?		
2	Hunting Lodge, later 'The Homestead' was built here, 1 mile east of the Harvey townsite.	1849 & 1883		SH (1995)
2	"Springhill", Loc 17, 25 km north Bunbury, Old Coast Rd, Australind.	1862	H3	NTWA
2	Upton House, Old Coast Rd/Upton Pl, Australind.	1847	H4	NTWA, AHC
2	Henton Cottage, 2 Paris Rd, Australind.	1840's	H4	NTWA, AHC
2	Shrine: Internees Camp Site, Paris Rd, Australind.	1941	H4	NTWA, AHC
2	St Nicholas' Church, Paris Rd, Australind.	1860	H4	NTWA, AHC
2	"Cooks Park" Farmhouse, east shore Leshenault Inlet, Scenic Dve, Australind	1860	H5	NTWA, AHC
2	St Peter's Church, Brunswick Junction.	1911	H6	NTWA, AHC
2	Historical Museum, Uduc Rd, Harvey.	1898	H7	NTWA, AHC
2	Runnymede and Florrie's Historic Cottage Group, Wellesley Rd cnr 10th Light Horse Bridle Trail, Brunswick Junction.		H6	NTWA
8	Former Mill Managers House, Clifton Rd cnr south-west Railway, Yarloop.		H8	NTWA
8	Yarloop Mill Town Conservation Area	1890's		NTWA, AHC
2	Marshall Waller Clifton memorial, AHC database no '009550			AHC
6	Brunswick Collie and Wellesley Rivers, 500 ha, AHC DB '017887.			AHC
2	Alverstone Farm Residence, Clifton Rd Brunswick.		H6	AHC
2	Bundidup Cottage, Wokalup.		H9	AHC
2	Millars Housing, Yarloop.		H8	AHC

Historical sites (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
8	Timber Mill Workshop Complex, Railway Pde Yarloop.		H8	AHC
6	White Rocks, Brunswick, AHC DB No 009547.			AHC
6	Crampton Nature Reserve, 37 ha, 16 km north-west of Harvey.			AHC
6	Reserve 22797, 301 ha, 8 km east Harvey.			AHC
6	South West Irrigation area, AHC DB No 009509, Harvey.			AHC
6	Virgin Forest (area 1), AHC DB No 009552, Harvey.			AHC
6	Benger swamp, 12 km south-south-west of Harvey.			AHC
6	Reserve 12049, 79 ha, 8 km west of Yarloop.			AHC

Bibliography

- Clifton, I. (1961) The Development Of The Harvey Irrigation Area. Teacher College Thesis.
- HTC (1995) Internment Camp. Pamphlet, Harvey Tourist Centre, Western Australia
- HCWA (1988ff) Yarloop Heritage Trail. Heritage Council of Western Australia, Western Australia
- Martin, D. & Wilson, G. (1979) Millars Timber Mill Workshop, Yarloop. Shire of Harvey, Western Australia.
- McGrath, R. (1986) Thomas Little At Dardanup. Independent Study Contract.
- SH (1995) Shire Of Harvey 1895-1995 : Proud To Be 100 : A Centennial Book. Shire of Harvey, Western Australia.
- Southcombe, M.R.H. (1986) Steam In The Forests. Hesperian Press, Western Australia.
- Staples, A.C. (1979) They Made Their Destiny : A History Of Settlement Of The Shire Of Harvey 1829-1929. Shire of Harvey, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.13 Mandurah

The City of Mandurah is located approximately 70 km south of Perth and covers an area of 179 km², which is located entirely within the study region. The population is about 31 780. The city has several suburbs and localities including Madora to the north and Clifton to the south. Local industry includes a large tourism industry, fishing, business and commerce (WAMA 1993). The mouth of the Peel Inlet, Dawesville cut, Lake Clifton, Boundary Lake and the Swan and Duck Ponds all lie within the Mandurah area.

History

Thomas Peel obtained the first land grant at Mandja, a meeting place for Aboriginals at the mouth of the Peel Inlet in 1830. His grant was actually 250 000 acres of land extending from Clarence, (now Woodman Pt), to the banks of the Murray River. The initial settlement was known for some time as Peeltown and later the Aboriginal name was later translated to the English version of Mandurah (Mandurah Tourist Bureau *pers comm*).

Among the first settlers was John Tuckey and T. Eacott who were granted 50 acres each by the Governor from Peel's estate because Peel could not pay their wages and had not supplied their families with sufficient food (Mandurah Tourist Bureau *pers comm*).

By the end of 1830, the settlement consisted of approximately 50 persons and an amount of cultivation had taken place with several houses being built. A detachment of soldiers were sent to the town for protection of the public after the Aborigines became hostile with the influx of settlers. A soldiers camp and barracks were built at Soldier's Cove near the present traffic bridge where the old Police Station now stands (Mandurah Tourist Bureau *pers comm*).

In 1832, Edward Hall acquired land four miles south of the town and built a house on the western shore of the Peel Inlet which was later destroyed by fire. He rebuilt in 1832 and his cottage still stands and is home to the Mandurah Historical Society (Inc). In the south-east corner of his property is a limestone lined well (Mandurah Tourist Bureau *pers comm*).

The Mandurah area was home to several industries and was known as being a large contributor of wheat to the Perth market in the 1840's. Henry Hall, son of Henry Edward Hall took over his father's farm and timber business after his death in 1859. A fish preserving works was constructed on the shore of the inlet in 1880 by the Tuckey family and was serviced by a jetty. A preserving works had already existed in the town since 1877. Many other canning works sprung up around the town and large numbers of local fish provided for a thriving industry. A ferry service operated from the early settlement across the inlet until the bridge was built at the site of the present town bridge in 1894. A timber mill was later constructed at Soldier's Cove in 1911 to cater for the increasing trade in timber brought down to the town for local use and export (Mandurah Tourist Bureau *pers comm*).

The Brighton Hotel opened its doors in October 1895 and a large residence purchased by the Tuckey family became the Peninsula Hotel. Mandurah then began to become a holiday resort for Perth (Mandurah Tourist Bureau *pers comm*).

Mandurah became a Road Board independent of Murray in 1949 and in 1990 City Status was conferred upon the town. Mandurah is a summer destination for many people and provides many recreational activities along the shores of its beaches and rivers with a thriving population expected to reach 50 000 by the year 2000 (Mandurah Tourist Bureau *pers comm*).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Thomas Peel obtains land grant at 'Mandja'	1830		Mandurah Tourist Bureau Inc 5 Pinjarra Rd MANDURAH 6210 Ph: 535 1155
2	Hall Cottage, Leighton Pl.	1832	Ma1	
2	Leighton Farm, Old Coast Rd.	1849	Ma2	
2	Creery's Cottage, Soldiers Cove.	1832	Ma3	
2	Dalrymple School, Behind the traffic bridge	1898	Ma4	
2	Mandurah Bridge.	1894	Ma5	
2	Tuckey's Peel Inlet Preserving Works, Mandurah Tce.	1880	Ma6	
2	Tuckey's Cottage, Mandurah Tce.	1857	Ma7	
2	Ambassador Picture Gardens, Mandurah Tce.	1925		
2	Turner's Guest House, Mandurah Tce.	1900	Ma6	
2	First Petrol Station, Mandurah Tce.	1900's	Ma6	
2	Mandurah Preserving Works & Barracks.	1877	Ma6	
2	Brighton Hotel, Mandurah Tce.	1880	Ma6	
2	Mandurah Bakery, Mandurah Tce.	1900's	Ma8	
2	Peninsula Hotel	1890	Ma9	
2	Peninsula Footbridge.	1913	Ma8	
8	Mandurah Sawmill, Soldiers Cove.	1911	Ma10	
2	Ferry Landing, Soldiers Cove.	1842	Ma10	
2	Government Jetty, Mandurah Tce, goods handling to Perth and Fremantle.	1897	Ma6	
2	Dalrymple Jetty, built by government for recreation.	1906	Ma5	
2	Ford at Harvey Estuary, 1 mile south of Mt John, used frequently by Sutton, Heron, McClarty and other families moving cattle.	1862		Richards (1978)
2	Birchmont House and outbuildings had a spring at the bottom of the garden. North of the house was a 'big lake' and vegetables were farmed around it.			
2	Former Hardey House, Estuary Rd.	1853		NTWA, AHC
2	Hall's Historic Cottage, Leighton Rd.	1850	Ma1	NTWA, AHC, HCWA
2	Christ Church and Churchyard, Scholl St.	1843	Ma11	NTWA, AHC
2	Carlisle Castle, AHC DB No 010654			AHC
2	James Service, AHC DB No 010665			AHC
2	Leighton Farm, AHC DB NO 010666		Ma2	AHC
6	Boodalan Island, 2 ha, 7 km south-east of Mandurah.			AHC
6	Geogrup Lakes, 2000 ha, 10 km north-east of Mandurah.			AHC
6	Lakes McLarty & Mealup, 600 ha, 25 km south of Mandurah.			AHC
2	Paganoni, 10 km north of Mandurah.			AHC

Bibliography

- Burgess, J. (1988) Mandurah-Water Under The Bridge. Town of Mandurah, Western Australia.
- Richards, R. (1980) Mandurah And The Murray, A Short History Of The Old Murray District. Artlook, Western Australia.
- Richards, R. (1993) Mandurah And The Murray, A Short History Of The Old Murray District Of WA. Artlook, Western Australia.

Smart, C. (1956) Mandurah And Pinjarrah: A History Of Thomas Peel And The Peel Estate 1829-1865. Paterson Brokensha, Western Australia.

Spandegs, V. (195?) Eighty Years Of Progress In The Pinjarra-Mandurah Area. (np)

WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.14 Murray

The Murray Shire is situated approximately 70 km south of Perth and covers an area of 1 813 km² entirely within the study region. It encompasses the townsites and localities of Pinjarra, North Yunderup, South Yunderup, Coolup, North Dandalup, Furnissdale, Ravenswood, Dwellingup, Murray Bend, Barragup, North Pinjarra, Nambeelup, Meelon, Birchmont, West Pinjarra and Stakehill and has a population of approximately 10 100. Local industry consists of farming (beef, sheep, pig and dairy), orchards, timber, tourism and bauxite mining and refining (WAMA 1993). The South and North Dandalup Dams are major water sources located within the Shire and major watercourses are the Murray, Serpentine, North Dandalup and South Dandalup rivers. The Peel Inlet and Harvey Estuary and Goegrup lake chain are also within its municipal district.

History

The first recorded exploration of the Murray River district was in November 1829 when Lt R.N. Preston and Dr Alexander Collie anchored the 'Sulphur' in Cockburn Sound and took two whaleboats south to a river between the Sound and Lechenault Inlet. Although, they were not impressed by the area around the Peel Inlet, Thomas Peel went ahead and placed a group of settlers here in 1830 (HCWA 1988u).

Four years later, a Mr Carter and his stock-keeper conducted an excursion upstream in an attempt to recapture some stray cattle. The Perth Gazette reported: "On their first excursion, Mr Carter has informed us, they fell in with a plain of the richest grass and the finest loam they had seen in the Colony, comprising an area of about 4 000 acres..." (HCWA 1988u).

An expedition to survey the Pinjarra district in 1834 was led by the Governor James Stirling and the Surveyor General, John Septimus Roe. The party were also intent on tracking down some Aborigines responsible for the death of a young private at Mandurah a few months earlier. On October 28th, they came across a group of 60-80 Aborigines and identified certain members as being responsible for the murder. The ensuing 'Battle of Pinjarra' as it was later known was the final breakdown of Aboriginal defence against European settlement in the Pinjarra region (HCWA 1988u). It should be noted that recent historical interpretations have painted a less noble picture of the battle than earlier accounts did (see Reece and Stannage, 1984)

A military post was established near the site in 1836 and settlers began occupying land grants along the Murray and a townsite was surveyed. In 1838, a road was surveyed from the Canning River to the Leschenault Inlet and in the early 1840's after the road was cleared and marked, a bridge was built over the Murray River. The name Pinjarra was Pinjarrup on early maps which was based on the name of the local Aboriginal tribe, 'Pindjarup', meaning place of swamp (HCWA 1988u).

Initial industries were farming however after the establishment of a network of railways in the early 1900's the timber industry became established at Dwellingup. A State Mill was established there and between 1914-1918 became a major centre boasting many facilities. A Mill was also established at Nanga Brook and Holyoake and an extensive tramway network was created through the forest. A railway dam was created at Etmilyn and the rail network was continually created and dismantled as the forest was felled. Eventually the timber became severely depleted and many companies moved to other areas further south (HCWA 1988g).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Exploration by Lt R.N. Preston and Dr Alexander Collie.	1829		HCWA (1988u)
1	Pinjarra district surveyed by party led by Governor Stirling and Surveyor General John Septimus Roe.	1834		
2	Military post established.	1836		
2	Original Road Board Office, 28 George St.	1870's	My1	
2	Courthouse, George St.	1935	My1	
2	Post Office, George St.	1895	My1	
2	St John's Church, Henry St.	1860's	My1	
2	Old Schoolhouse, Henry St.	1896	My1	
2	Liveringa, Henry St.	1885	My1	
2	Edenvale, Henry St.	1888	My1	
2	Old Blythewood, 3 km south of Pinjarra.	1860	My2	
2	Pinjarra Bridge	1840's	My1	
6	Pioneer Memorial Park, George St, containing some of the oldest Oak and Pine trees in the district.	1870's	My1	
4	Etmilyn steam locomotive watering point and dam.	1920's	My3	
8	Timber tramways along Davis Brook, Dwellingup.	1900's		
8	Mill sites and townsites of Holyoake and Nanga Brook located along Davis Brook watercourse	1890's-1961	My4	
2	Cooper's Mill, Culeenup Island.	1843	My5	Murray Tourist Centre PO Box 277 PINJARRA 6208 Ph: 531 1438
6	Lane Poole Reserve, 54 000 hectares.			
3	South Dandalup Dam			
3	Oakley Dam			
2	Scarp Pool			
2	Baden-Powell Water Spout			
2	Island Pool			
2	Thomas and John Pollard each had 10 acres adjoining a ford on the river on what is now East Coolup Rd. A tree is said to have marked the site where a mud brick cottage once stood.			Richards (1978)
2	Edenvale Precinct and Group, South West Hwy Pinjarra.	1921	My1	NTWA, AHC, HCWA
2	Fairbridge Farm School Group, on South Dandalup River off SW Hwy.		My6	
2	Ravenswood Hotel, on bank of Ravenswood River, Lloyd Ave.	1863	My7	NTWA, AHC
2	Pinjarra Park, 3 km south-east of Pinjarra, Williams Rd.	1858	My1	NTWA, AHC
2	"Old Blythewood", 3 km south of Pinjarra, South-Western Hwy.	1840	My2	NTWA, AHC
2	Pinjarra Railway Precinct, cnr South-Western Highway and Williams Rd	1892		NTWA
2	Grass Tree Cottage, Old Bunbury Rd Coolup.	1890		NTWA, AHC
2	Cooper's Mill on Culeenup Island Yunderup.	1843	My5	NTWA, AHC

Historical sites (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Marrinup No 16 Prisoner of War Camp, AHC DB 0019050			AHC
2	St John's Anglican Church, Henry St Pinjarra.		My1	NTWA, AHC
2	Pinjarra Post Office and Quarters, George St, Pinjarra.		My1	AHC, HCWA
2	Creaton, Paterson Rd, Pinjarra.		My1	AHC
6	Austin Bay Nature Reserve, 243 ha, 9 km west of Pinjarra.			AHC
6	Harvey Estuary Nature Reserve, 1019 ha, 18 km south-west of Pinjarra.			AHC
6	Nature Reserve 4990, 350 ha, 8 km west-north-west of Pinjarra.			AHC
6	Nerimba Bay Nature Reserve, 892 ha, 10 km west of Pinjarra.			AHC

Bibliography

- HCWA (1988g) Etmilyn Forest Heritage Trail Heritage Council of Western Australia, Western Australia.
- HCWA (1988u) Pinjarrah Heritage Trail Heritage Council of Western Australia, Western Australia.
- Reece, B. and Stannage, T. (eds) (1984) European-Aboriginal Relations In Western Australia. UWA Press, Western Australia
- Richards, R. (1978) The Murray District Of Western Australia : A History. Shire of Murray, Western Australia.
- Richards, R. (1980) Mandurah And The Murray, A Short History Of The Old Murray District. Artlook, Western Australia.
- Richards, R. (1993) Mandurah And The Murray, A Short History Of The Old Murray District Of WA. Artlook, Western Australia.
- Stannage, C.T. (Ed) (1981) A New History Of Western Australia. UWA Press, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.15 Narrogin

The Shire of Narrogin is located 190 km south east of Perth and covers an area of 1618 km² although only the north western third is within the study region. Narrogin is comprised of both the Shire and the Town and the combined population is 6 165. Localities within the district include Highbury, Yilliminning and Normans Lake. Industries are farming (sheep, crop, cattle and pig), timber milling, meatworks, and some engineering works (WAMA 1993). The Williams River is the only major watercourse located within the Shire, however the Narrogin, Arthur and Yilliminning Rivers, and Lakes White, Lukin, Normans and Taarblin also occur in the Shire.

History

The first exploration of the area was by John Septimus Roe in 1830 and later in 1869 by John Forrest who described a location within the present townsite with reference to Narrogin Pool.

First settlement consisted of shepherds moving sheep through the area in the 1860's. Shepherds utilised the many pools along the creeks and rivers, as well as soaks and springs. This included Narrogin Pool at the present townsite, Kunderning Pool on the Williams River, Yilliminning Pools and a stoned soak near Birdwhistle Rock east of Narrogin (Maurie White *pers comm*).

The area was surveyed as Williams Location 177 in 1869 and land grants were taken up by settlers in the 1870's. Early settlement was located around the watering points with settlements at Kunderning Pool, Bailaling Spring, Torbling Springs, Wolwolling Pool, Dumberning Spring and Marramucking Well. Early sheep dips and washes were used in many places and later Chinese market gardens established at a number of soaks in the 1890's (Maurie White *pers comm*).

From 1881, the West Australian Government actively pursued the idea of a railway line between Perth and Albany. The WA Land Company successfully bid for the contract and the line was constructed from 1884-1889. The Land Company found itself short of a watering place for its engines and so acquired Narrogin Pool. The Beverley to Albany Railway Act of 1887 granted all unowned land within the Narrogin townsite to the WA Land Company. A plan of the town was drawn up in 1889 and used as the basis for development, much of which still applies today. The Narrogin Road board was gazetted in 1892 after secession from the Williams Board (HCWA 1988p).

Initial settlement was bolstered by the development of the railway, however early settlers had to look to other sources for income. Many of Narrogin's early settlers offset the financial problems caused by poor initial harvests by selling sandalwood and mallet bark, both native to the region. Sandalwood was eagerly sought after in Asia for use in incense and oils and indiscriminate harvesting of the bushes has meant that it is now rare in the area. The bark of mallet trees growing wild on the hilltops in the region was found to be a useful agent for the tanning of leather and large areas around Narrogin were planted with trees to serve as a long term source of income. However synthetic tanning agents were developed and the trees subsequently left uncut resulting in the creation of reserves. Some harvesting of mallet continues today mainly for use in axe handles (HCWA 1988p).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Exploratory journey through area by John Septimus Roe	1830		Mr Maurie White Hon Curator "Old Courthouse" Museum NARROGIN 6312 Ph: (098) 814 134
2	Sheperd movements through area.	1860's		
3	Pools used by shepherds include -			
	- Kunderning Pool on Williams River, west of Narrogin.		Na1	
	- Gnargojin Pool on Narrogin Creek (current location of Narrogin).			
	- Yilliminning Pools, East of Narrogin.			
	- Narrogin Creek.			
	- Stoned soak near Birdwhistle Rock - east of Narrogin.			
	- Four Mile Well - east of Narrogin.			
	- Ford at Rocky Crossing near the Kunderning Pool - west of Narrogin.		Na1	
2	Farming and pastoral settlers including G. Dyson, W.F. Weise, W. Graham, E.R Weise, J.H. Stevens and the Pustkuchens	1870's		
2	Settlement located at these springs and pools -			
	- Kunderning Pool		Na1	
	- Bailaling Spring, (W.F. Wiese).			
	- Torbling Spring, (W. Graham).	1900	Na2	
	- Wolwolling Pool, (E.R Weise).			
	- Dumberning spring, (J.H. Stevens).	1871	Na3	
	- Marramucking Well, east of Narrogin, (Pustkuchens).			
2	Early sheep dips and washes -			
	- Old Forest Lodge, Highbury West Rd			
	- Narrakine Gully, Near Highbury			
	- Newmans sheep washing pool			
	- Taylor's Soak			
2	Chinese market gardens utilising soaks;	1890+		
	- Trefort property immediately north of Narrogin.	1900's		
	- Dumberning location No. DAA178 to west of Narrogin.			
2	Township of Narrogin resulted from the railway being built by the West Australian Land Company.			
	Gnargojin Pool railway siding.	1880's		
	- Railway Dam near Gnargojin Pool on Narrogin Creek.	1906		
	- Railway Dam on southern side of town.	1910's	Na4	
	- Railway Dam, Yoraning to the north of Narrogin.			

Historical sites (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
7	- Railway Dam, Congelin to the north east of Narrogin. Saline water of the Narrogin Dam caused problems for the steam locomotives			
3 3 3 5	Domestic water tapped from an underground stream running north-south through the town centre Public Wells, Federal St and Felspa St. Battle Creek Reservoir. Narrogin Creek through town realigned, periodically cleared of bulrushes and weed growth, mosquito swamps cleared, storm water pipes feed into creek.	1920's 1920's- 1950's	Na5	
2 3 5 7 3 3 3 3 7 7	Railway dam - water for steam trains - now recreation at South Toolibin, Dulbinning. Government dams built for drought relief at Toolibin. Toolibin Lake used to fill each year but not so often these days despite continued land clearing Lakes below Toolibin salty for at least 50 years. House well Rain water tank (house) Rain water tank (school) Sandpit by railway line (Hillman Dam) (dried up in summer) Government well: "like rainwater" House well "always muddy"	1947- 1950's 1935- 1943 1907	Na6 Na7	Mr Ned Crossley Dept of Agriculture 10 Doney St NARROGIN 6312
7 7	Lake Towerrinning - onset of salinity Arthur River (specific location according to study) - onset of salinity.	1971- 75 1941- 45		Ms Angela Sanders c/ Dept of CALM
2/3 2 2 2 2 2 2 2	Murrin Murrin', Cuballing Rd South West (north), originally taken up by the Barron family, freshwater spring and well. Sylvania', Spouse Rd (east), site of Ted Pustkuchin's house on the creek bank. Minigin', Clayton Rd (north). Bannister Site, (Carter's Crossing), originally chosen for a strategic point for a military base. Carnegie', Williams-Narrogin Rd (north), start of John Forrest's survey up the Williams River. The Bridge, Graham Rd. Minabbie' at Kunderning Pool. Dumberning Springs, The Steven's family obtained a tillage lease of the freshwater springs here.	1890's 1904 1870's 1872 1908 1870	Na8 Na9 Na10 Na11 Na12 Na13 Na1 Na3	HCWA (1988p)

Historical sites (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Cooramining, Surveyor General J.S. Roe travelled through here from the Tone River.	1835		
	Torbling Spring, originally an Aboriginal watering hole, Graham family established one of the earliest dairies here.	1900	Na2	
2	Museum, former School then Courthouse, Earl St.	1894	Na5	NTWA, AHC
2	Former St Peter's Church, Earl St.	1925	Na5	NTWA
2	Mardoc Building, Federal St Narrogin.		Na5	AHC
6	Arthur River Wetland Complex, 5000 ha, 30 km east of Narrogin.			AHC
6	Dryandra Forest area, 25 000 ha, 18 km north west of Narrogin.			AHC

Bibliography

- HCWA (1988p) Narrogin Heritage Trail. Heritage Council of Western Australia, Western Australia.
- Narrogin District Education Office. (1993) School Days 1893-1993. A Collection Of Oral Histories To Celebrate The Centenary Of State Education In Western Australia. Narrogin District Education Office, Western Australia.
- Pustkuchin, O.E. (1981) The Way Through: The Story Of Narrogin. Artlook Books, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.
- White, M. (1990) Pricklebush Hill. Narrogin Senior High School, Western Australia.
- White, M. (1991) Mighty Heart : Narrogin's Railway Story. M. White, Western Australia.

3.2.16 Northam

The Shire of Northam is located approximately 60 km north east of Perth, (to the Shire boundary, 100 km to the Town), and covers an area of 1 419 km². The population of the Shire and Town is approximately 10 000 and includes the localities of Wundowie, Bakers Hill, Grass Valley, Spencers Brook and Clackline (WAMA 1993). Only the western part of the Shire, encompassing Woorloo Brook is located within the study region. Other watercourses within the Shire boundary are the Avon and Mortlock Rivers and a number of tributaries.

History

Ensign Dale discovered open grassy land to the east of the Darling Range during an expedition in 1830 and stirred considerable interest within the colony as settlers struggled to make the land around Perth productive. The townsite of Northam was selected when Governor Stirling assessed the area and by 1830 nearly a quarter of a million acres had been granted along the Avon Valley. However, actual settlement was slow to take place and there was little activity on the townsite until the 1850's (HCWA 1988r).

Next to a safe winter ford across the Avon (16 km from Northam), a community developed on what was known as the Katrine lease in the 1850's to service surrounding properties and travellers. However, as Northam grew and better access was provided by the bridge upstream, the Katrine settlement was bypassed by traffic (HCWA 1988r).

The Avon and Mortlock Rivers played an important role in the development of Northam. The wide flats of rich alluvial soil and well shaped deep pools encouraged a broad agricultural and pastoral mix renowned for its quality. Proximity to the water has exacted a price with occasional severe floods which have been disastrous to stock and buildings (HCWA 1988r).

Northam's transformation from a relatively small agricultural village to a substantial town occurred during the premiership of Sir John Forrest in the 1890's. In December 1891, in preference to York and Beverley, Northam was chosen as the point of departure for the railway to the Goldfields, assuring its development into the service centre for the vast wheatbelt region (HCWA 1988r).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Ensign Dale discovers open grassy land during an expedition beyond the Darling Range.	1830		HCWA (1988r)
2	First land grants.	1830		
2	Northam and Katrine communities develop.	1850's		
2	Flour Mill, Gairdiner St next to Avon Bridge.	1867	No1	
2	Avon Bridge Hotel.	1860's	No1	
7	Severe flooding of the Avon River	1862		
2	Northam's first police station site, cnr Katrine & Irishtown Rds	1852	No2	
2	Lockyer's Flour Mill, Katrine Rd.	1857	No3	
2	Hampton Vineyard, Katrine Rd (rising salt content gradually destroyed it).	1920's	No3	
2	Newleyine Homestead, Katrine Rd.	1837	No4	
2	Katrine Homestead, Katrine Rd.	1850's	No5	
2	St Saviours Anglican Church, Katrine Rd.	1862	No5	
6	Viveash Reserve, Northam-Toodyay Rd.	1981	No5	
2	Katrine Causeway, at Viveash Reserve.	1867		
2	Glenfield, Katrine Rd. Stone ruin of a home.	1860	No5	
2	Morgan's Winery, Katrine Rd, opposite Glenfield.		No5	
2	Bardeen, Katrine Rd, main homestead built in the 1850's, next to a permanent spring.	1850's		
2	Avon Bridge Hotel, Fitzgerald St.	1860	No1	NTWA, AHC
2	"Egoline" Homestead, Northam - Toodyay Rd.	1851		NTWA, AHC
2	John Morrel's grave, Quelquelling Rd.	1929	No6	NTWA, AHC, HCWA
2	Warranine Homestead Group, Spenser's Brook Rd, Clackline.	1845		NTWA, AHC
2	Bardeen Homestead & Farm group, Dunbarton Rd, Irishtown.	1858		NTWA
2	Buckland Homestead and Farm Group, Irishtown Rd Katrine.	1836		NTWA
2	Katrine Homestead Group, Katrine Rd Katrine.	1860	No5	NTWA, AHC
2	Former Seabrook Battery site, 0.8 km south east of Northam.	1896		NTWA, AHC
2	Spencers Brook Tavern, Thomas St Spencers Brook.	1884		NTWA, AHC
2	St Saviours Church, Katrine.		No5	AHC
2	Muresk, AHC DB No 009974, Northam.			AHC
2	Morby Farm, York Rd Northam.			AHC
6	Clackline Nature Reserve, 459 ha, 1 km north of Clackline.			AHC
6	Blackboy Gully Natural Area, 5 km east southeast of Clackline.			AHC
2	Noondeening Hill, 8 km west of Northam.			AHC

Bibliography

- Garden, D.S. (1979) Northam, An Avon Valley History. Oxford University Press, Melbourne.
- Hancock, D. (1983) Buckland, Irishtown, Northam, Western Australia 6401 : The History Of An Avon Valley Homestead. Hancock Media Relations, Western Australia.
- HCWA (1988r) Northam/Katrine Heritage Trail. Heritage Council of Western Australia, Western Australia
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth Western Australia.
- Wroth, B. (1977) Avon Valley Sketchbook. Wrigby Ltd, Western Australia.

3.2.17 Pingelly

The Shire of Pingelly is located 158 km east southeast of Perth and covers an area of 1223 km² of which only a southern portion encompassing the Hotham River and its tributaries are within the study region. The population is approximately 1 213 and the Shire includes the locality of Moorumbine as well as Pingelly. Farming forms the mainstay of the Shire with crop, sheep, cattle, pig, ostrich, emu and yabby farming (WAMA 1993).

History

Moorumbine, 10 km east of Pingelly was the first area to be settled when Lewis John Bayley took up land in 1846. He was granted 4000 acres for grazing sheep near a spring which Aborigines called 'Nalyaring' and Bayley was soon followed by other pastoralists (HCWA 1988o).

The area was surveyed by Francis Gregory in 1856 and again in 1858 by Richard Austin. A permanent settlement was established around 1860 and called Moorumbine after the Aboriginal name of another nearby spring. Following rumours of the imminent construction of the Beverley-Albany Railway, the Moorumbine townsite was gazetted in April 1884. At this time Moorumbine was connected to Beverley by a rough dirt track known as the Old Beverley Road. The town had several buildings by this stage and a stone well (HCWA 1988o).

Early settlers found the land difficult to clear because of the heavy timber and supplemented their incomes with sandalwood and mallet bark. Aborigines sometimes assisted them by directing them to the whereabouts of plentiful supplies of sandalwood trees and water (HCWA 1988o).

The Great Southern Railway which was completed in 1889, stretched 391 km from Beverley to the port of Albany and was instrumental in opening up land in the south-west. It passed 10 km west of Moorumbine and a small settlement was established at the railway siding located there. It was called 'Pingegully' after another Aboriginal name 'Pingeculling' meaning 'small gully of water', but became known as Pingelly (HCWA 1988o).

Pingelly was gazetted in 1898 and its growth and development marked the beginning of Moorumbine's gradual decline. Pingelly attracted many settlers from the Goldfields looking for a more secure means of income and by the early 1900's Moorumbine's influence had begun to wane. The Pingelly-Moorumbine Road Board offices were built at Pingelly in 1909 and just a few years later Moorumbine was deleted from the title and Pingelly town became the centre of the district. (HCWA 1988o).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	William's and Marshall find water supplies etc.	1900-05	Pi1	Mr A.G. Marshall 45 Queen St PINGELLY 6308 Ph: (098) 871 320
2	Sink wells and soaks, clear land erect buildings.			
3	Underground water and permanent pools in river, freshwater soaks and water tanks.		Pi2	
4	Sunk dam for water catchment, small amount of irrigation.	1920's		
5	Many areas in the west Pingelly, Hotham River area have been drained to avoid flooding and salt intrusion.	1940-1950	Pi3	
6	All areas along the Hotham River are classed as reserved waterways			
7	Hotham River in the early days was classed as good quality stock water with good supplies of freshwater fish, now are few.			
3	A.J. Marshall divined west Pingelly area and located underground water.			
8	Good quality Wandoo, Jam and Sheoak timber, also Sandalwood trees. (Wandoo railway sleepers, Jam fence posts).	1940+		
9	Black duck, Wood duck, Mountain duck and Teal abounded along the river and were food supplies for early settlers and into later years.			
3	Well, 73 ft deep on A.J. Marshall's land. Supplied many farmers during the 1914 drought year.	1905		
3	Pools along the Hotham River include - - Pumphries, developed and used as a sports area for many years. - Boxies, used as a recreational fishing area - Marterdene Pool - Codjatotine Pool - Noombling Pool - Redgum Pool - Dumbitmooney Pool - Dwarda Pool			
3	Bridges used by early settlers of the area include- - Pumphries Bridge - Noombling Bridge - Dwarda Bridge		Pi2	
3	Old wagon crossing south of Noombling Bridge			
7	Many streams ran salt and many fresh.			

Historical sites (contd)

Land use	Historic site and/or water use	Date	Map ref	Source of information
3	Soak put down by first settlers just off river and is still a good supply today.		Pi2	
3	Freshwater Well at Pingelly, neglected for many years but now used to irrigate surrounding lawn area.	1880	Pi4	
1	Moorambine surveyed by Francis Thomas Gregory.	1856		HCWA (1988o)
2	Pingelly town gazetted .	1898		
2	Lewis John Bailey takes up land in Moorambine area at Nalyaring Spring.	1846		
2	Moorambine settlement established near spring later called Moorambine Spring. (Moorambine Rd)	1860		
2	Town Hall, Parade St Pingelly.	1907	Pi5	NTWA, AHC
2	CBA Bank, 12 Parade St Pingelly.	1911	Pi5	NTWA, AHC
2	Pingelly Post Office, Parade St Pingelly.	1889	Pi5	NTWA
2	St Patrick's Church, 10 km east of Pingelly at Mourambine.	1873		NTWA, AHC
2	Staunton Springs (Bostock's Farm), Old York/Albany Rd, Pumphrey.	1856		NTWA, AHC
6	Tutanning Nature Reserve, 2087 ha, 19 km east of Pingelly.			AHC

Bibliography

- HCWA (1988o) Moorambine Heritage Trail. Heritage Council of Western Australia, Western Australia
- Baskerville, B. (1960) A History Of Pingelly. Teachers College Thesis.
- Ford, G. (1952) A History Of Pingelly. (np)
- Lange, S. (1981) Pingelly - Our People And Progress. Pingelly & Town Beautification Committee, Western Australia.
- Pingelly Shire. (1979) Back To Pingelly; 150th Celebrations 10-14th October 1979. Pingelly Shire Council, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth Western Australia.

3.2.18 Serpentine-Jarrahdale

The Shire of Serpentine-Jarrahdale is located 45 km south of Perth and covers an area of 905 km². It includes the localities of Mundijong, Serpentine, Jarrahdale, Byford, Mardella, Cardup, Keysbrook, Oakford and Whitby and has a population of about 9000. Local industry includes mixed farming, market gardening, orchards, timber, bauxite mining and quarrying (WAMA 1993). Important water sources within the Shire are the Serpentine River, tributaries, reservoir and pipehead dam, and the Wungong Reservoir.

History

Captain Mark Currie discovered the Serpentine River in July 1829 while on an inland exploration looking for watercourses. He had sailed to the southern end of Cockburn sound on the HMS Challenger and led a party inland where he came across the river. Several other exploration parties travelled through the area in the following years such as Bannister and Dale in December 1830, J.S. Roe in 1833 and Hillman in 1835 (Coy 1987).

First settlers to the area included Peel and his Serpentine Farm, the Armstrong's in the 1840's, and a few years later the Cowcher's and the Hall's (Coy 1987). Henry Mead was one of the earliest settlers to the Serpentine-Jarrahdale district when he purchased 320 acres of land in 1848 which became known as the Whitby Falls Estate. A Coach house was built near here as a staging post on the Perth-Bunbury road and is known as the Whitby Falls Coach house, however much of the old estate was purchased by the crown in the late 1800's and Mead's original two storey home demolished in 1971 (HCWA 1988i).

In 1871, 250 000 acres of Jarrah forest was leased to the Rockingham Jarrah Company, promoted by Thomas and William Wanliss, James Service, and Peter Lalor. In 1872, the company built a sawmill on a site which became known as 'Jarrahdale', a jetty at the Rockingham Port and a railway linking the two. This railway, one of the earliest in the district, played a vital role in the districts development. The town of Jarrahdale was the largest timber town in WA following its foundation in 1872. The timber industry boomed and the number of mills increased to six until competition and a decline in profitability saw rationalisation in the early 1900's and more closures during the 1930's depression (HCWA 1988i).

The town of Mundijong was known as Jarrahdale Junction for many years because the Perth-Bunbury line crossed the timber line here and during the 1920's the State's second largest timber stacking yard was located there (HCWA 1988i).

Mining has also played a role in the development of the district. Near the gates of Yarrabah, along the banks of the winter creek Mundijong Brook, is the site of one of the state's earliest mining ventures. There are claims of this silver/lead mine being mined as early as 1840 but it was not until 1869 that mining began in earnest. This was one of a series of general leases along this section of the scarp. The mine was worked spasmodically until 1908-1909 when the main shaft was 86 ft deep. Buildings and equipment were removed a few years later and the shafts filled in 1976. The discovery of rich deposits of bauxite renewed interest in mining and in 1963 the first load was railed to Kwinana along Alcoa's new railway line (HCWA 1988i).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
2	Early silver/lead mining venture on the banks of the winter creek, Mundijong Brook near the gates of 'Yarrabah'.	1869		HCWA (1988i)
2	Railway crossing over Medulla Brook.	1872		
1	Jarrahdale Town founded	1872		Serpentine/ Jarrahdale Tourist Committee
2	Turner Cottage, Serpentine Bridge.			
3	Serpentine Dam.			
3	Serpentine Pipehead Dam			
2	Gooralong Brook, off Jarrahdale Rd.			
2	Whitby Falls Coach house.	1850's	Sj1	
2	Mundilup, Balmoral Rd (Reconstructed sawpit).			
2	Gooralong Creek- Flourmill on creek.			Jan Starr President Serpentine-Jarrahdale Heritage Society Jarrahdale Rd MUNDIJONG 6202 Ph: 525 5434 wk
3	Whitby Falls water supply.			
9	First release of trout at Whitby falls area.			
7	Could drink water in Birreger Drain post war.			
7	Could drink Medulla 1965.			
2	Serpentine Townsite Conservation Area, historic part of Serpentine including grounds.			NTWA
2	"Carralong", Junction of Serpentine River & Carralong Brook.	1850-60		NTWA, HCWA
2	Old Post Office, Jarrahdale Rd, Jarrahdale.	1881	Sj2	NTWA
2	"Lowlands", Pt Loc 16 Mardella.	1845		NTWA, AHC
2	Lefroy's Cottage, Lots 26 & 27 Gordon Rd, Serpentine.	1864	Sj2	NTWA
2	Turner Cottage, Southwest Hwy Serpentine.		Sj3	NTWA, AHC
6	Brickwood Bushland, 62 ha, 1 km south of Byford.			AHC
6	Cardup Bushland, 86 ha, 3 km south of Byford.			AHC
6	Jarrahdale Railway Cutting, 7 ha, 5 km north of Jarrahdale.			AHC
6	Monadnock Reserve, 1560 ha, 18 km east of Jarrahdale.			AHC
6	Serpentine Reserve, 5910 ha, 0.5 km north of Jarrahdale.			AHC
6	Banksia Rd Nature Reserve No 28167, 33 ha, 10 km west northwest of Mundijong.			AHC
6	Reserve 23012, 28 ha, 2 km south east of Mundijong.			AHC
6	Karnet Nature Reserve, 302 ha, 3 km south east of Serpentine.			AHC
6	Lowlands Property, 600 ha, 9 km west northwest of Serpentine.			AHC
6	Serpentine national park, 635 ha, 2 km east of Serpentine.			AHC

Bibliography

- Cowie, T. (1987) The Hills Of History. (private publication)
- Coy, N.J. (1987) The Serpentine - A History Of The Shire Of Serpentine-Jarrahdale. Shire Of Serpentine-Jarrahdale, Mundijong, Western Australia.
- Fall, V.G. (1972)The Mills Of Jarrahdale. UWA Press, Western Australia.
- Gleeson, ?. (1975) A History Of Serpentine-Jarrahdale Shire. Teacher College Thesis.
- HCWA (1988i) Jarrahdale Railway Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988w) Rockingham-Jarrahdale Heritage Trail. Heritage Council of Western Australia, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.19 Toodyay

The Shire of Toodyay is located 85 km north east of Perth and covers an area of 1 683 km² of which only the western half is within the study region. It includes the localities of Coondle, Culham, West Toodyay, Wattening, Nunile, Dumbarton, Hoddy Well, Dewars Pool, Julimar, Morangup, Majestic Heights and Bejoording and has a population of around 1200. Local industry consists of farming (sheep, cattle and wheat), vine growing, bee keeping and tourism (WAMA 1993). The Malkup and Spice Brooks and the Avon River are within the Shire boundaries.

History

The area of Toodyay was first explored in October 1831 by Ensign Dale however land grants were not made in the area until 1836 when Governor Stirling announced his intention to finalise outstanding claims for land grants. In May 1836, settlers James Drummond Snr, Captain Francis Whitfield and Alexander Anderson set out to blaze a trail to land they had been granted sight unseen. This route was to be more direct than the one via York and Northam and facilitated in opening up the area. The name Toodyay comes from an Aboriginal word 'Duigee' meaning 'place of plenty' and in 1836 townships were declared at Toodyay and Bejoording (HCWA 1988dd).

The trail was hazardous and it was not until the 1850s with the use of convict labour that improvements and a deviation around Jimperding Hill reduced travelling time and resulted in easier access. Stopping places where fresh water was available were vital to the teamsters who travelled this route and Morangup Spring was the most isolated of these (HCWA 1988dd).

Severe floods in 1847, 1849 and again in 1859 resulted in a new town being gazetted two miles upstream from the little hamlet of Toodyay and it was called Newcastle. Between 1880 and the 1900's the area was dotted with orchards and vineyards producing fruit to be sent to the Goldfields. Then in 1911, Newcastle's name was changed to Toodyay (HCWA 1988dd).

In the 1900's, settlement had increased in the Jimperding area and a school was built, (now marked by a lemon scented gum) near the banks of the Avon and a footbridge built across the river for easier access to the school (HCWA 1988dd).

Gold was noted in the area in 1852 and the area became a hive of activity in the Great Depression when over 100 prospectors camped in the valley. Alluvial gold was worked in the Yinniding Creek with some 231 ounces obtained between 1931 and 1937. In 1934, the lode-quartz leaders in the schist were discovered and mined until 1950. Mica schist is still extracted from the area and various quarries exist along Morangup Rd (HCWA 1988dd).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information
1	Ensign Dale leads exploration party.	1831		HCWA (1988dd)
2	First land grants.	1836		
3	Morangup Spring.	1850's	T1	
2	Yinniding Creek, prospectors camp and gold mining.	1930's	T2	
2	Jimperding Pool & Nolan's Rock, also site of Chauncy camp for two months on survey.		T3	
2	School & footbridge site, Old Toodyay.	1900	T4	
7	Floods threaten 'Old Toodyay' resulting in new town declared two miles upstream.	1861	T4	
2	Site of Samuel Ferguson's cottage, West Toodyay.	1852	T4	
2	The Royal Oak Inn, West Toodyay, site of sheep wash pool.		T4	
2	The Highland Laddie, West Toodyay, site of sheep wash pool.	1850	T4	
2	Military Barracks, West Toodyay.	1842	T4	
2	Catholic Chapel site, West Toodyay.	1859	T4	
2	Newcastle recreation grounds and cottage, West Toodyay.	1886	T4	
2	"Bejoording" Group, Toodyay/Bolgart Rd, 6 km north of Culham in the vicinity of Bejoording.	1859	T5	
2	"Culham" House, Toodyay/Bolgart Rd, 16 km north of Toodyay in the Culham area.	1870	T6	NTWA, AHC
2	St Phillip's Church, Culham.	1895	T7	NTWA
2	Toodyay Historic Town, comprising the area of the town extant in 1900		T8	NTWA
2	"Hawthornden", 0.5 km north of Toodyay.	1866	T8	NTWA, AHC
2	"Glen Avon", Avon Loc X, Toodyay.	1859	T9	NTWA
2	Newgain Granary, 4 km north of Irishtown Rd/Northam Rd Junction.	1860	T10	NTWA, AHC
2	Bardeen Homestead, Dunbarton Rd Irishtown.		T11	AHC
2	Windmill Hill Railway Cutting, AHC DB No 018827			AHC
6	Reserve No 22096, 386 ha, 8 km west of Culham.			AHC
6	Avon Valley National Park, 4430 ha, 19 km west of Toodyay.			AHC
6	Beelaring Spring reserve, 40 ha, 17 km south west of Toodyay.			AHC
6	Goonaring Spring Nature reserve, 53 ha, 20 km south west of Toodyay.			AHC
6	Julimar State forest 27 798 ha, 14 km north west of Toodyay.			AHC
6	Moondyne Nature Reserve, 1991 ha, 21 km west of Toodyay.			AHC
6	Morangup nature reserve, 900 ha, 20 km south west of Toodyay.			AHC
6	Avon Valley National Park Extension (M16), 5114 ha, 20 km south west of Toodyay			AHC

Bibliography

- Demasson, L. (1943) History Of Toodyay. L. Demasson, Toodyay, Western Australia.
- Erikson, R. (1969) The Drummonds Of Hawthorndon. Lamb Paterson, Western Australia.
- Erikson, R. (1974) Old Toodyay And Newcastle. Toodyay shire Council, Western Australia.
- Hancock, E. (1963) The Development Of The Railways In The Toodyay District. Hancock, Western Australia.
- HCWA (1988dd) Toodyay Pioneer Heritage Trail. Heritage Council of Western Australia, Western Australia.
- Thomas, A. (1949) A History Of Toodyay. Sands & McDougall, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth Western Australia.

3.2.20 Victoria Plains

The Shire of Victoria Plains is located 140 km north northeast of Perth and covers an area of 2 563 km², although only a small portion of the south west of the Shire lies within the study region. The Shire has a population of about 1 200 and includes the localities of Calingiri, Bolgart, Yerecoin, Piawaning, New Norcia, Mogumber and Gillingarra. Local industry consists of wheat, oats, lupin and barley cropping and sheep, cattle and pig farming (WAMA 1993). The Moore River and Moore River East, Bolgart Brook and tributaries to the Brockman River flow through the Shire.

History

The history of the Victoria Plains district began in 1836 with the discovery of the Moore River by George Fletcher Moore. Captain J. Scully and the first government botanist James Drummond explored and named the Victoria Plains area in 1841. The Victoria Plains Road Board was one of the original 18 local government authorities to be established and was created in 1871 (WAMA 1993).

Scully met Bishop Brady upon his arrival in Perth, five years after exploring and naming the Victoria Plains district and convinced him that the region, with its numerous Aborigines, was the ideal location for a central mission. In 1846, a band of Benedictine Monks headed by Salvado and Serra made camp and said mass at Noondagoonda Pool on the Moore River 8 km north of the present day site of New Norcia on March 1st 1846. It was discovered after some time that they were located on the leases of the Macphersons who were James Scully's shepherds and they moved to the present site (HCWA 1988q).

During the Missions expansion in the 1880's more than 200 stonelined wells were sunk in the Victoria Plains and surrounding districts as Salvado sought to increase his holdings to assist Aborigines to establish themselves as farmers. Two of these are the 'Old Well' and 'Bishop's Well' and on the river floodgates were created. The monks continue to farm extensively today and hold the largest area of uncleared bushland in the Shire (HCWA 1988q). The area is one of the State's leading farming and grazing areas (WAMA 1993).

Historical sites

Land use	Historic site and/or water use	Date	Map ref	Source of information	
2	Benedictine monks arrive to establish a mission. Noondagoonda Pool on Moore River, site of original camp of Benedictine monks.	1846 1846		HCWA (1988q)	
1	First exploration by Captain James Scully and botanist James Drummond, naming Victoria Plains area.	1841			
3	Old Well , site 11 HT brochure. One of 200 sunk in the Victoria Plains and surrounding districts during the missions expansion in the 1880's.	1880's	Vp1		
2	Old Floodgates on Moore River, site 12 HT brochure.		Vp1		
3	Bishops Well, site 13 HT brochure.	1880's?	Vp1		
2	Bishop Torres Beehouse, site 14 HT brochure.	1930's	Vp1		
7	Salt from Moore River gradually destroyed the orchard and consequently the apiary, second half of this century.				
7	Floods damage beehouse structure.	1960			
2	The Washpool' at Calingiri, used by early farmers for sheep washing before shearing.		Vp2		Tourist Information Centre Shire of Victoria Plains PO Box 21 CALINGIRI 6569 Ph: (096) 287 004
2	Mogumber Bridge, Mogumber. One of the highest timber and concrete bridges in WA standing 12 m above the riverbed		Vp3		
2	Bullgert Springs, Bolgart, area settled by Sculley.	1840's	Vp4		
3	Wyening Spring. Also used as recreation and gathering place after Sunday devotions at the mission and water was carted in the drought years of 1908, 1911, 1914	1843	Vp5		
2	Wyening Cottage.	1880	Vp5		
2	Wyening Winery.	1917	Vp5		
2	Clearing along the creek after Bishop Salvado took up residence at New Norcia.	1858			
7	Creek is now salty around New Norcia.				
2	Wyening Mission House, 13 km north of Bolgart, Wyening.	1892	Vp5	NTWA, AHC	
2	Former Benedictine Winery, Wyening.	1892	Vp5		NTWA
2	New Norcia Conservation Area, Gt Northern Hwy, New Norcia.	1850+			NTWA, AHC

Bibliography

- Erikson, R. (1971) The Victoria Plains. Lamb Paterson, Western Australia.
- HCWA (1988q) New Norcia Heritage Trail. Heritage Council of Western Australia, Western Australia
- Monachus. (1946) New Norcia- A Historical Guide To All Its Institutions. (np)
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.21 Wandering

The Shire of Wandering is located 120 km south east of Perth and covers an area of 1955 km², which mostly lies within the study region. It includes the localities of Dwarda, Pumphrey's Bridge, Codjatotine, Wandering, North Bannister and Bannister and has a population of around 480. Local industry consists of farming, vineyards, sawmilling, earthmoving and heavy transport (WAMA 1993). The Hotham, Serpentine and Canning Rivers and their tributaries are located within the Shire.

History

There is little information available on the first exploration of Wandering Shire but it is possible assistant surveyor A.C. Gregory passed through the western area of Wandering in 1845. Other exploration parties travelling from Pinjarra to Albany may also have travelled through the area (Schorer 1974).

In 1858, George Stedman Watts and his two sons tracked their horses which had strayed from their overnight camp for over 20 miles. The tracks followed two streams (verified years later as the Bannister and Wandering Brooks) to a spring of freshwater on the banks of the Wandering Brook approximately 5 miles from where it enters the Hotham. The area had thick green pastures, a good water supply and wild game and George Watts stood at the spring and declared "This is a very potential track of land." and coined the name Wandering. He returned in 1860 and in 1861 was granted freehold. He built his house after selecting a small area around the spring which was to be known as Horse Well Spring (Schorer 1974).

Other springs became settling points and the Gnowing Spring, 10.5 miles from Wandering on the Halfway House to Wandering track, was a popular camping and stopping point. A 'beautiful freshwater spring' located at the 'W Tree' was a well known camping spot for the sandalwood carters which travelled to Perth in teams after assembling at the Williams and Kojonup. McAlinden built an Inn nearby (Schorer 1974).

As the area was settled, each holding sunk wells for their own use and there was not any significant central watering point. The well on the property 'Grassdale' was sunk about 1860 and is still in use, however all the other wells along the Wandering Brook have long since gone salty (G.G. Watts *pers comm*).

The Wandering Roads Board was constituted in 1874 and a town centre established with a hotel built in 1877 and a hall in 1896. In 1899, the Great Southern Railway reached Pingelly and Narrogin and supplies could now be obtained at Pingelly. In 1905, Pumphrey's Bridge was built. Settlement slowly continued with people taking up farm holdings within the district. Leedman's Pool in the Hotham was used as a sheep wash and the dam on 'Grassdale', George Watts' property was a popular recreational spot as well as being used for sheep dipping and stock watering (Schorer 1974).

In 1944, 10 miles north of Wandering, a native reserve was established to house and educate Aboriginal children (Schorer 1974).

Historical sites

Land use	Location and type of water used	Date	Map ref	Source of information
3	Each early holding sunk their own wells, no significant central watering point.			G.G. Watts "Grassdale"
3	Well on Mr Watts property, sunk about 1860, still in use, however all the other wells along the Wandering Brook have long since gone salty.	1860		PO Box 3 WANDERING 6308 Ph: (098) 841 153
1	A.C. Gregory possibly passed through Wandering.	1845		Schorer (1974)
2	Horse Well, site of first settlement.	1861		
3	Gnowing Springs, 10.5 mile from Wandering was a popular camping and stopping point.	1860's+		
3	Freshwater Spring at the 'W Tree'. Meeting and camping point for the sandalwood carters.	1980's		
2	Pumphrey's Bridge built.	1874	Wd1	
2	Wandering Road Board constituted. Native Reserve established, 10 miles north of Wandering.	1944		
2	Old Flour Mill, North Wandering Rd Mill Farm.	1877-78	Wd2	NTWA, AHC
6	Duncan Management Priority Area, 9900 ha, 17 km north east of Bannister.			AHC
6	Wandering Management Priority Area, 4300 ha, 7 km west of Wandering.			AHC

Bibliography

- Adamson, M. (1990) The Outcome Is Unknown : A Watts Family History. Hesperian Press, Western Australia.
- Gable, W. (1990) History Of The Pioneer Schools In The Wandering Shire. Observer Print, Narrogin, Western Australia.
- Schorer, A. (1974) The Horses Came First : A History Of The District Of Wandering. Wandering Shire, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.
- White, M. (1958) 100 Years : The History Of Wandering And The Pioneers Of The District. Thesis.

3.2.22 Waroona

The Waroona Shire is located 108 km south of Perth and covers an area of 835 km² that stretches from the Indian Ocean in the west, across irrigated flatlands and inland to the Darling ranges and its jarrah forests. It includes the townsites of Waroona, Hamel, Preston Beach and Lake Clifton and has a population of about 3226. Local industry includes farming (beef, sheep dairy and vegetable), forestry, Mining (mineral sands and bauxite) and refining. (WAMA 1993). Important water sources within the Shire include the Waroona, Drakesbrook and Samson Brook Dams. Other important water courses include the Harvey River, Murray River, Waroona Drain, Logue Brook Drain, and the coastal chain of lakes in the west of the Shire.

History

Captain James Stirling and John Septimus Roe camped on a stream then known as Navarino Stream and later called Drakes Brook during an expedition in 1837. In 1839, John Phillips took up land 8 miles south of the gorge of the Murray River with mention of a considerable waterfall (Snell 1986). George Moore took up the Leschenault location at Lake Clifton in 1844 and William Drake took up the Murray location in 1847 and thus the Waroona district became known in time as Drakesbrook (Duane 1961).

Land on the coastal plains around 'The Old Coast Road' were first settled mostly as grazing areas. John Fouracre erected a wayside Inn in 1855 on G.F. Moores Wellington location and then in 1871 purchased the Drakesbrook Estate and later built one of the first homesteads away from 'The Old Coast Road'. The land was then immediately opened up and settled, later to become the Drakesbrook township (Duane 1961).

Cattle camps were located at Yalup Brook between 1872-1880 and a homestead was built on Yalup Brook between Hamel and Wagerup by George Jackson in the 1880's. A homestead was established on Lake Clifton by Robert Holmes in 1874 (Duane 1961).

The railway arrived in 1893, bringing more settlers and a timber industry was established in the late 1890's. In 1898, the township had a population of 800, most of whom were employed by the timber industry. McDowells was the first timber company to operate with Millar's Karri & Jarrah Co opening in 1902 which was later to take over McDowells. However only a few years later, the mill was closed with timber sent to Nanga and Yarloop. The timber industry had a small revival in Waroona before the Second World War and a State nursery and pine plantation was planted 3 miles south of the town at the turn of the century (Duane 1961).

Lack of winter drainage was a problem for farmers and in the early 1900's four main drains were constructed, being the Drakesbrook, Waroona, Samson North and Samson South. In 1931, the Waroona Irrigation Scheme was commenced and a dam put across the Drakesbrook River (Duane 1961).

The swamp of Lake Wannup at 'Wannup Farm' was drained in 1880, by a drain over 1 km long, and J. Williamson used it to grow vegetables. During early settlement in the swamps west of the railway line it was common to see boodie rats, red and grey tammars, water rats, bush turkeys, and even the noisy scrub bird (Snell 1986).

Seymor Falls was a showpiece in the 1930's and Steven Falls in Kyabram Rd was also popular. Tunnels found in Yalgorup Park are of a date and time unknown but were possibly constructed in the 1920's (Snell 1986).

Historical sites

Land use	Location and type of water used	Date	Map ref	Source of information
2	Joseph Logue selects land on Logue Brook.	1849		HCWA (1988ff)
2	Town site surveyed near Yaloo Brook on western side of Millar's railway on swampland which was drained to enable building (Yarloop town).			
1	Stirling & Roe camp on Navarino Stream.	1837		Duane (1961)
2	First land grants, John Phillip.	1839		Snell (1986)
2	John Fouracre erects wayside Inn.	1855		
2	Cattle camps on Yalup Brook.	1872-80's		
2	George Jackson builds homestead on Yalup Brook.	1880's		
2	Robert Holmes builds homestead on Lake Clifton.	1874		
2	Railway is opened .	1893		
8	McDowell's Timber Mill established.	1890's	Wr1	
8	Millar's Timber Mill established.	1902	Wr1	
5	Construction of four main drains, Drakesbrook, Waroona, Samson North and Samson south.	1900's		
5	Lake Wannup Swamp drained.	1880's		
2	Seymour Falls and Steven Falls, popular areas of recreation.	1930's		
2	Tunnels in Yalgorup National Park, use and date of construction unknown.			
6	Yalgorup National Park, 11545 ha, 21 km west of Waroona.			AHC
6	Yalgorup National Park Extension, 3700 ha, 20 km west of Waroona.			AHC

Bibliography

- Duane, K. (1963) General history And Development Of The Waroona District. Teacher College Thesis.
- HCWA (1988ff) Yarloop Heritage Trail. Heritage Council of Western Australia, Western Australia
- Snell, L.J. (1986) Drakesbrook Days And Waroona Years. Shire Of Waroona, Western Australia.
- Waroona Road Board. (1948) Drakesbrook Road Board 1898-1948. Waroona Road Board, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.23 West Arthur

The Shire of West Arthur is located 204 km south west of Perth and covers an area of 2 850 km² of which only the western third is within the study region. It includes the localities of Darkin, Duranilling, Moodiarrup, Bowelling and Arthur River and has a population of around 1 100. Local industry is made up of mixed farming (sheep and cereal grains) and timber. Most of the area is cleared for agriculture however there are significant areas of uncleared land and reserves. The portion of the Shire within the study area that constitutes part of the Wellington Dam catchment consists of a mix of agricultural land, State forest and reserves (WAMA 1993). Rivers within the Shire boundary include the Hillman, Arthur, Beaufort and Collie East with a portion of the Blackwood forming part of the boundary.

History

The first Europeans to explore the West Arthur area were Captain Bannister and his party late in 1830. Other explorations followed and during the 1850's the main Perth to Albany road was built with convict labour. The first settlements in what is now the Shire of West Arthur were developed along this road between the Beaufort and Arthur Rivers. These settlements followed the pastoralists who were granted grazing leases in the area in 1854. The 'Woagin' Homestead was built on the Arthur River in the 1860's (WATIC 1995?).

Over the years Arthur River developed into a thriving centre with many of the town's main buildings constructed in the period 1865-1885. The construction of the Great Southern Railway in 1889 attracted settlement away from the 'Coach Road' to the route of the railway line (WATIC 1995?). Darkan was declared a townsite in 1905. The railway went through Darkan in 1907 and immediately the town began to flourish (HCWA 1988e).

Two connecting railway lines from Collie to the Great Southern line brought a new era of prosperity with Darkan soon becoming a busy centre. During this period other families began pioneering outlying areas of the Shire. Some grazed sheep while others provided services such as the Inn at Tarwonga, trading posts, and stores at Moodiarrup, Arthur River and Boolading (WATIC 1995?).

The Hillman Dam, built in the 1930's, is fed by channels over one mile long that were built by hand and concreted to bring water from Hillman Rock.

Historical sites

Land use	Location and type of water used	Date	Map ref	Source of information
2	First settlement between the Beaufort and Arthur rivers	1850's		HCWA (1988e)
2	Darkan town declared.	1905		
2	Farming, mostly sheep, some cattle.			
1	Captain Bannister and party.	1830		Tourist Committee
2	Grazing leases granted.	1854		Shire of West Arthur
3	Hillman Dam, includes channels over 1 mile long dug by hand and concreted to bring water from Hillman Rock.	1930's	Wa1	Borrows St DARKAN 6392 Ph: (097) 361 003
2	Lake Towerinning, longtime recreational use.			
2	Trigwells Bridge, Moodiarup.		Wa2	
2	Gibbs family settled this area	1867		Mr Tom Perry
2	Tom Perry senior	1898		11 Arthur St DARKAN Ph:(097) 361095
2	Development only really started in 1920's			
3	First settlers relied on soaks and wells, later dams, rain water tanks on buildings.			
5	Whittington contours banks used extensively.			
9	Marron and Perch fished until disappearance in 1955/56			
2	Arthur River Group, (Old Mail Coach Staging Post), Albany Hwy, Arthur River. Lot 1 excised from Williams Loc 36 and Reserve 21211 (includes two wells).	1860's	Wa3	NTWA, AHC
2	"Woagin" Outbuilding, Former Old Police Staging Outpost, Albany Hwy Arthur River, Williams Loc 13903, at 131 mile peg.	1860's	Wa4	NTWA
2	Glenorchy Primary School Library, Former Old School, Glenorchy South Rd, Moodiarrup		Wa5	NTWA
2	Bowelling Railway Station		Wa6	NTWA

Bibliography

- Bird, J. (1990) West Of The Arthur. West Arthur Shire Council, Western Australia.
- Bird, J. (1979) The Last Coach. Bird, Perth, Western Australia.
- HCWA (1988e) Darkan Heritage Trail. Heritage Council of Western Australia, Western Australia
- Spencer, I. (1966) Darkan, Early Days : 100 Years Of Darkan's History. Lamb Paterson, Western Australia.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.
- WATIC (1995?) Drop Into Darkan. West Arthur Tourist Information Centre, Western Australia

3.2.24 Williams

The Shire of Williams is located 161 km south east of Perth and covers an area of 2295 km² of which only a small portion around the Hillman River lies outside the study region. Localities within the Shire are Quindanning, Dardadine and Tarwonga and it has a population around 1000. Wool, cattle and grain are the major local industries (WAMA 1993). The Williams, Bingham, Hillman and Crossman Rivers, and Marradong and Bell Brooks are located within its boundaries.

History

The Williams district was first explored by Europeans in 1831, when Captain Thomas Bannister led the first overland expedition from Perth to King George Sound in Albany. Bannister and his party left Perth on December 14th, 1830 and followed several watercourses travelling up the valley of the Canning River, through the area of the upper Bannister River and arrived near Crossing Pool on the Hotham River in late December 1830. He then travelled further south and crossed the Williams River near what is now Boraning Bridge. Although his exact route is not known, his party blazed the trail that became the basis for the Old Sound Road (HCWA 1988ee).

Although no records have been discovered concerning the naming of the river or the area that surrounds it, an 1833 map used the name Williams and showed a projected road to King George Sound from Perth (HCWA 1988ee). Many remains of the road are still in evidence as culverts, tracks and stoned water crossings, the route of which is documented in 'Frowning Fortunes' (Petchell *pers comm*).

The first settler to the area was Joseph Strelley Harris and his father, who were allocated grants of over 2000 acres within the district in 1836 and were accompanied to the district by a detachment of soldiers. A military station was established at the proposed townsite of Williamsburg from 1837 until 1847 and 'The Old Sound Road', located west of the present Albany Highway, passed through there (HCWA 1988ee).

The need for a road connecting the Port of Albany to Perth, resulted in the present Williams town was chosen as the position where the road was to cross the river. There was a spring two miles south and this was the last fresh water until one mile from Arthur River. The more direct route of the Albany Highway was surveyed and used from the 1850's onwards. Around 1853, the need for a reliable mail service saw the upgrading of the road. With the tendering of the mail service, Williams became an important stop over point for passengers and the changing of coach horses. It is thought that as early as 1851 a structure existed for the purpose of a Wayside Inn, situated a little south of the present hotel (HCWA 1988ee).

The small township that grew up on the Albany side of the Williams River was subject to increasingly frequent floods due to the clearing of the land for intensive farming. The decision was made to relocate the town to the Perth side of the Williams bridge and part of one of the original land grants, by then called the Richmond Estate, was acquired. The new townsite was surveyed in 1905 and the Roads Board organised the laying out of the streets. Except for a few early buildings such as the hotel, the flour mill, 'Millbrook' and the Agricultural Hall, all the buildings in the present townsite were constructed after 1905 (HCWA 1988ee).

Historical sites

Land use	Location and type of water used	Date	Map ref	Source of information	
1	Bannister Crossing, Williams - Quindanning Rd.	1830-31	Wi1	HCWA (1988ee)	
2	Boraning Bridge, Williams - Quindanning Rd.	1895	Wi2		
2	Boraning Cemetery private 1908, declared public 1944	1908	Wi3		
2	Flour Mill, used until 1914, powered by a steam engine.	1870	Wi4		
2	Josbury Siding, Darkan Rd.	1906	Wi5		
2	Marling Homestead, Williams - Quindanning Rd.	1860	Wi6		
2	Marling School, Williams - Quindanning Rd.	1911-50	Wi7		
2	Millbrook, Albany Hwy.	1850	Wi4		
2	Original Williams River Bridge site (at 'new' bridge).	1855	Wi4		
2	Quindanning Bridge, Williams - Quindanning Rd.	1897	Wi8		
2	Quindanning Hotel, Williams - Quindanning Rd.	1900	Wi8		
3	The Old Well, (convict tank), Albany Hwy.	1880	Wi4		
2	Williams Hotel, Albany Hwy.	1850	Wi4		
2	Williams River Bridge	1911	Wi4		
2	Williamsburgh Townsite and the Old Sound Road	1837	Wi7		
2	Old Sound Rd route, water crossings include-	1839-47			Mr Bill Petchell RMB 508 WILLIAMS 6391Ph: (098) 857 032
2	- Warrening Gully crossing, 10 km north of Williams River.				
2	- A crossing over a tributary to Warrening Gully, 5 km north of Williams River				
2	- Williams River crossing, site of military barracks, 1839-47.				
2	- Jennamartin Creek, south of the Williams River.				
2	- Wild Horse Creek crossing, tributary to the Hillman River.				
2	- First Hillman River crossing, end of Williams Shire.				
2	- Second Hillman River crossing, West Arthur Shire.				
2	- Arthur River crossing (Bennet Bridge).				
2	- Beaufort River crossing.				
2	Harris Farm building, near Williams River.	1836			
3	York Rd Well, road reserve 9 km north of Williams.	1836			
3	Gregory's Well, near Albany Hwy, 6 km south of Williams.	1850			
7	The Williams River had many deep freshwater pools and all of the river in the Williams Shire was freshwater. In the Narrogin Shire later in the season the river contained brackish and saltwater.				

Historical sites (contd)

Land use	Location and type of water used	Date	Map ref	Source of information
3	Pools in the Williams River include-			
2	- Pollards Pool, 3 km west of Williams.			
2	- Strangers pool at Josbury Rd siding.			
2	- The Wash Pool, a stoned wash pool is still evident, 200m from the junction of the Williams River and Starting Creek			
2	Pools that are now filled with sand worked down from land clearing.			
3	- Jennamartin Pool, junction of Williams River & Jennamartin Ck.			
3	- Pumphries Pool.			
2	- Baptising Pool & site of Baptist Church, 4 km east of Quindanning			
2	- Mandiacking Pool, largest in the Williams Shire.			
1	Starting Creek Campsite, (junction of Williams River & Starting Creek), camping parties include-			
1	- Bannister Dec 1830.			
1	- Hillman & Harris, Jan & Oct 1835.			
1	- Governor Stirling & Roe, Oct 1835.			
1	- Lt Bunbury, 1836.			
2	Agricultural Hall, Williams town.	1898	W14	NTWA, AHC
2	Millbrook, Albany Hwy Williams.	1850	W14	AHC

Bibliography

Chate, A.H. (1935) *The Williams* in The Western Australian Historical Society Proceedings Inc. Journal & Proceedings 4,5.

Cowin, H.G. (1971) The Williams. Shire Of Williams, Western Australia.

Gable, W. (1988) Narrakine, Williams. Gable, Western Australia.

HCWA (1988ee) Williams Heritage Trail. Heritage Council of Western Australia, Western Australia

Jackson, J.L. (1993) Frowning Fortunes: The Story Of Thomas Bannister And The Williams River District. Hesperian Press, Western Australia.

WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

3.2.25 York

The Shire of York is located 97 km east of Perth and covers an area of 2010 km² of which only the western third encompassing the Helena and Darkin Rivers is within the study region. It includes the localities of Greenhills, York and Kauring and has a population of around 2740. Local industry consists of mixed farming and tourism. York is the oldest inland town in Western Australia (WAMA 1993). The Avon and Mortlock Rivers are also within the Shire boundary.

History

In July and August 1830, Ensign Robert Dale and party discovered the Avon Valley east of the Darling Range and formed an exceedingly favourable impression of the region. On November 12 of that year, the district was declared open for settlement and notice was given that "a town called York will be laid out in situation to Mt Blakewell". There was an immediate rush to select land on either side of the river from Beverley to Northam (HCWA 1988gg).

The first settlers arrived in September 1831 and farms were established in the region. It was not until 1835, when Aborigines began resisting the European settlement, that moves were made to establish a town. Soldiers were sent and constructed a barracks and other buildings and the town of York was established (HCWA 1988gg).

The Avon River was often impassable in winter and it was not until Monger's Bridge was built in 1853 that settlement began to spill over onto the left bank. Aspect and soil here lent themselves to orchards and market gardening and as a result the blocks here are bigger and the buildings more widely spaced than on the right bank (HCWA 1988gg). Convicts were introduced in the 1850's and did much to develop the district and the convict hiring depot was not closed until 1872 (York Tourist Bureau *pers comm*).

During the 1850's many of the original large properties were subdivided into smaller farms to encourage settlers to the area. Transport and communications were improved with the coming of the telegraph line in 1872 and the railway in 1885 (York Tourist Bureau *pers comm*).

Prior to the railway, the York Road was part of the route to the goldfields and some 60 000 to 100 000 men passed along this route. York was the last place to gather supplies for the long trek which lay ahead and the farmers, storekeepers and publicans prospered (HCWA 1988h).

Historical sites

Land use	Location and type of water used	Date	Map ref	Source of information
2	19 Mile Inn & Woottating Spring, off Gt Southern Hwy, 1 km east of Inkpen Rd.	1850	Y1	HCWA (1988h)
3	Manyuering Spring, track of Gt Southern Hwy, west of Wundabiniring Brook.	1846	Y2	
3	13 Mile Brook, north of Gt Southern Hwy, 21 km west of York.			
3	St Ronan's Well, Gt Southern Hwy.		Y3	
2	A substantial number of buildings and historical sites are located in the vicinity of the Avon River within York town. The town developed on the banks of the river and as such the townsite has an overall historical value		Y4	HCWA (1988gg)
2	Dardalan Swamp - used for trapping horses. Avon Loc 27716.	1918+		Mr N. Hasen PO Box 79
3	White Well - Old Goldfields track.	1890's+	Y5	YORK 6302
7	Fresh until Meckering earthquake but now salt.			Ph: (096) 411 147
6	Avon Valley Landscape Area, 500 km ² , (27 km north to south, approx 20 km east to west), site of first agricultural settlement in Western Australia.			NTWA
3	St Ronan's Well, 77 km from Perth on north side of Old York Rd, Res 10895	1830's	Y3	NTWA, AHC
2	Korrawilla Homestead Group, Lots 15-20 York/Quarading Rd, Greenhills.	1860		NTWA
2	St Andrew's Church, York/Quarading Rd Greenhills.	1912		NTWA
2	Historic Town of York Conservation Area Declared by National Trust, broadly defined to include the most significant places on the Historic Town of York and extending from Clinton St to the southern boundary of Balladong Farm. including:		Y4	NTWA, AHC
2	- Bland's Brook and Bridge.		Y4	NTWA, AHC
2	- Swing Bridge, Low St.	1906	Y4	NTWA, AHC
2	Balladong Farm Group, bounded by Avon Tce, Redmile Rd & Parker Rd.	1850+	Y4	NTWA, AHC
2	Original Balladong House and Grounds, 7 Redmile Rd.	1890	Y4	NTWA
2	Redmile House and Grounds, Redmile Rd.	1853	Y4	NTWA, AHC
2	House, 22 Redmile Rd.	1890	Y4	NTWA, AHC
2	"Clementine" House, 13 Redmile Rd.	1890	Y4	NTWA, AHC
6	Avon Valley Landscape Area, AHC DB No 018719			AHC
2	Bridge House inc Gardens, Redmile Rd.		Y4	AHC
6	Talbot Block, 7500 ha, 24 km west southwest of York.			AHC

Bibliography

- Davies, L.T. (1982) York- Its Horse And Heydays. (np)
- Deacon, J.E. (1948) A Survey Of The Historical Development Of The Avon Valley, With Particular Reference To York, Western Australia, During The Years 1830-1850. (np)
- HCWA. (1988h) Guildford to York Heritage Trail. Heritage Council of Western Australia.
- HCWA. (1988gg) York Heritage Trail. Heritage Council of Western Australia, Western Australia.
- Mackay, A. (1963) The Pioneers Of The Tork Road, 1831-1884. Teacher College Thesis.
- Smith, J. (1992) Historic Watering Holes: A Report For The National Trust Of Australia, (WA). Stage 2, The Old York Road From Guildford To York Western Australia. UWA Press, Western Australia.
- Stockman, H. (197?) The History And Development Of York Western Australia 1880-1900. Teacher College Thesis.
- WAMA (1993) The West Australian Municipal Directory 1993-1994. Western Australian Municipal Association, Perth, Western Australia.

4. CONCLUSIONS

4.1 Conclusions

Water is essential for life and European settlers quickly realised that Western Australia is a profoundly dry landscape. Therefore the settlement of the State is tied to the development of reliable water resources. Indeed without schemes such as the Goldfields pipeline, the gold around Kalgoorlie would have been very difficult to mine. Historically, governments (local and state) were comparatively slow to adequately protect human health. As a result, sewage contamination of groundwater in Perth and Fremantle was responsible for numerous deaths from typhoid. This lack of political will can be seen in the early contamination of Victoria reservoir only a few years after its completion. Perth, is indeed fortunate that through sensible political decisions and good fortune the majority of its water supplies have been protected from development (eg. dam catchments and groundwater mounds). This has allowed good quality water to be supplied to the populace with little treatment and has preserved large areas of native vegetation. It would be a waste if this advantage was lost through unnecessary developments on these resources, such as housing development on the Jandakot Mound.

Development has severely impacted on the environment, with numerous wetlands, streams and rivers being modified, filled or drained. Unrestrained catchment clearing has also resulted in flooding (ie. of Collie) and secondary salinization of many streams and rivers. A positive note is the publication of a series of detailed scientific reports on a variety of wetland issues by the Water Authority and Department of Environmental Protection. The first volume (see 1994 in the Timeline) of the series is written for managers. At the media launch of the first volume the then State Minister for the Environment stated that the degradation of Perth's wetlands was the result of ignorance and that the publishing of this book should rectified that problem. Let's hope he was right.

4.2 Future Research Requirements

This study was conducted over a limited time frame and so it has been impossible to provide a complete listing of all historical areas within the study region. It is anticipated that this report will provide a guide to most of the major areas of historical importance to water. The references provided will allow information on any specific areas covered only briefly to be pursued. The following recommendations are made with regards to future research.

- There is a wealth of oral history in the community and historical societies, it is recommended that this be documented before it is lost. The benefits of doing this are two-fold, for historical analysis and for environmental research where it provides a baseline for observed changes.
- This study relied on published information, given more time it would be useful to return to primary sources to check dates and other information.

5. REFERENCES

This list covers only the references that have been used in the text and consequently omits some of the references given in the individual bibliographies

- Appleyard, R.T. and Manford, T. (1979) The Beginning: European Discovery And Settlement Of Swan River Western Australia. University of Western Australia Press, Crawley, Western Australia.
- Barker, A.J. and Laurie, M. (1992) Excellent Conditions: A History Of Bunbury 1836-1990. City of Bunbury, Western Australia.
- BBTA (1995?a) Boyup Brook Tourist Guide. Boyup Brook Tourist Association, Western Australia.
- BBTA (1995?b) Welcome to Boyup Brook. Pamphlet, Boyup Brook Tourist Association, Western Australia.
- Beverly Tourist Bureau (1995?) Beverly Top of the Avon. Pamphlet, (np)
- Coffey, P. (1990) Report On An Investigation Into Scientific And Educational Values Of Wetlands And Rivers In The Perth-Bunbury Region. Western Australian Water Resources Council, Perth, Publication No. 1/91.
- Coy, N.J. (1987) The Serpentine - A History Of The Shire Of Serpentine-Jarrahdale. Shire Of Serpentine-Jarrahdale, Mundijong, Western Australia.
- Cuballing Shire, (1990) Reunion 1990, A Cuballing Keepsake. Shire of Cuballing, Western Australia.
- Duane, K. (1963) General history And Development Of The Waroona District. Teacher College Thesis.
- Ewers, J.K. (1971) The Western Gateway: A History Of Fremantle. (2nd Ed.) University of Western Australia, Crawley, Western Australia.
- Feilman Planning Consultants (1987) Recreational Opportunities Of Rivers And Wetlands In The Perth To Bunbury Region: Volume 1: Main Report. Western Australian Water Resources Council, Perth, Publication No. WRC 3/87.
- Ferrel, J. (1992) Becoming Boddington. Shire of Boddington, Western Australia.
- Fowler, I.C. (1961) Pioneering And Development Of The Capel Area. (np).
- Gable, W. (1988) Upper Ferguson And Ferguson Mill Dardanup. Rural and Isolated Schools, Western Australia.
- HCWA (1988a) Bilgoman Well Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988b) Bunbury Heritage Trail. Heritage Council of Western Australia.
- HCWA (1988c) Cala Munda Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988d) Claremont Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988e) Darkan Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988f) East Fremantle Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988g) Etmilyn Forest Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988h) Guildford to York Heritage Trail. Heritage Council of Western Australia.
- HCWA (1988i) Jarrahdale Railway Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988j) John Forest Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988k) Kattamorda Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988l) Lake Joondalup Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988m) Mason & Bird Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988n) Melville Historical Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988o) Moorumbine Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988p) Narrogin Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988q) New Norcia Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988r) Northam/Katrine Heritage Trail. Heritage Council of Western Australia, Western Australia.

- HCWA (1988s) Old Rockingham Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988t) Perth Heritage Trails. Heritage Council of Western Australia, Western Australia.
- HCWA (1988u) Pinjarrah Heritage Trail Heritage Council of Western Australia, Western Australia.
- HCWA (1988v) Railway Reserves Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988w) Rockingham-Jarrahdale Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988y) Rocky Bay Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988x) South Perth Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988z) Star Swamp Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988aa) Subiaco Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988bb) Swan River Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988cc) Swan Valley Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988dd) Toodyay Pioneer Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988ee) Williams Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988ff) Yarloop Heritage Trail. Heritage Council of Western Australia, Western Australia.
- HCWA (1988gg) York Heritage Trail. Heritage Council of Western Australia, Western Australia.
- Horwitz, P. and Wardell-Johnson, A. (1995) The Historical Associations Between European Peoples And Wetlands And Rivers In The Busselton To Walpole Region Of Southwestern Australia. Draft report to the Water Authority of WA, Western Australia.
- HTC (1995) Internment Camp. Pamphlet, Harvey Tourist Centre, Western Australia.
- Jarvis, N.T. (1979) Western Australia: An Atlas Of Human Endeavour 1829 1979. Government Printing Office of Western Australia, Perth, Western Australia.
- Jones, H & Johnston, D. (1994) The Story Of Avondale. Department of Agriculture, Western Australia.
- LeProvost, Semeniuk & Chalmer (1987) Environmental Significance Of Wetlands In The Perth To Bunbury Region Volume 1: Main Report. Western Australian Water Resources Council, Perth, Publication No. WRC 4/87.
- Markey, D. (1977) More A Symbol Than A Success: Foundation Years Of The Swan River Colony. Westbooks, Bayswater, Western Australia.
- McGrath, R. (1986) Thomas Little At Dardanup. Independent Study Contract.
- Mitchell McCotter & Associates (1989) Historical Associations Of Wetlands In The Perth To Bunbury Region. Draft report to the Water Authority of WA, Western Australia.
- Morony, F.B. (1980) Water: The Abiding Challenge. Metropolitan Water Board, Perth, Western Australia.
- O'Connor, R., Quartermaine, G. and Bodney, C. (1989) Report On An Investigation Into Aboriginal Significance Of Wetlands And Rivers In The Perth-Bunbury Region. Western Australian Water Resources Council, Perth, Publication No. WRC 9/89.
- Olsen, G. and Skitmore, E. (1991) State Of The Rivers Of The South West Drainage Division. Western Australian Water Resources Council, Perth, Publication No. 2/91.
- Parker, W.F. (1983) Microbial Aspects Of Septic Tank Effluent Disposal Into Coarse Sands In The Perth Metropolitan Area. Department of Conservation and Environment, Perth, Western Australia, Bulletin 130.
- Reece, B. and Stannage, T. (eds) (1984) European-Aboriginal Relations In Western Australia. UWA Press, Western Australia.
- Richards, R. (1978) The Murray District Of Western Australia: A History. Shire of Murray, Western Australia.
- Schorer, A. (1974) The Horses Came First : A History Of The District Of Wandering. Wandering Shire, Western Australia.

- Seddon, G. and Ravine, D. (1986) *A City And Its Setting: Images Of Perth*. Western Australia. Fremantle Arts Centre Press, Fremantle, Western Australia.
- SH (1995) *Shire Of Harvey 1895-1995 : Proud To Be 100 : A Centennial Book*. Shire of Harvey, Western Australia.
- Snell, L.J. (1986) *Drakesbrook Days And Waroona Years*. Shire Of Waroona, Western Australia.
- Sparkes, H. (Ed) (1994) *Donnybrook Community Profile*. South West Development Commission, Bunbury.
- Stannage, C.T. (1981) *A New History Of Western Australia*. University of Western Australia, Crawley, Western Australia.
- Tauman, M. (1978) *The Chief, C.Y. O'Connor*. University of Western Australia Press, Crawley, Western Australia.
- Thomas, A.T. (1946) *The History Of Beverley 1946*. Van Heurk & Thomas, Western Australia.
- WAMA (1993) *The West Australian Municipal Directory 1993-1994*. Western Australian Municipal Association, Perth, Western Australia.
- WATIC (1995?) *Drop Into Darkan*. West Arthur Tourist Information Centre, Western Australia.
- WAWA (1994) *Wastewater 2040 Discussion Paper*. Water Authority of Western Australia, Perth, Western Australia.
- WAWRC (1991) *Safeguarding Our Water Resources Perth - Bunbury, Draft Regional Allocation Plan*. Western Australian Water Resources Council, Perth, Publication No. WRC 5/91.
- Williams, H.W. (1979) *One Day In Collie*. Shire of Collie, Western Australia.

6. APPENDICES

6.1 Appendix A

The following were contacted during the course of the study and have not been cited within the report. They are all thanked for their help and involvement.

Ms Pat Adamson	Secretary, Cottesloe Society, 9A Andrews Pl, Cottesloe, WA 6011
Mrs Lynda Arnold	North Suburban Historical Society, 26 Whitworth Ave, Girrawheen, WA 6064
Secretary (Mr/Mrs Barnes)	Bunbury Historical Society 77 Forest Ave, Bunbury, WA 6230
Mrs Margaret Bettenay	255 Irymple Rd, Rolystone, WA 6111
Beverley Shire Clerk	Shire Of Beverley, PO Box 20, Beverley, WA 6304
Beverley Tourist Bureau	Beverley, WA 6304
Ms Debbie Birch	Boyup Brook Tourism Association, PO Box 47, Boyup Brook, WA 6244
Ms Ann Brake	Curator, Fremantle Prison, The Terrace, Fremantle, WA 6160
Mr W.J. deBurgh	3/26 Plantation Dve, Swan Cottage Homes, Bentley, WA 6102
Calingiri Tourist Information Centre	PO Box 21 , Calingiri, WA 6569
Ms Ann Chapple	Tourist Information Centre, PO Box 133, Donnybrook-Balingup, WA 6239
Chittering Tourist Promotion Centre	PO Box 10, Bindoon, WA 6502
Ms Margaret Cockman	Recreational & Cultural Services, City Of Wanneroo, Boas Dve, Joondalup, WA 6027
Collie Tourist Centre	Throssell St, Collie, WA 6225
Ms Arlene Crane	Secretary, Historical Society Of Cockburn, 27 Freeth Rd, Spearwood, WA 6163
Ms Caroline Crundall	Claremont Museum, 66 Victoria Ave, Claremont, WA 6010
Mrs Mary Davies	Rockingham Historical Society, PO Box 504, Rockingham, WA 6168
Ms Hazel Dewar	16 Weld St, Gingin, WA 6503
Dr Rica Erikson	462/31 Salvation Army Village, 31 Williams Rd, Nedlands, WA 6009
Miss B. & M. Evans	60 The Esplanade, Peppermint Grove, WA 6011
Mr Eric. E. Fairs	15 Sudlow St, Embleton, WA 6062
Mr Leslie Greenham	6 San Miguel Rd, Hope Valley, WA 6167
Mr Frank Greenslade	Maylands Historical Society, PO Box 6, Maylands, WA 6051
Mrs M.J. Hammersley	Swan Guildford Historical Society, Meadow St, Guildford, WA 6055
Mrs Grace Hardie	Bayswater Historical Society, PO Box 76, Bayswater, WA 6053
Harvey Tourist Centre	Southwest Highway, Harvey, WA 6220
Mr N. Hasen	PO Box 79, York, WA 6302
Mr Hortin	Shire Clerk, Shire Of Gingin, 7 Brockman St, Gingin, WA 6503
Mrs Marie Hutchinson	Beverley Historical Society, 47 Hunt Rd, Beverley, WA 6304
Kalamunda & Districts Historical Society	PO Box 121, Kalamunda, WA 6076
Mrs Thelma King	Bullsbrook Historical Association, 571 Chittering Rd, South Chittering, WA 6084
Mrs M. Lefevre	Lot 103 Hardinge Rd, Orange Grove, WA 6109
Local History Department	Fremantle City Library, PO Box 807, Fremantle, WA 6160

6.1 Appendix A (contd)

Mandurah Tourist Bureau Inc	5 Pinjarra Rd, Mandurah, WA 6210
Mr A.G. Marshall	45 Queen St, Pingelly, WA 6308
Mrs Judy Mitchell	Subiaco Historical Society, 291 Railway Rd, Subiaco, WA 6008
Narrogin Tourist Bureau	Egerton St, Narrogin, WA 6312
Mr Stephen O'Brien	Local Library Historian, Gosnells Library, 2240 Albany Hwy, Gosnells, WA 6110
Mr Ted Packer	31 Verna St, Gosnells, WA 6110
Mr John Parker	Canning Districts Historical Society, PO Box 606, Cannington, WA 6107
Ms Jan Pascall	Serpentine-Jarrahdale Tourist Committee, Serpentine-Jarrahdale Shire, Mundijong, WA 6202
Mr Bill Petchell	RMB 508, Williams, WA 6391
Mr Greg Peterson	Bassendean Preservation Society, 8 Carnegie St, Bassendean, WA 6054
Ms Anne Reid	Research Secretary, Historical Society, 6 Hill Pl, Attadale, WA 6156
Mr Ronald Richards	50 Tweedale Rd, Attadale, WA 6156
Rockingham & Districts Tourist Authority	43 Kent St, Rockingham, WA 6168
Ms Noela Shepherd	Halcyon Hill, Lot 4 Roland Rd, Gidgegannup, WA 6083
Mrs Slade	Mandurah Historical Society, PO Box 199, Mandurah, WA 6210
Ms Jennifer Smith	Murray Tourist Centre, PO Box 277, Pinjarra, WA 6208
Ms Ann Spalding	Belmont Historical Society, 19 Ullapool Rd, Applecross, WA 6153
Ms Jan Star	President, Serpentine-Jarrahdale Heritage Society, Jarrahdale Rd, Mundijong, WA 6202
Ms L. Summers	South Perth Heritage House, 11 Mill Pt Rd, South Perth, WA 6151
Mr Ross Warburton	PO Box 74, Brunswick Junction, WA 6224
Mr G. Watts	"Grassdale", PO Box 3, Wandering, WA 6308
West Arthur Tourist Committee	Shire Of West Arthur, Borrows St, Darkan, WA 6392
Mr Maurie White	Curator, Narrogin Museum, PO Box 141, Narrogin, WA 6312

6.2 Appendix B

Codes used on all maps


1. Armadale	A	26. Mandurah	Ma
2. Bassendean	Bs	27. Melville	Me
3. Bayswater	Ba	28. Mosman Park	Mo
4. Belmont	Be	29. Mundaring	Mu
5. Beverley	Be	30. Murray	My
6. Boddington	Bo	31. Narrogin	Na
7. Boyup Brook	Bb	32. Nedlands	Ne
8. Bunbury	Bu	33. Northam	No
9. Canning	Cn	34. Peppermint Grove	Pg
10. Capel	Ca	35. Perth	P
11. Chittering	Ch	36. Pingelly	Pi
12. Claremont	Cl	37. Rockingham	R
13. Cockburn	Cb	38. Serpentine-Jarrahdale	Sj
14. Collie	Co	39. South Perth	Sp
15. Cottesloe	Ct	40. Stirling	St
16. Cuballing	Cu	41. Subiaco	Su
17. Dardanup	Da	42. Swan	Sw
18. Donnybrook-Balingup	Db	43. Toodyay	T
19. East Fremantle	Ef	44. Victoria Plains	Vp
20. Fremantle	F	45. Wandering	Wd
21. Gingin	Gg	46. Wanneroo	Wn
22. Gosnells	Go	47. Waroona	Wr
23. Harvey	H	48. West Arthur	Wa
24. Kalamunda	Ka	49. Williams	Wi
25. Kwinana	Kw	50. York	Y

6.3 Appendix C

The questionnaire that was sent to historical societies.

NAME:		
ADDRESS		
		Code:
TELEPHONE	Home:	Work:

HOW TO DO THE QUESTIONNAIRE...

- We need your name, address and telephone number;
- Please fill in the location you are telling us about;
- Fill in any details you have on the form;
- Mark the location on the attached map with the corresponding number & letter, like this:  ^{1A}
- Any useful publications?
- Do you have any publications or information for sale or to give away?
- Please let us know any information you have on names and costs that will enable us to follow up;
- Please return the questionnaire and map to us in the enclosed envelope
- We will acknowledge your contribution and let you know about the final report.

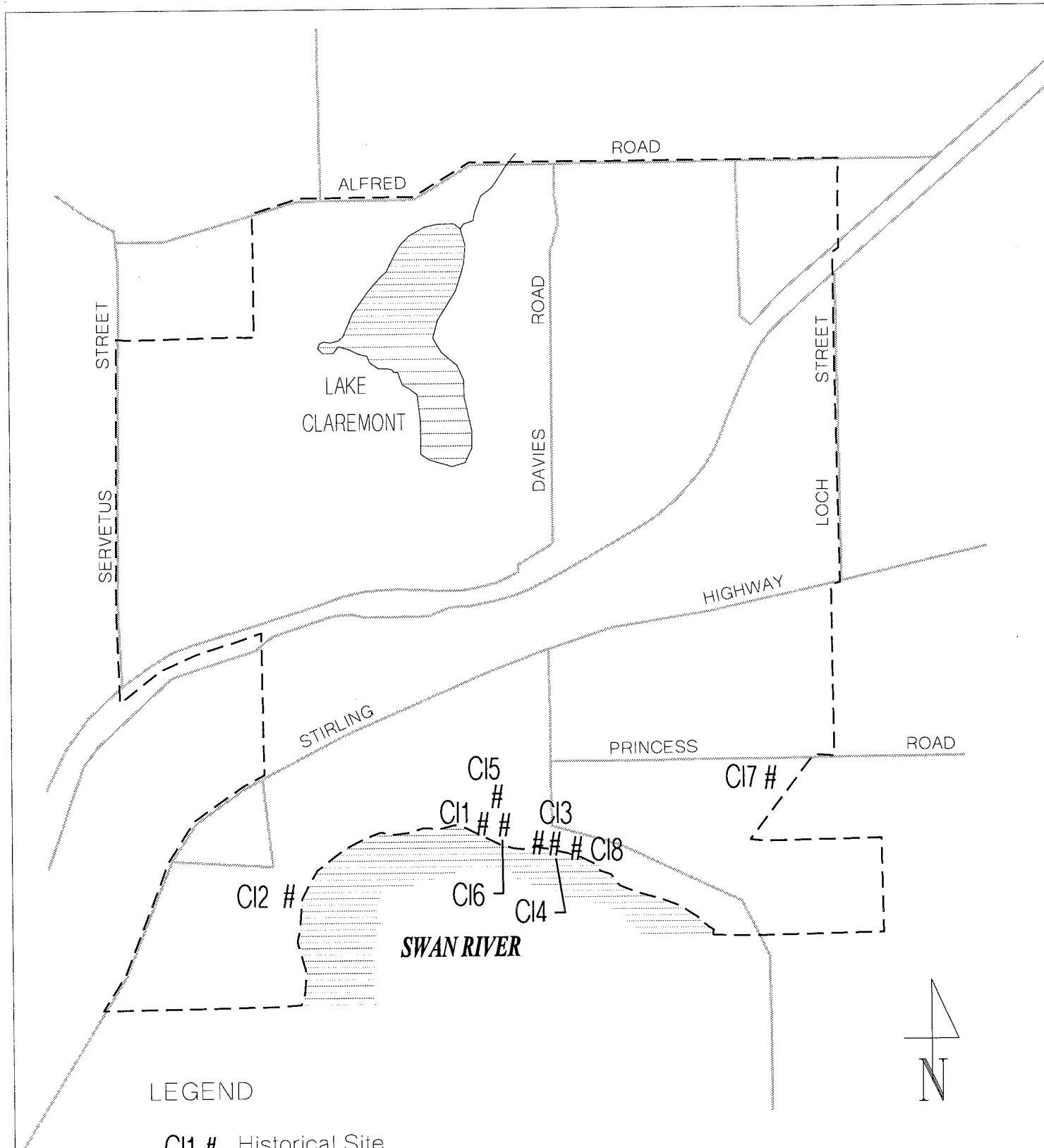
Questionnaire example:

LOCATION: <i>Augusta</i>			
Land use activity:	Location and type of water used:	Map no.	Years
First European exploration: 1	A. <i>Ships took on water in the small cove in the mouth of the Blackwood River</i>	<i>1A</i>	<i>1830 - 1935</i>
	B		

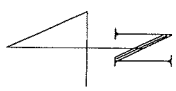
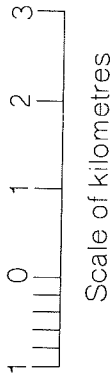
PUBLICATIONS:

Author:	Name of publication:	Where is it available?	Cost ?

LOCATION:						
Land use activity:	Location and type of water used			Map no	Years	
First European exploration: 1	A					
	B					
Early settlement and farming development: 2	A					
	B					
Water Supply development: domestic: 3	A					
	B					
	C					
	D					
Water Supply development: irrigation: 4	A					
	B					
Land drainage wetlands, etc. 5	A					
	B					
Reservation of waterways: 6	A					
	B					
Anecdotal records of water quality: 7	A					
	B					
Timber industry development & water utilisation 8	A					
	B					
Historical utilisation of aquatic: flora & fauna 9	A					
	B					
Publications Y = yes ; N = no	Information held		Book/Publication		Report/ Unpublished info	Unsure

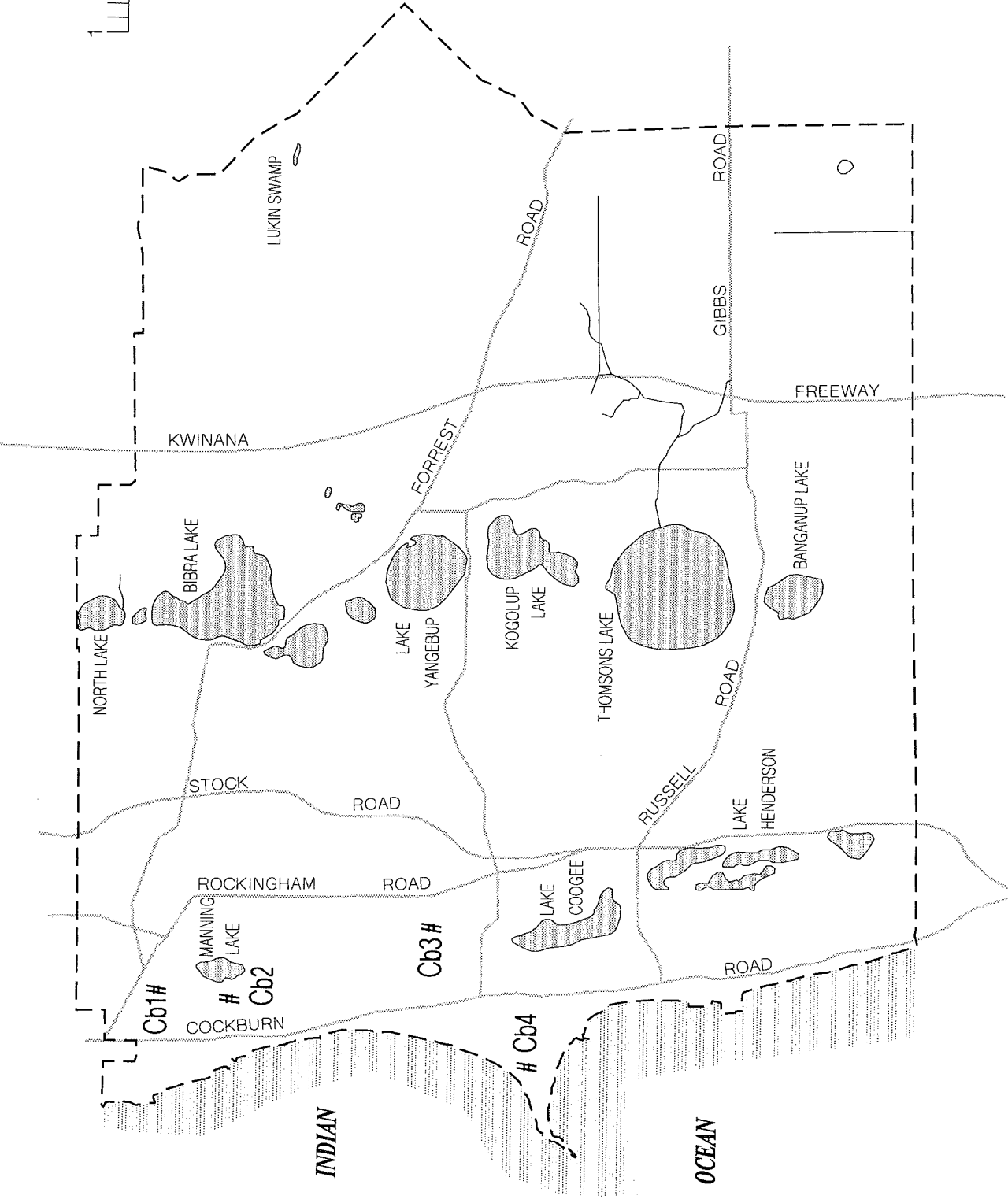


HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE TOWN OF CLAREMONT

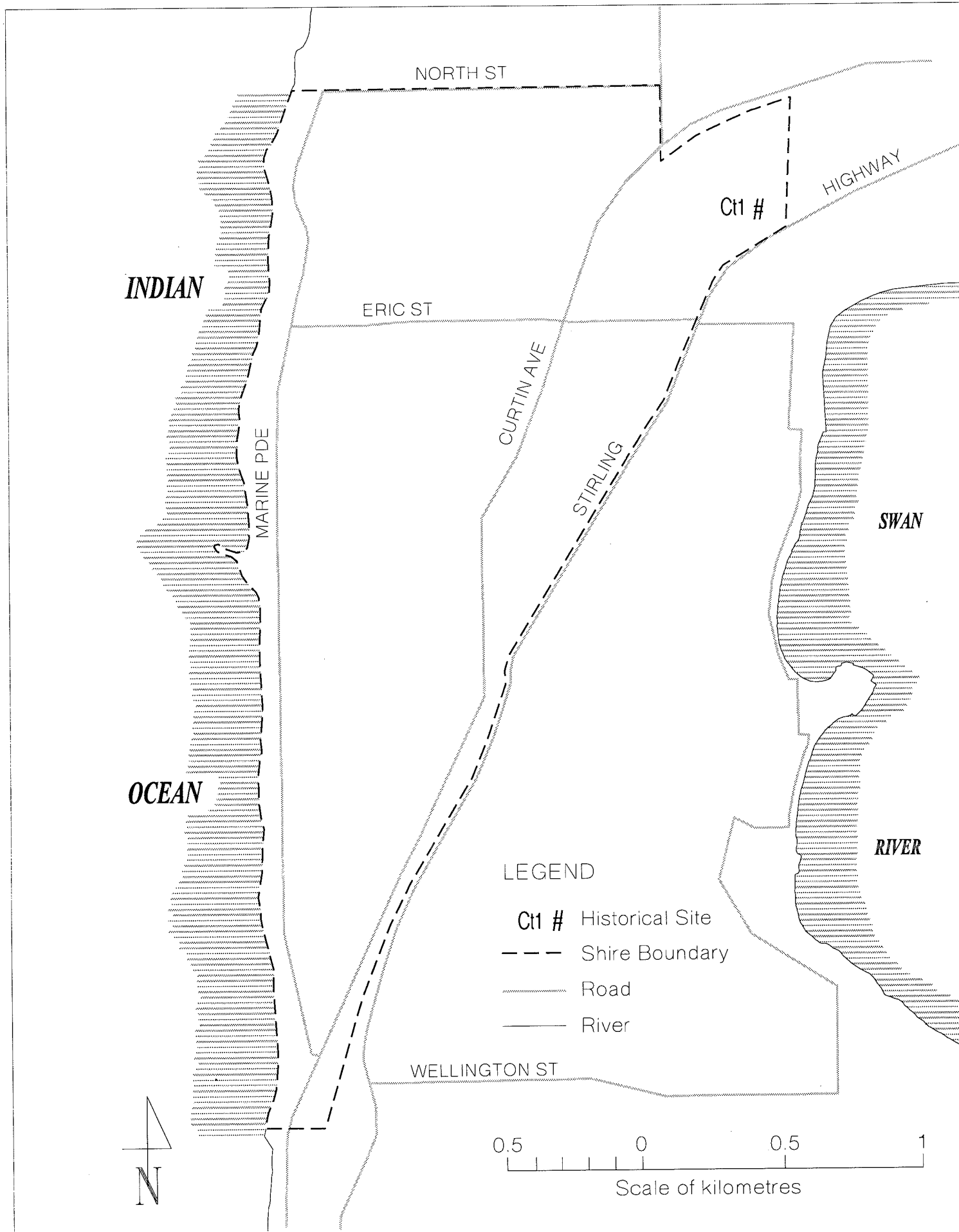


LEGEND

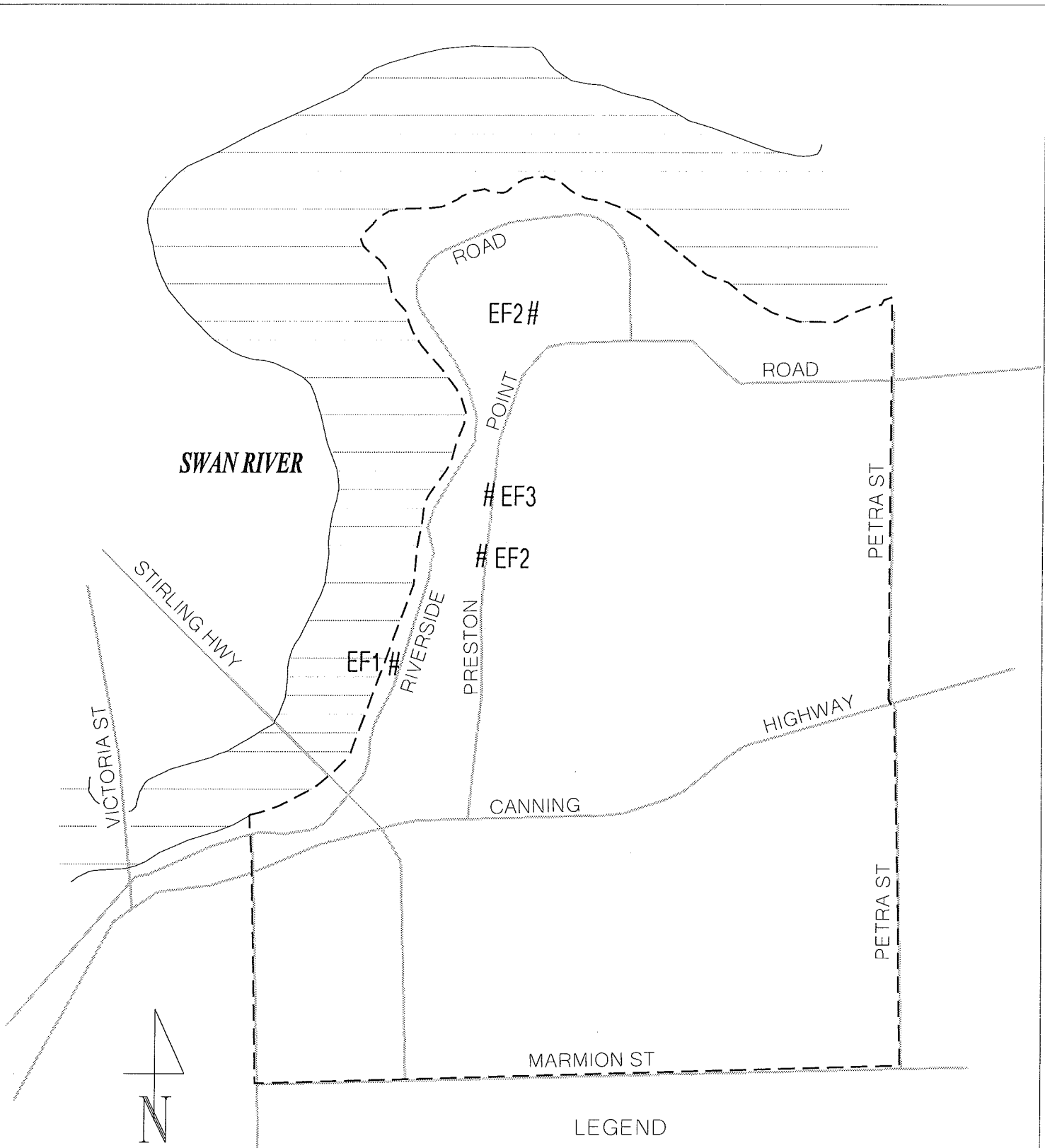
- Cb1 # Historical Site
- - - Shire Boundary
- Road
- River



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



**HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN
PEOPLE AND WETLANDS AND
RIVERS IN THE TOWN OF COTTESLOE**



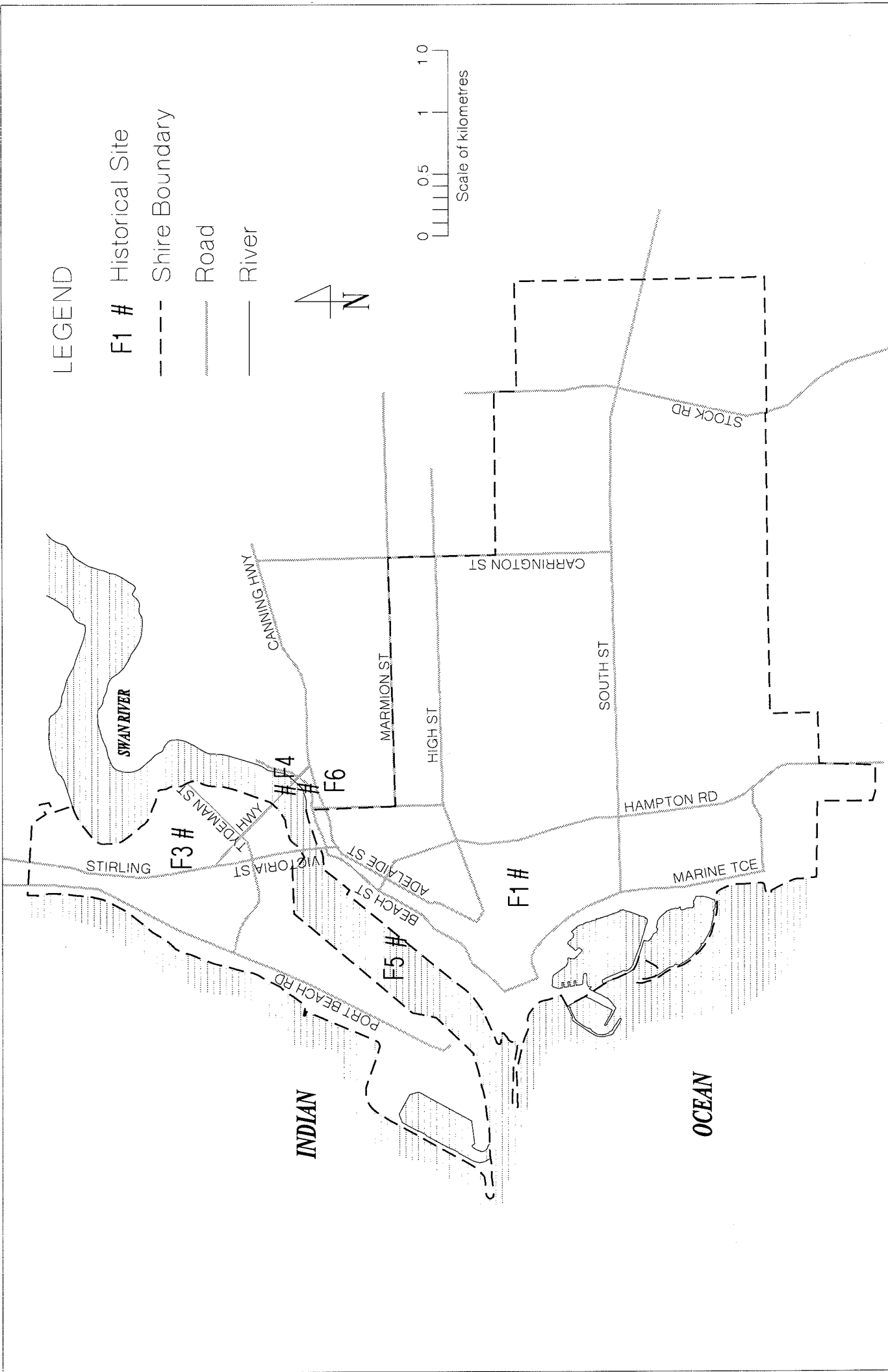
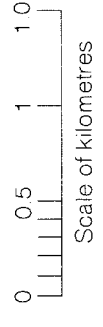
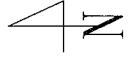
LEGEND

- EF1# Historical Site
- Shire Boundary
- Road
- River

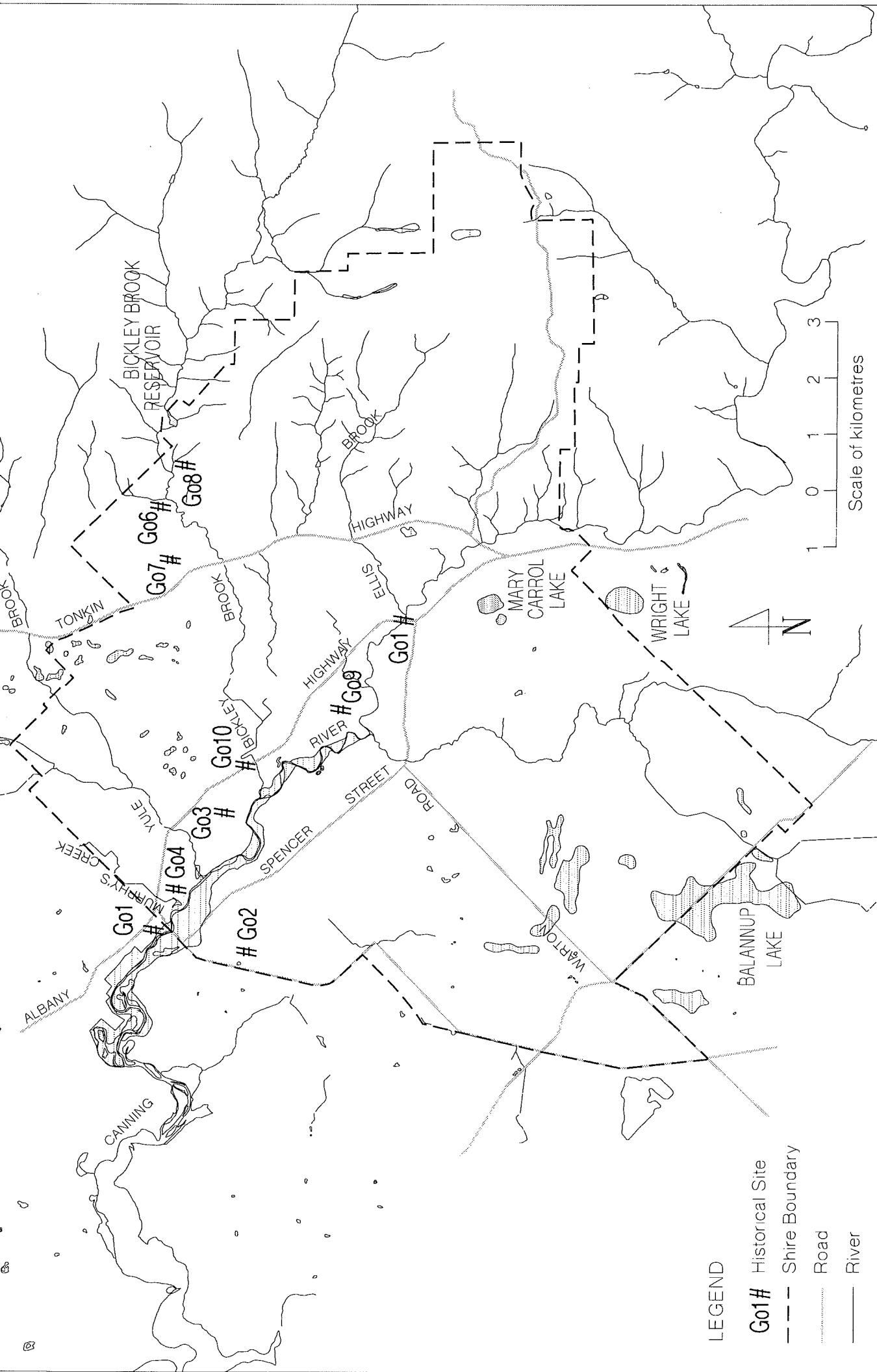
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE TOWN OF EAST FREMANTLE

LEGEND

- F1 # Historical Site
- Shire Boundary
- Road
- River



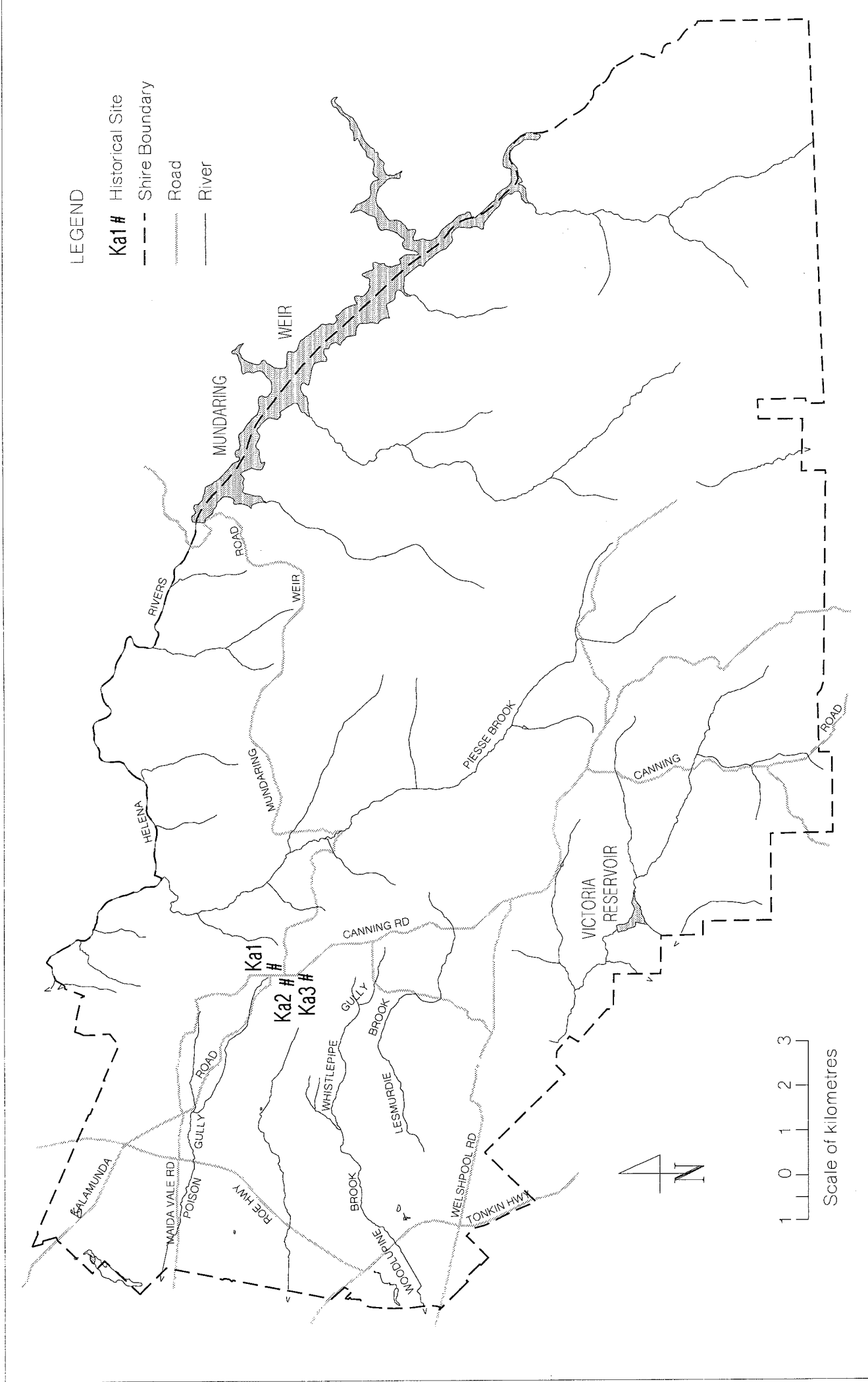
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE CITY OF FREMANTLE

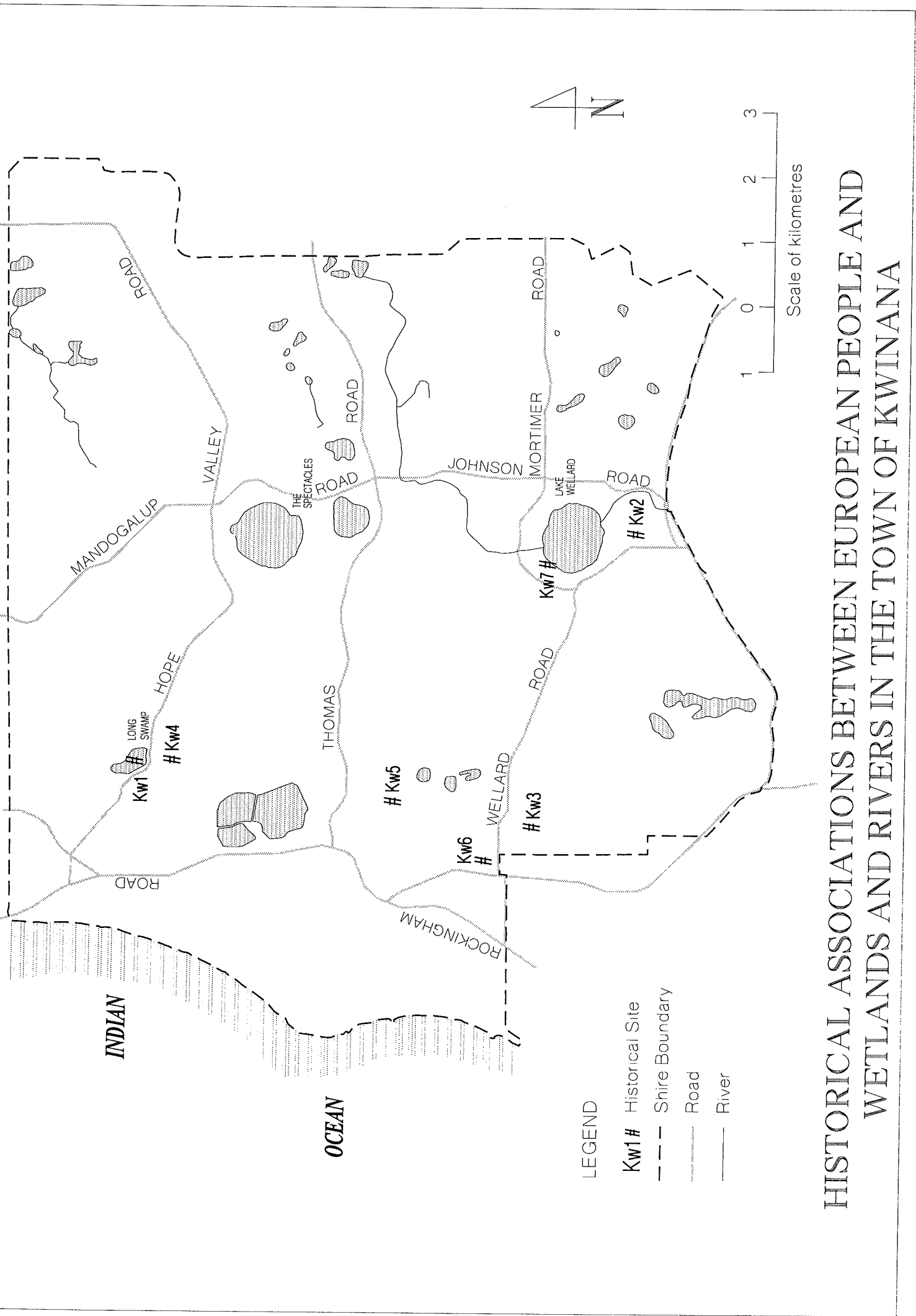


HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE CITY OF GOSNELLS

- LEGEND**
- Go1# Historical Site
 - Shire Boundary
 - Road
 - River

HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF KALAMUNDA





INDIAN

OCEAN

LEGEND

Kw1# Historical Site

--- Shire Boundary

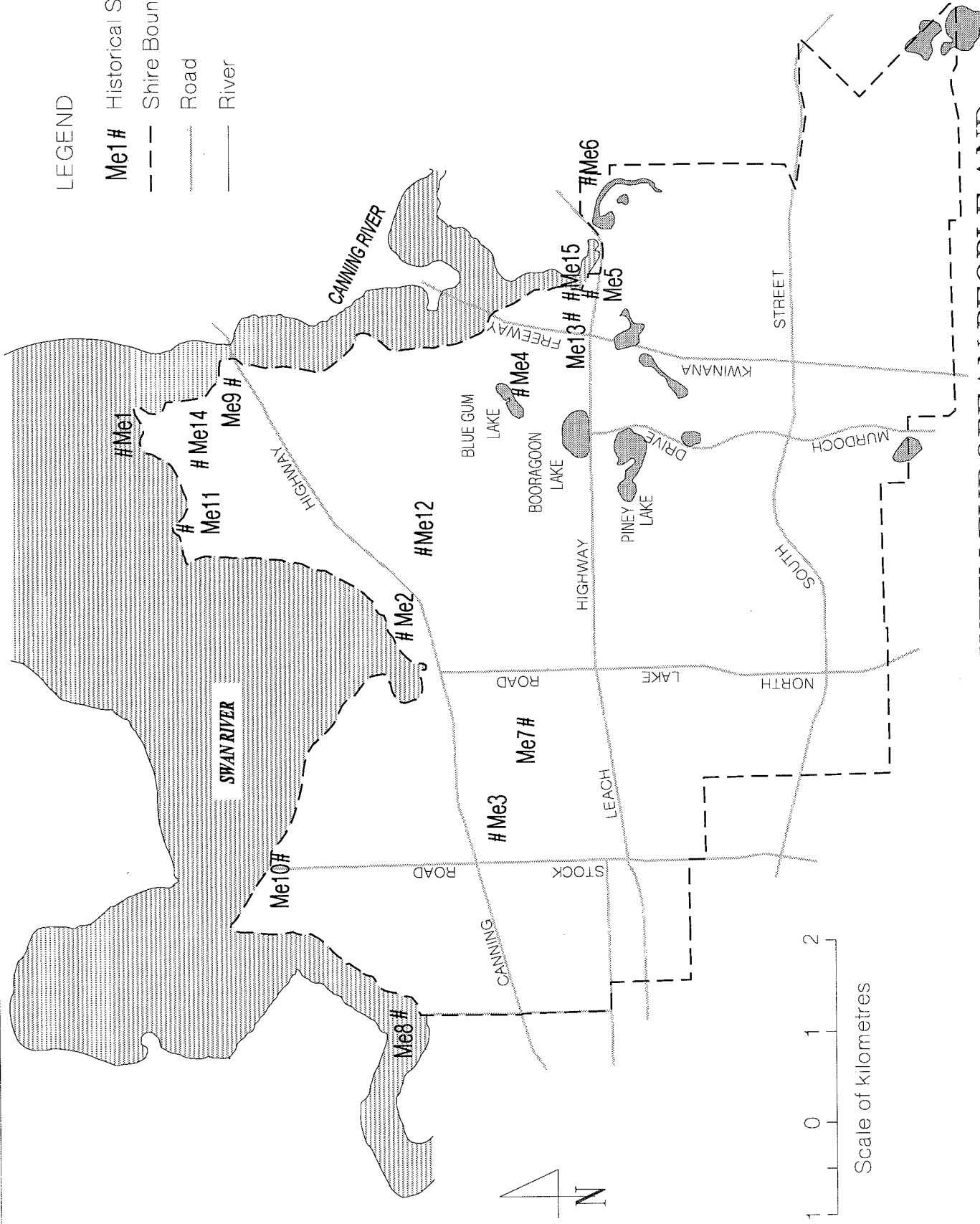
..... Road

— River

HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE TOWN OF KWINANA

LEGEND

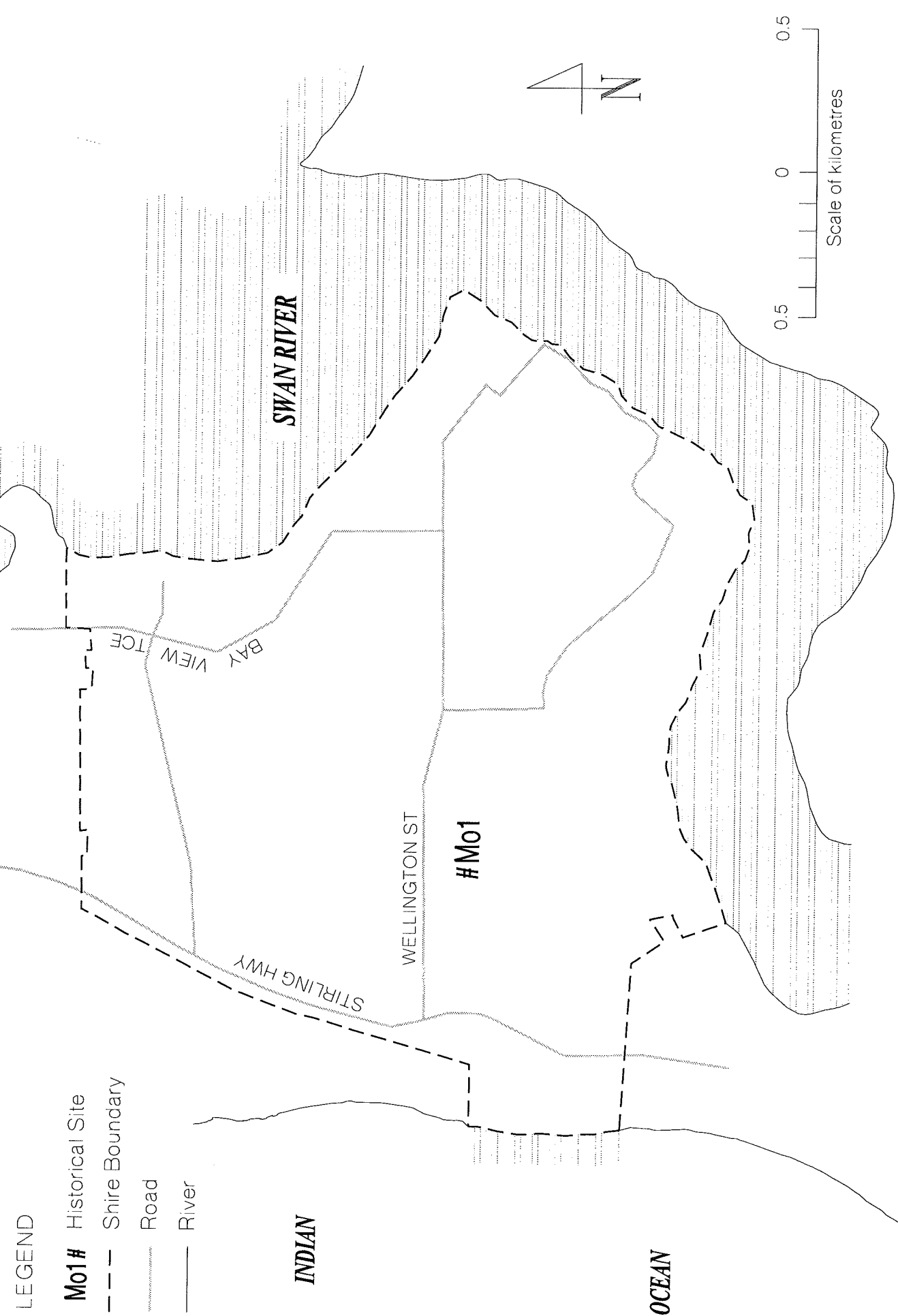
- Me1 #** Historical Site
- - - Shire Boundary
- Road
- River



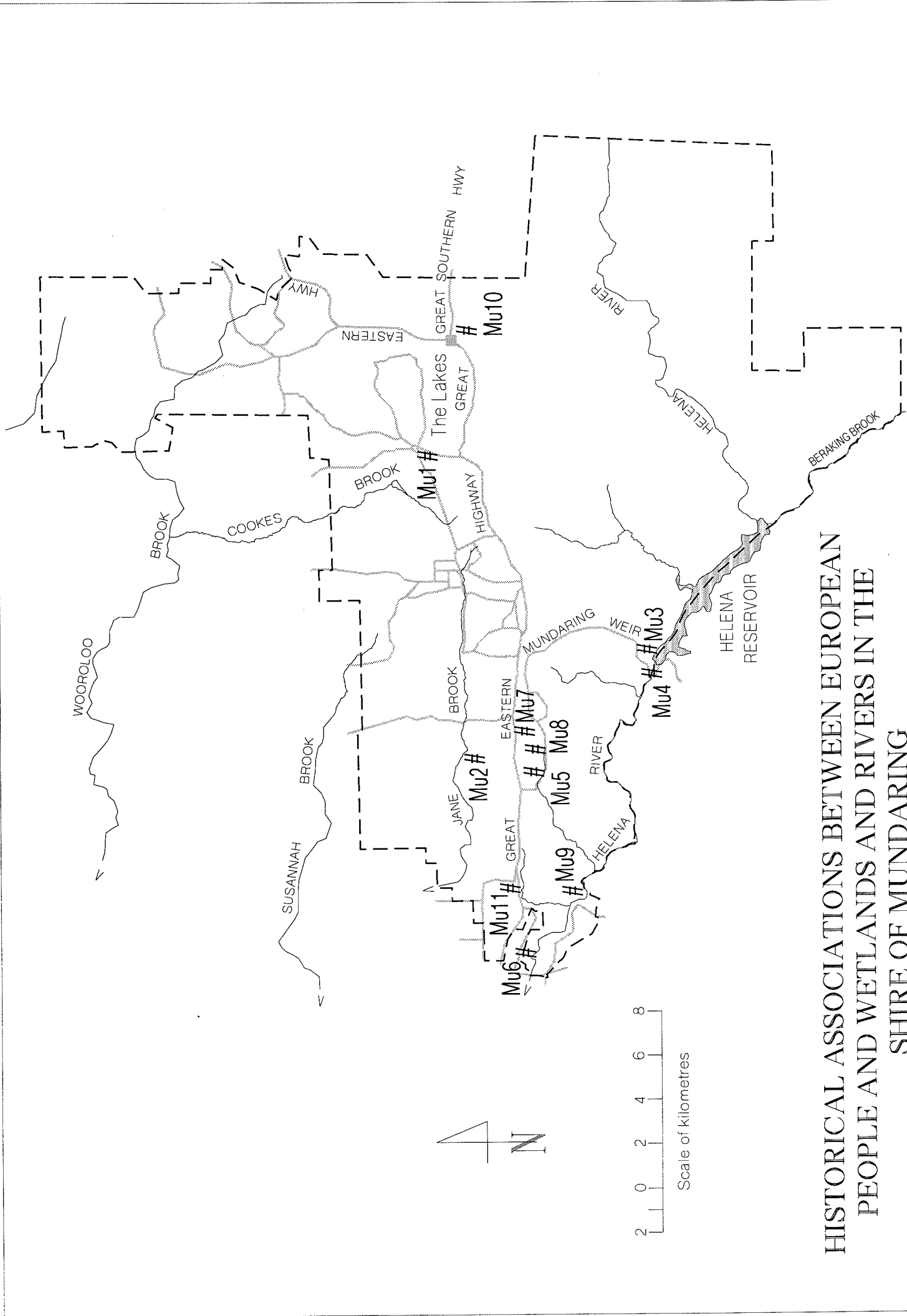
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE CITY OF MELVILLE

LEGEND

- M01#** Historical Site
- Shire Boundary
- Road
- River



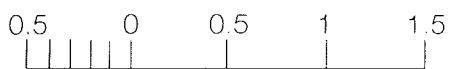
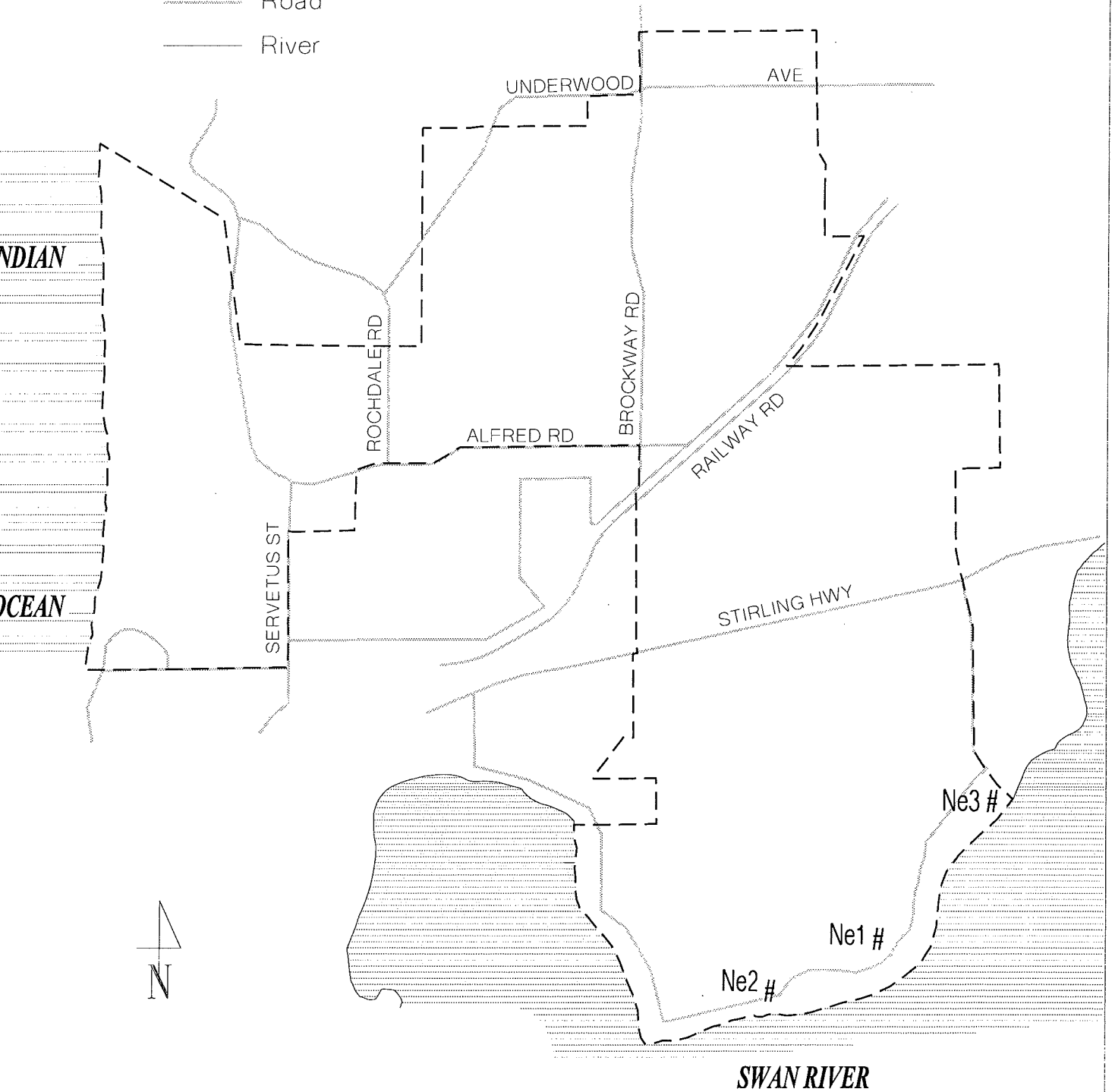
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE TOWN OF MOSMAN PARK



**HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN
PEOPLE AND WETLANDS AND RIVERS IN THE
SHIRE OF MUNDARING**

LEGEND

- Ne1 # Historical Site
- - - Shire Boundary
- Road
- River



Scale of kilometres

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

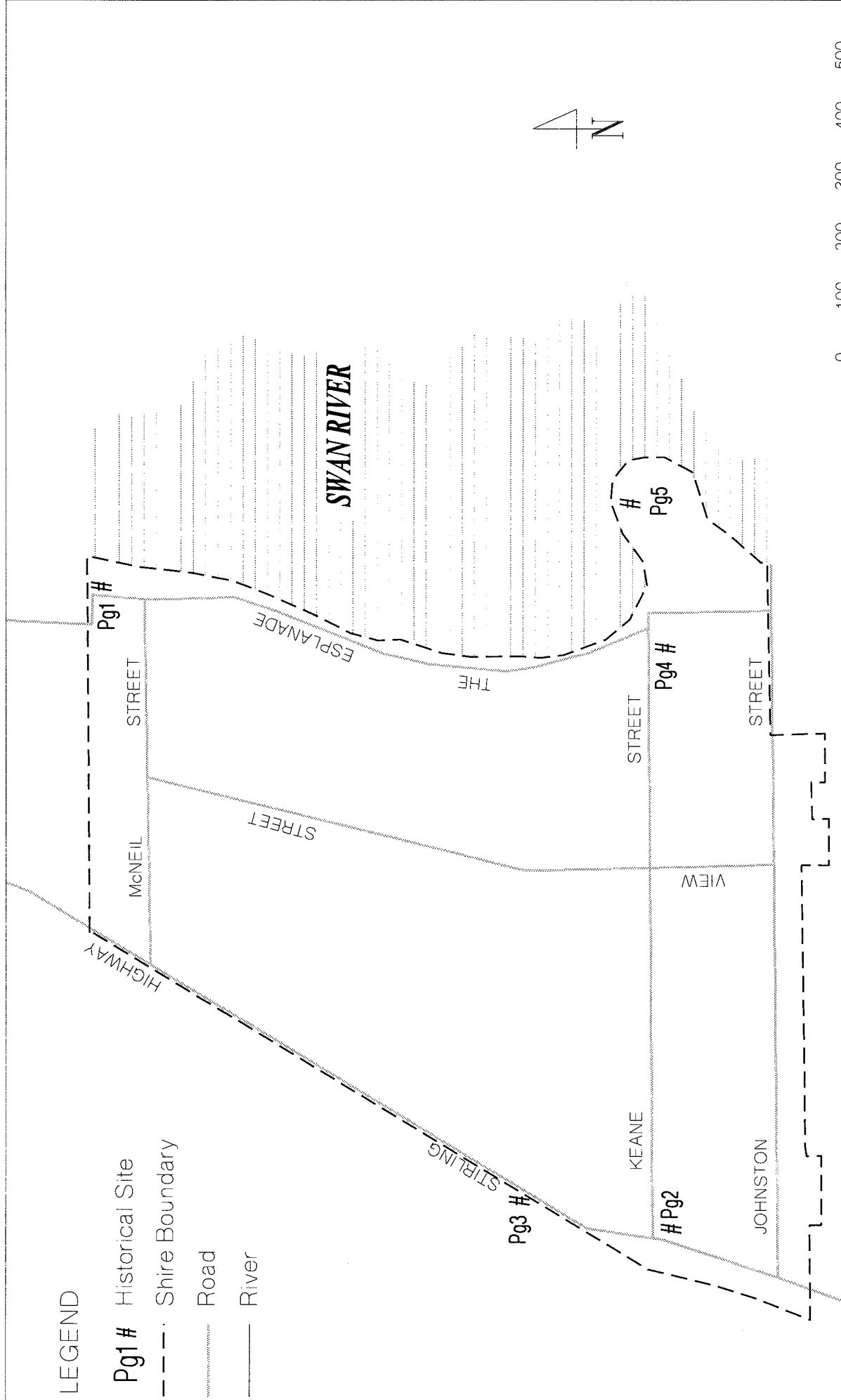
LEGEND

Pg1 # Historical Site

- - - Shire Boundary

..... Road

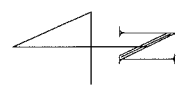
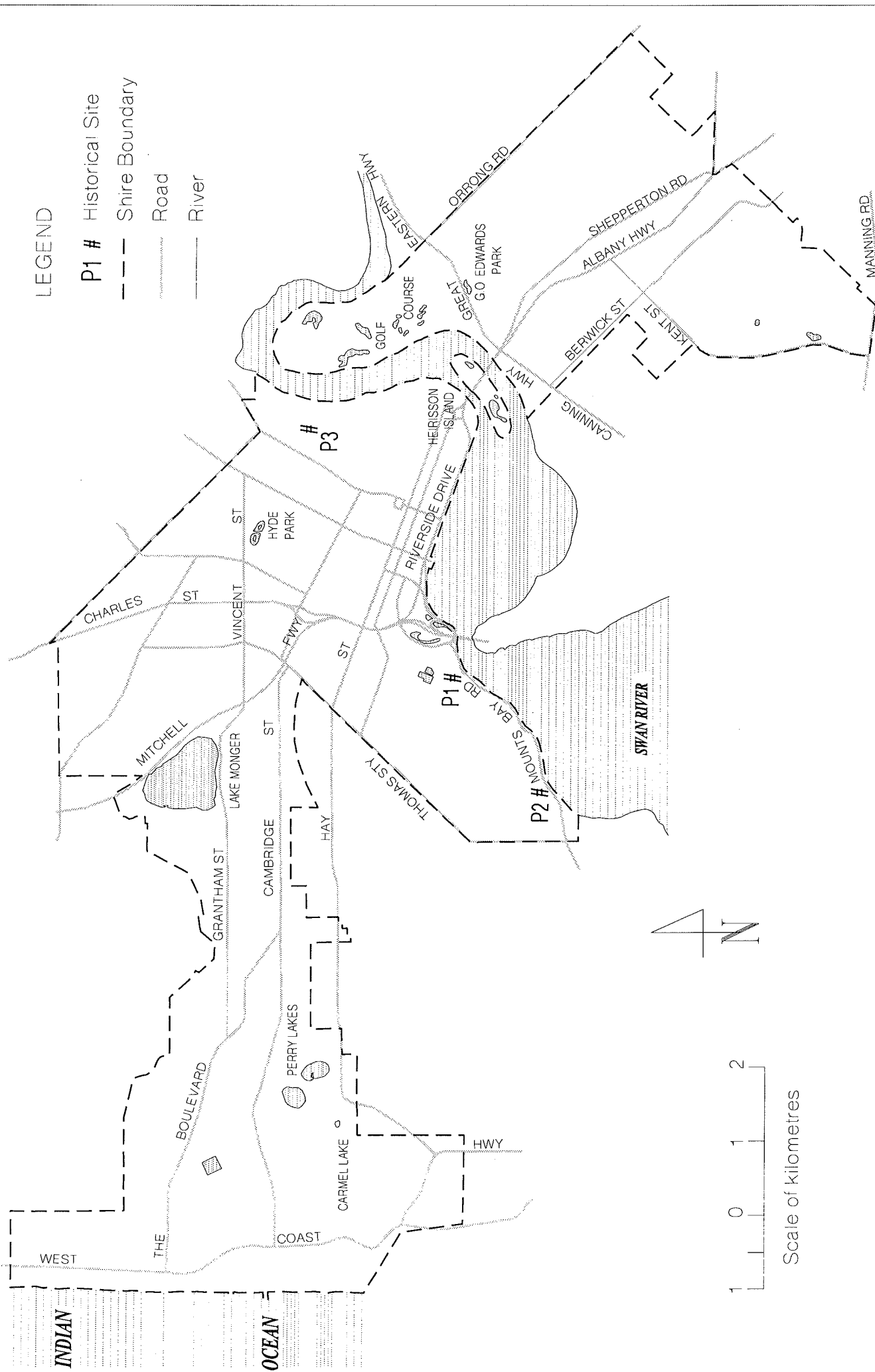
— River



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF PEPPERMINT GROVE

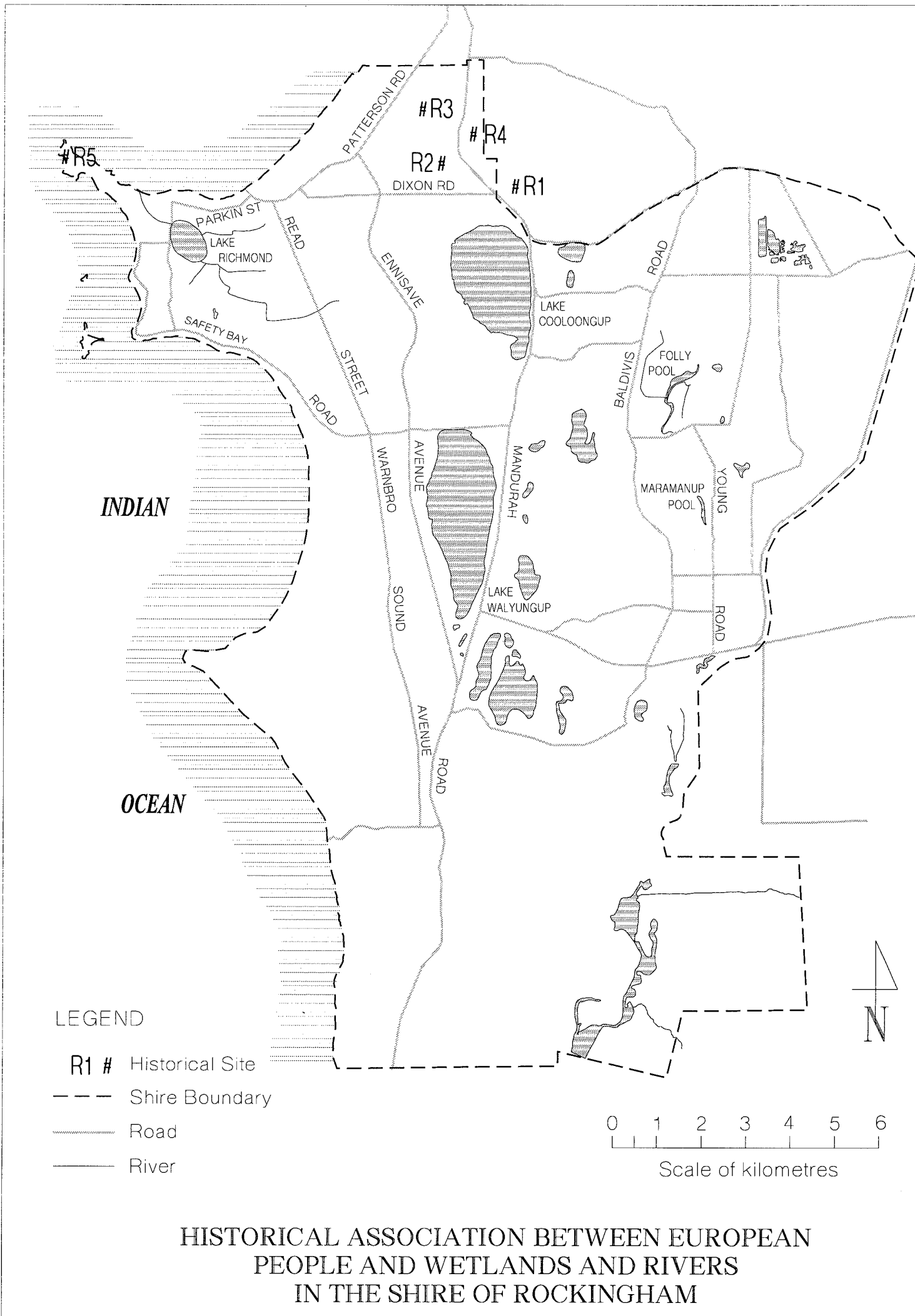
LEGEND

- P1 # Historical Site
- Shire Boundary
- Road
- River



Scale of kilometres

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



LEGEND

- R1 # Historical Site
- Shire Boundary
- Road
- River

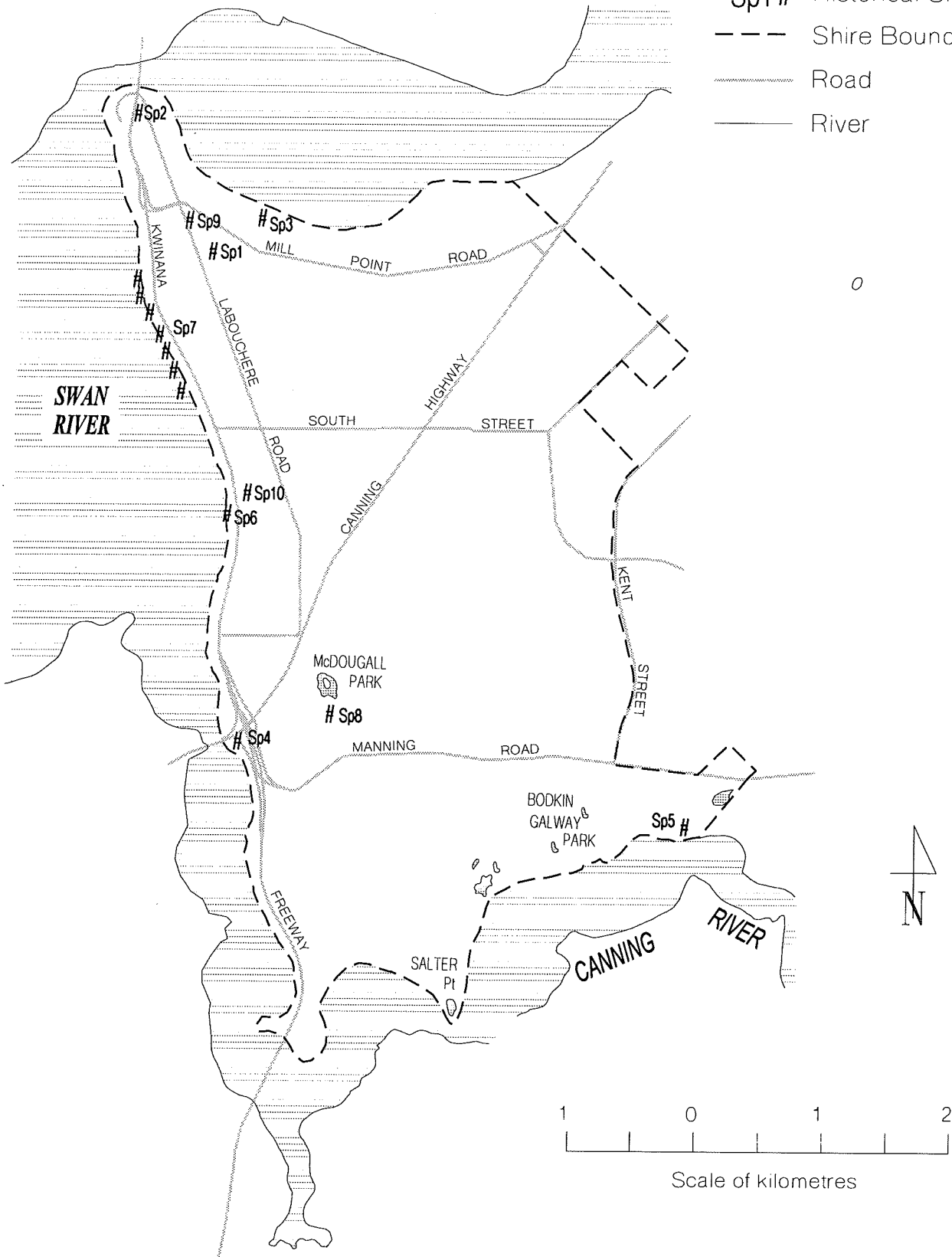


Scale of kilometres

HISTORICAL ASSOCIATION BETWEEN EUROPEAN
PEOPLE AND WETLANDS AND RIVERS
IN THE SHIRE OF ROCKINGHAM

LEGEND

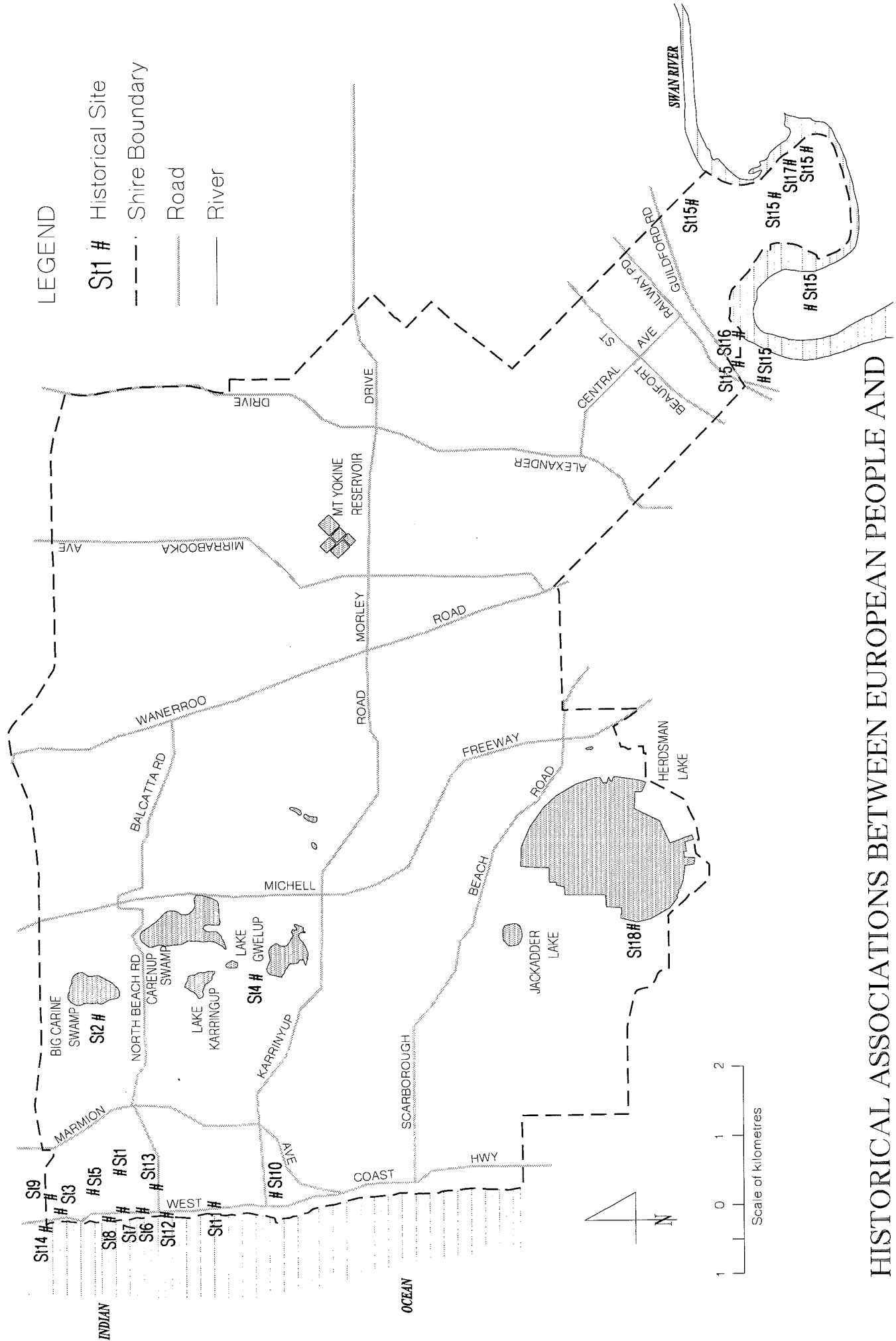
- Sp1 # Historical Site
- Shire Boundary
- Road
- River



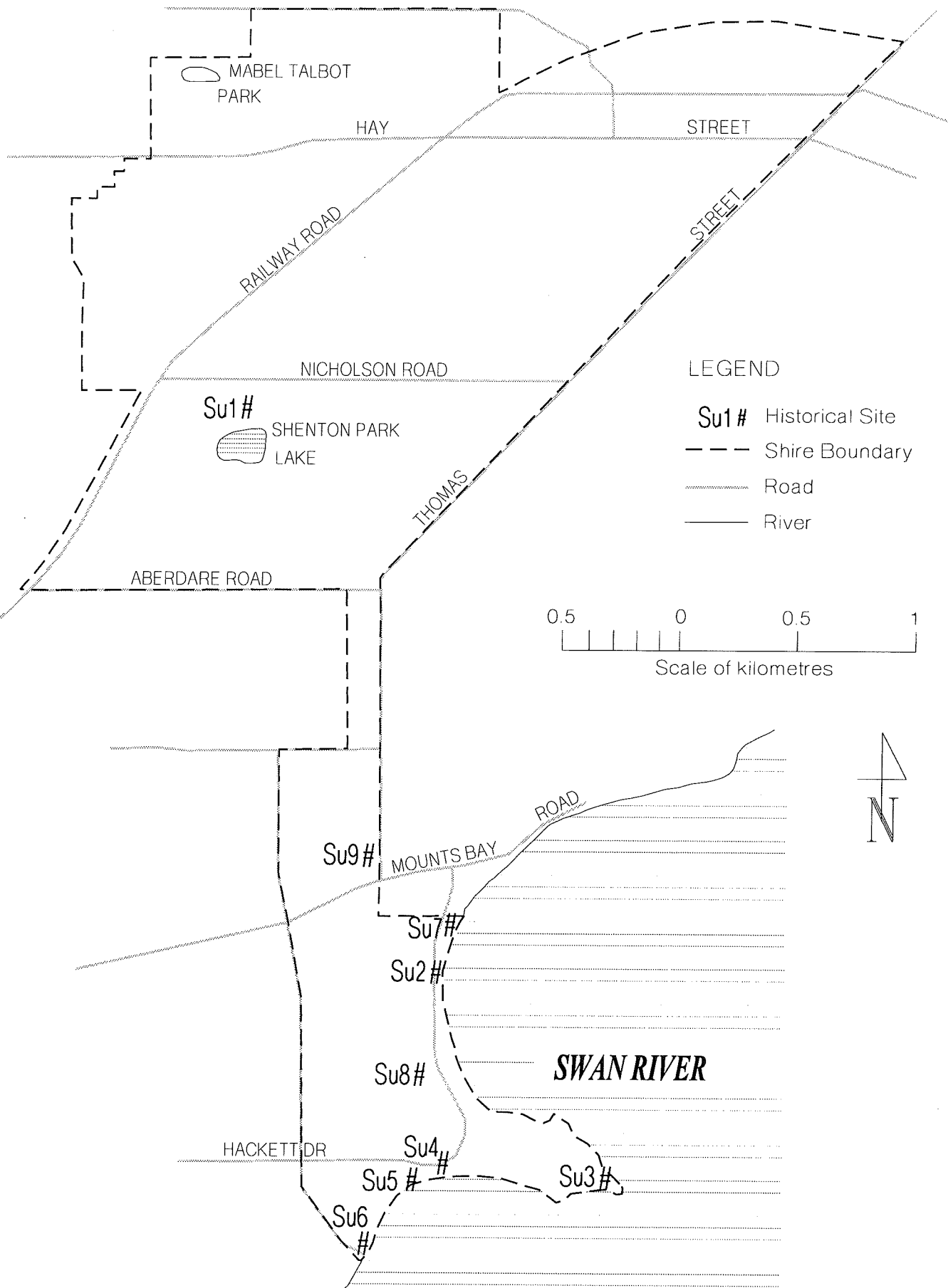
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN
PEOPLE AND WETLANDS AND RIVERS
IN THE CITY OF SOUTH PERTH

LEGEND

- S11 # Historical Site
- - - - - Shire Boundary
- Road
- River



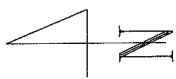
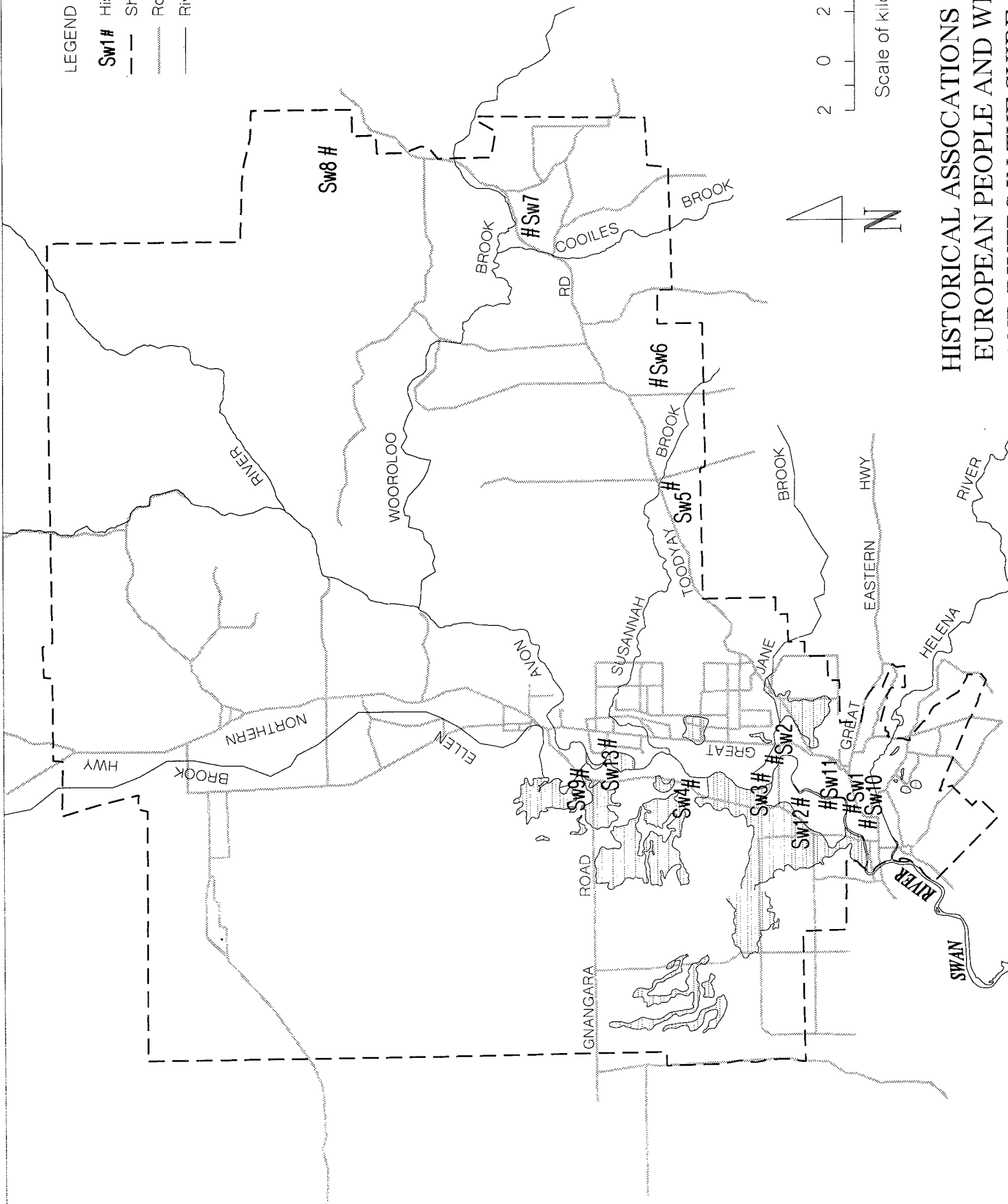
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE CITY OF STIRLING



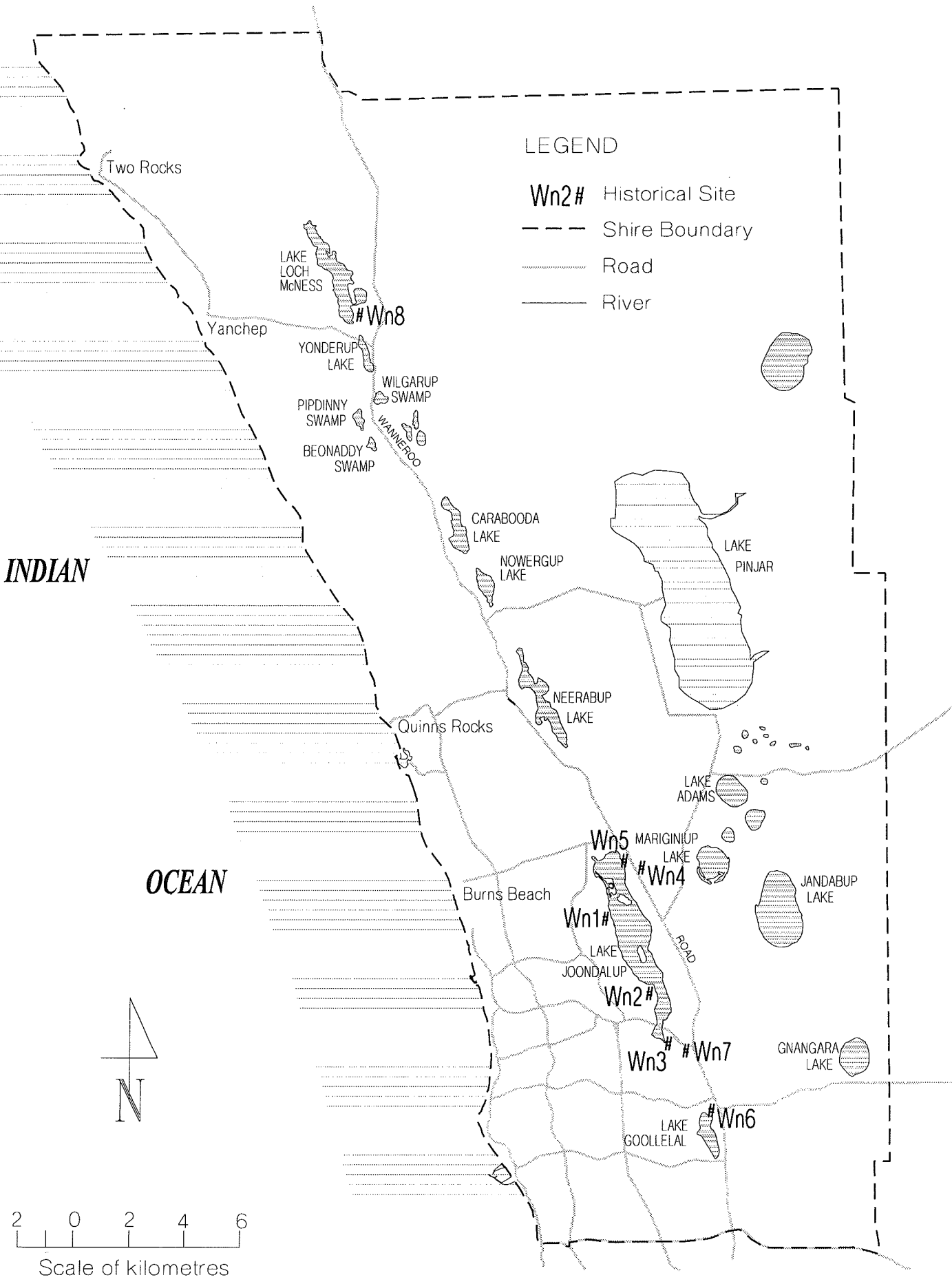
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS RIVERS IN THE CITY OF SUBIACO

LEGEND

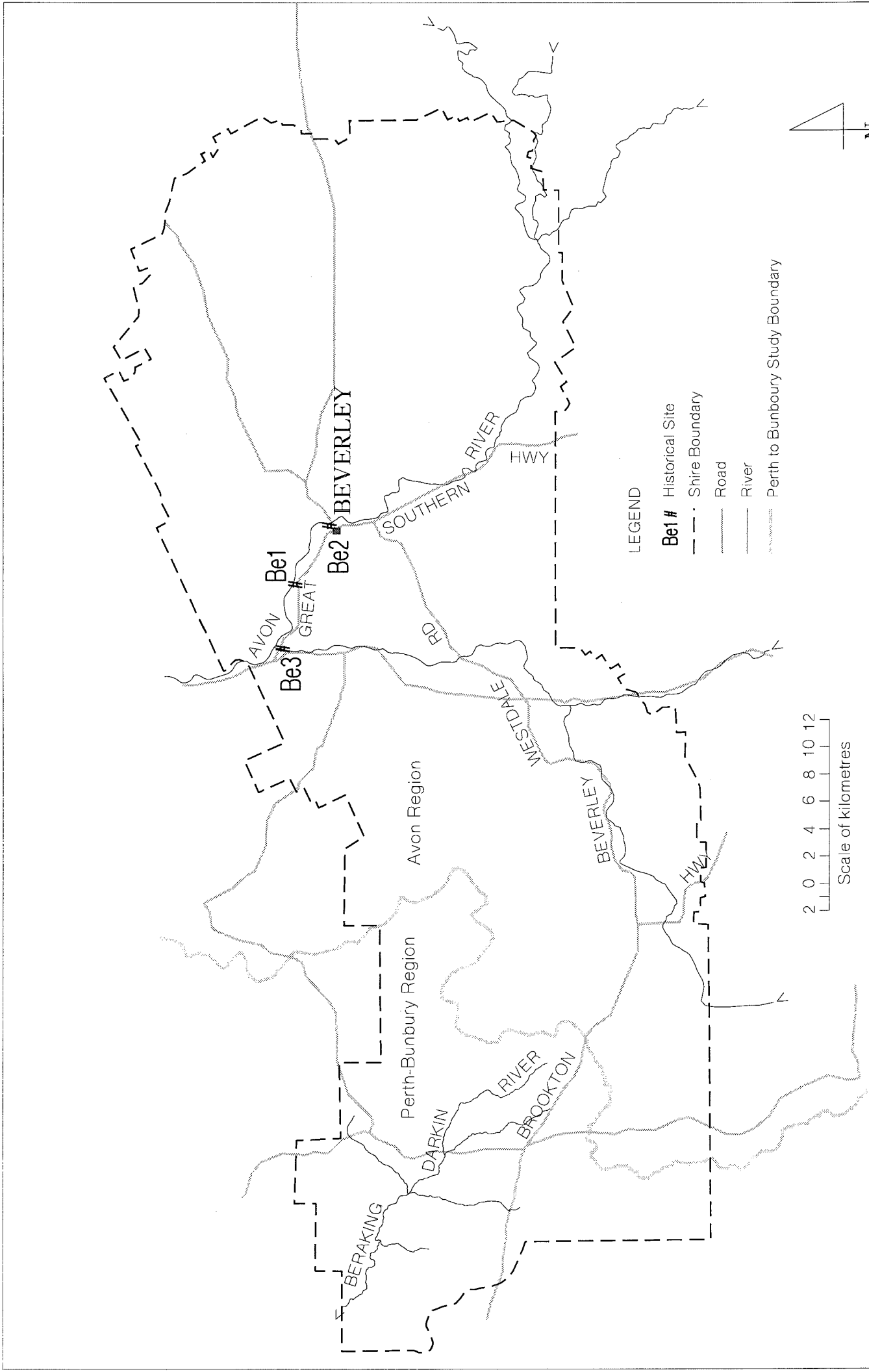
- Sw1#** Historical Site
- - - Shire Boundary
- Road
- River



HISTORICAL ASSOCIATIONS BETWEEN
EUROPEAN PEOPLE AND WETLANDS
AND RIVERS IN THE SWAN RIVER

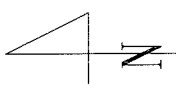
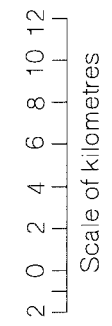


HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF WANNEROO



LEGEND

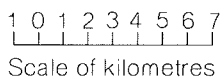
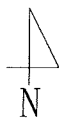
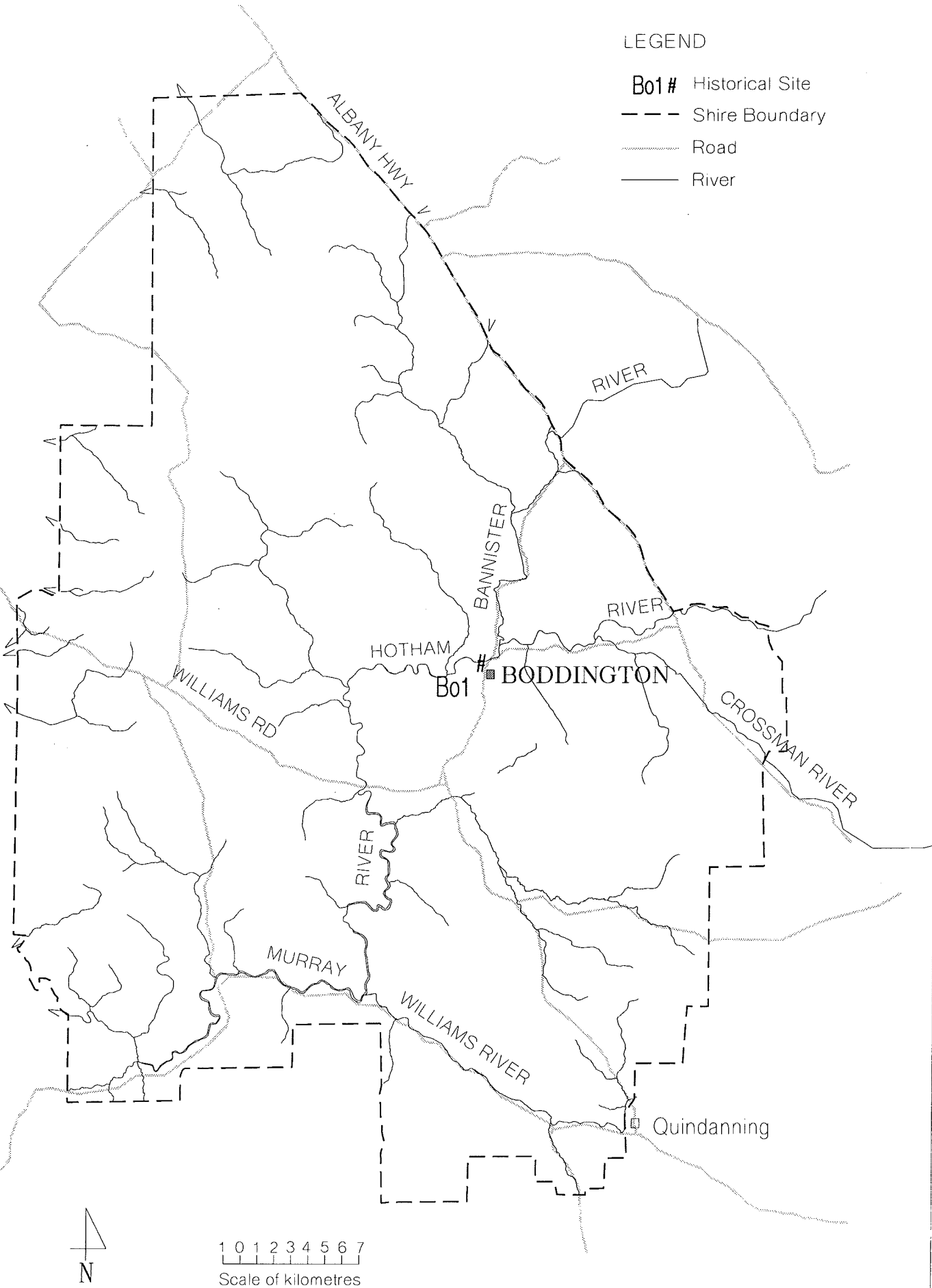
- Be1 # Historical Site
- - - Shire Boundary
- Road
- River
- Perth to Bunbury Study Boundary



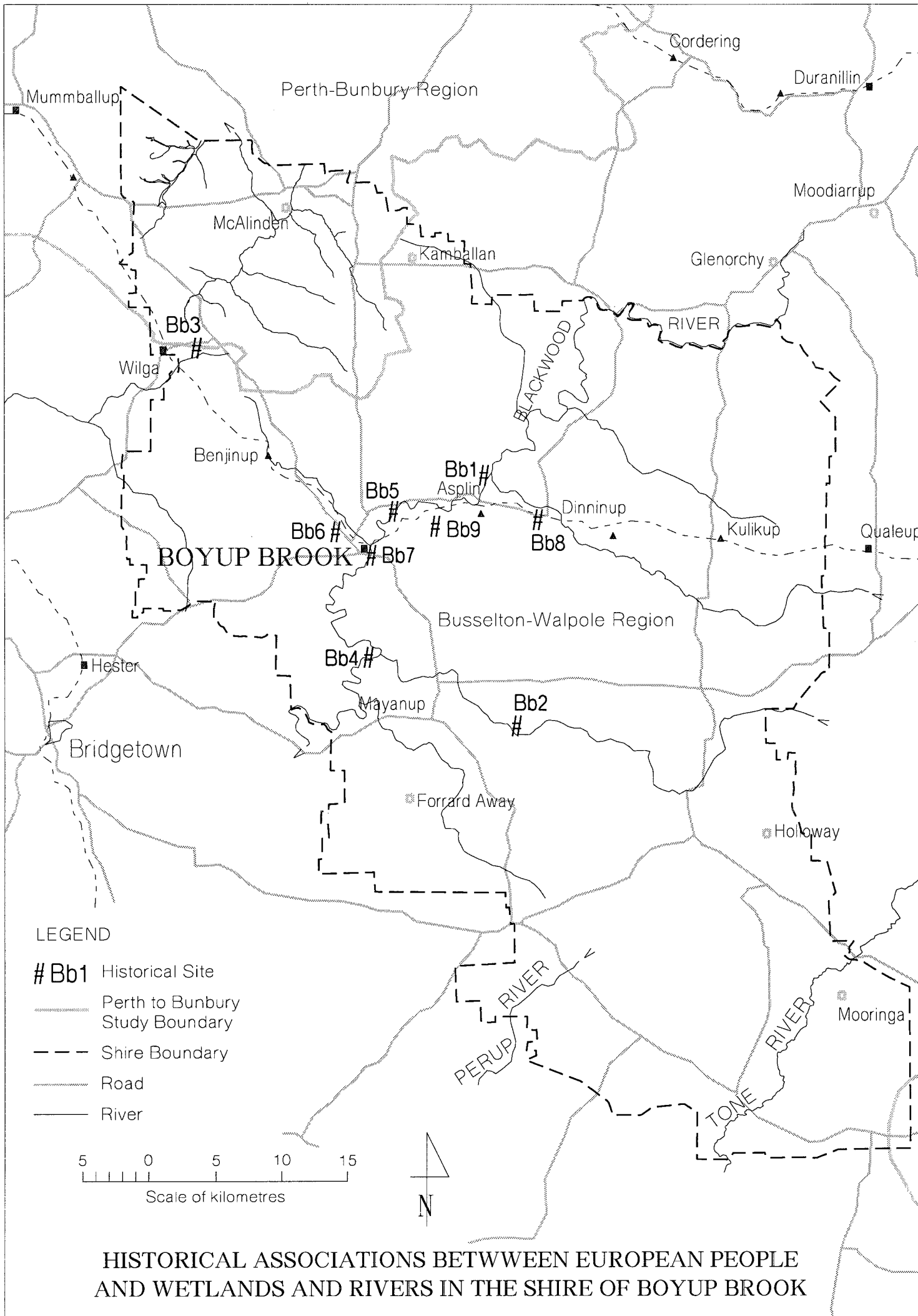
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF BEVERLEY

LEGEND

- B01 #** Historical Site
- Shire Boundary
- Road
- River



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF BODDINGTON



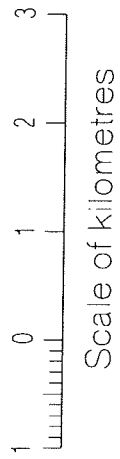
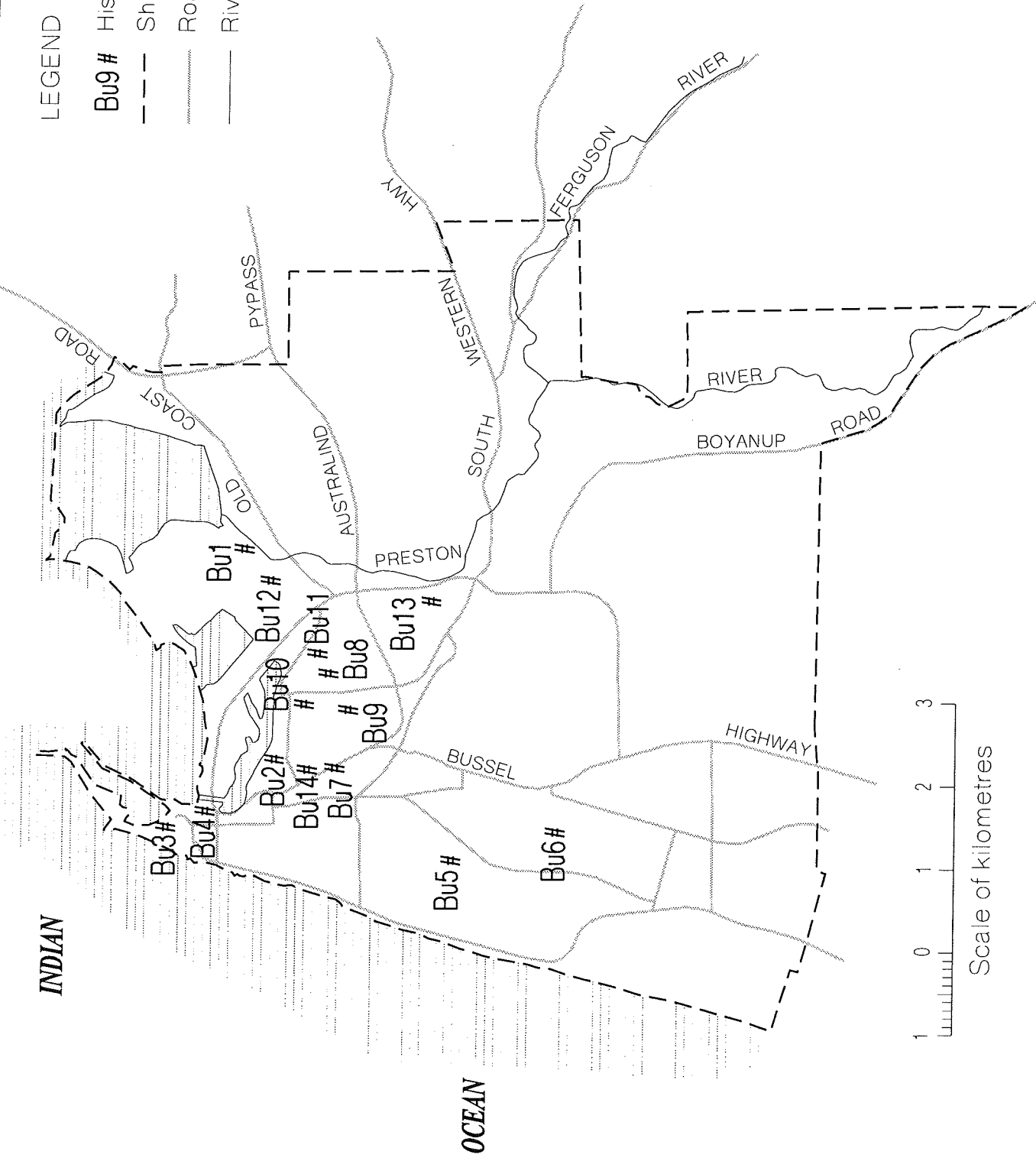
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF BOYUP BROOK

INDIAN

LEGEND

- Bu9 # Historical Site
- Shire Boundary
- Road
- River






OCEAN

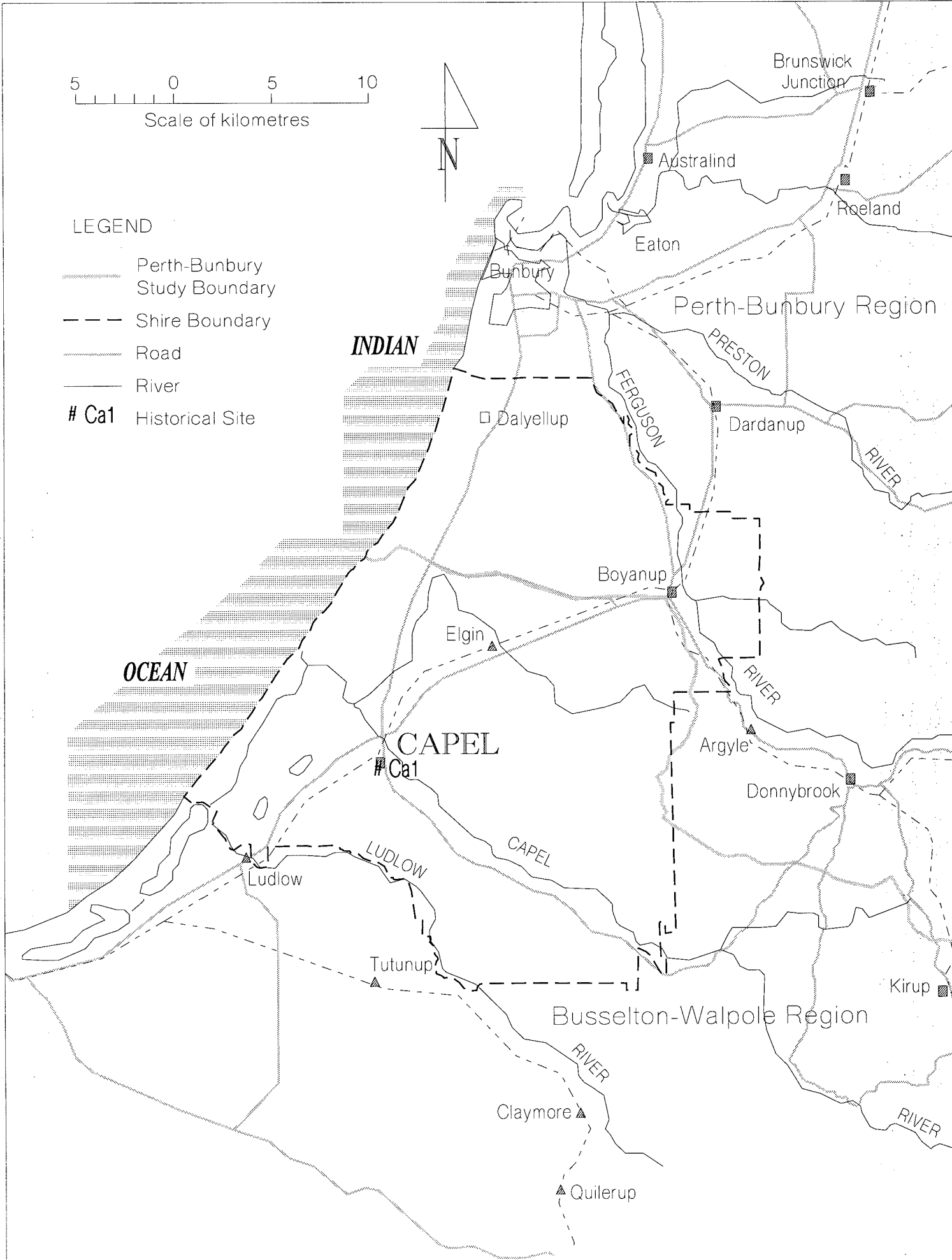


HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE CITY OF BUNBURY



LEGEND

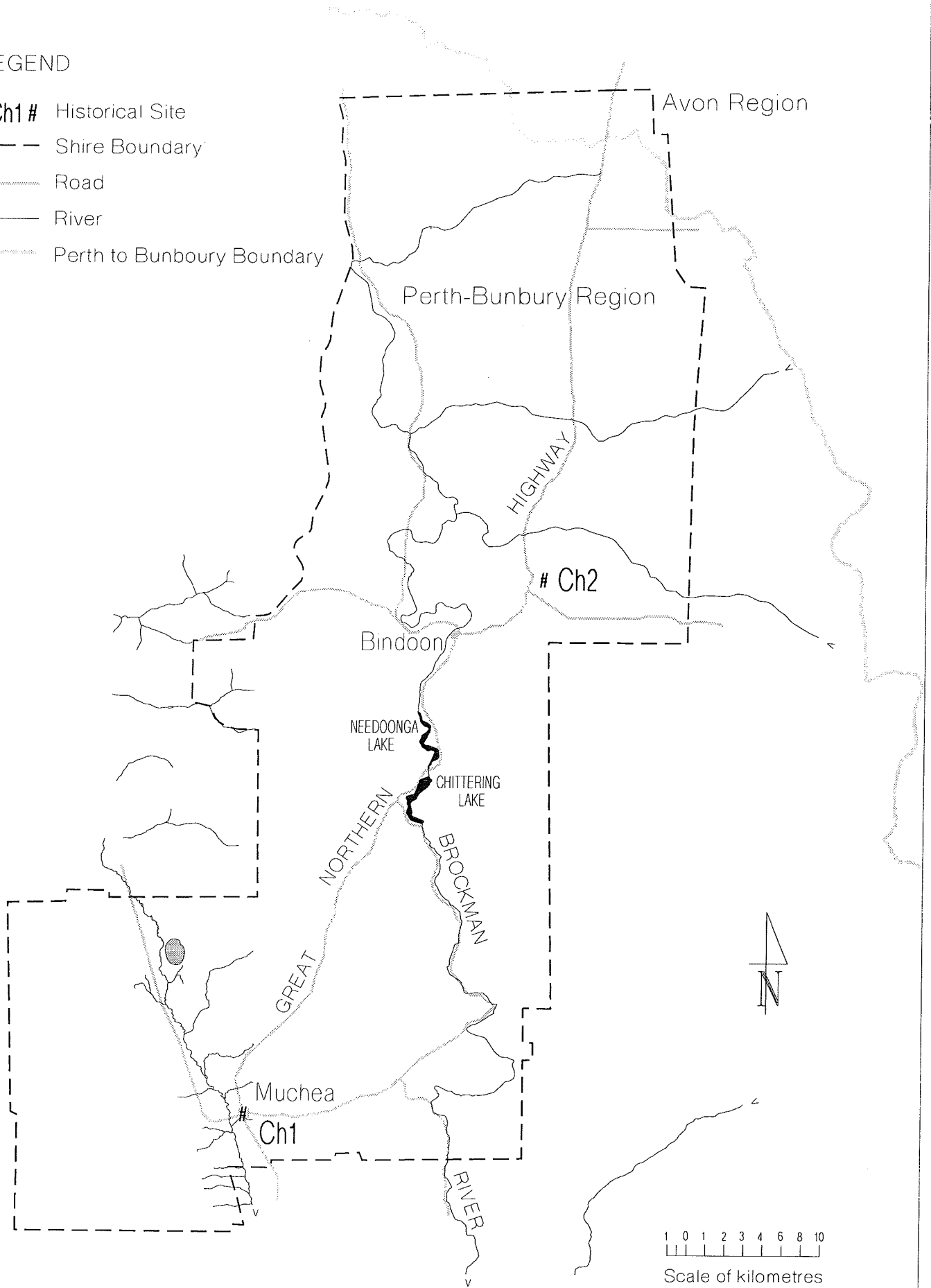
-  Perth-Bunbury Study Boundary
-  Shire Boundary
-  Road
-  River
-  # Ca1 Historical Site



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF CAPEL

LEGEND

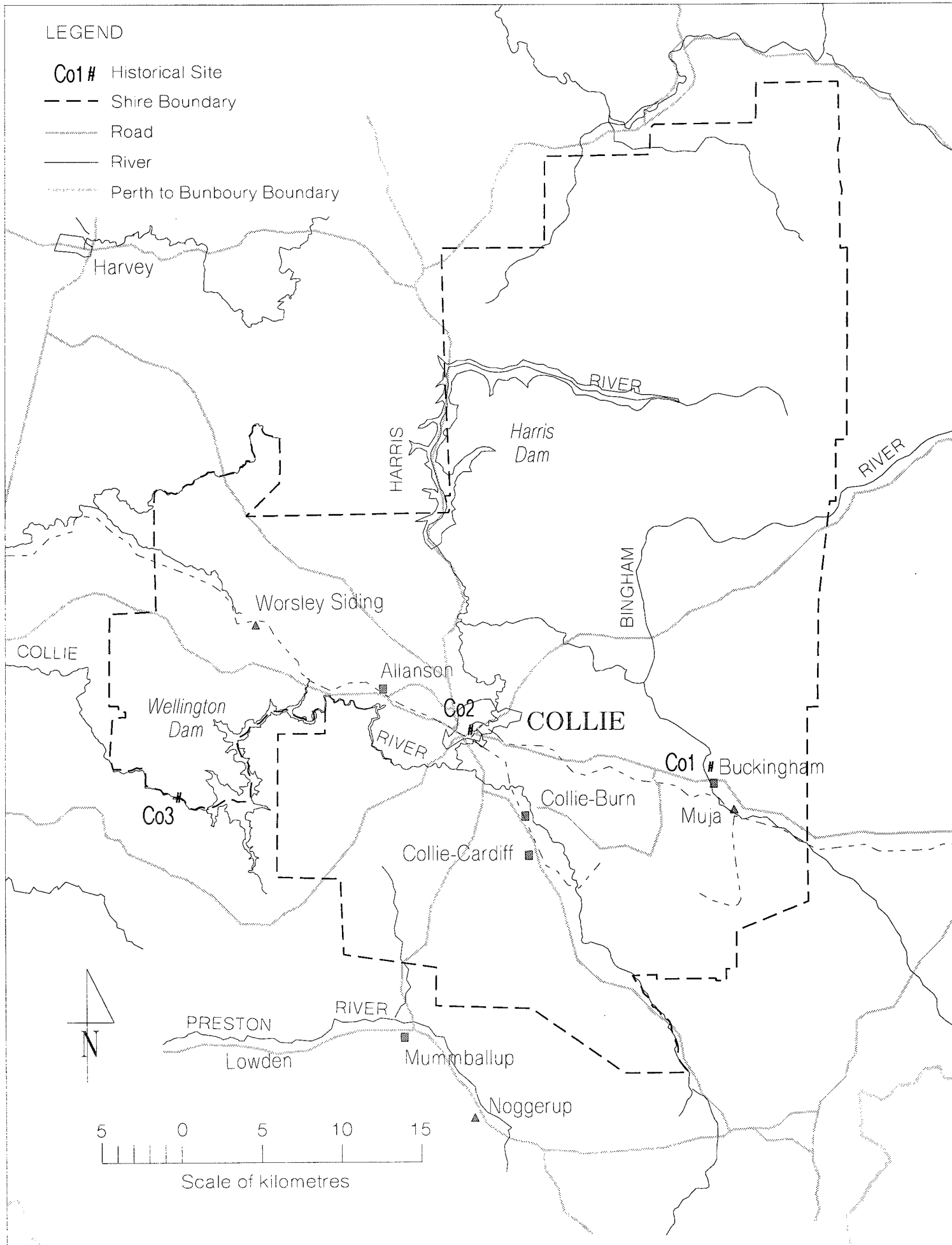
- Ch1# Historical Site
- Shire Boundary
- Road
- River
- Perth to Bunbory Boundary



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF CHITTERING

LEGEND

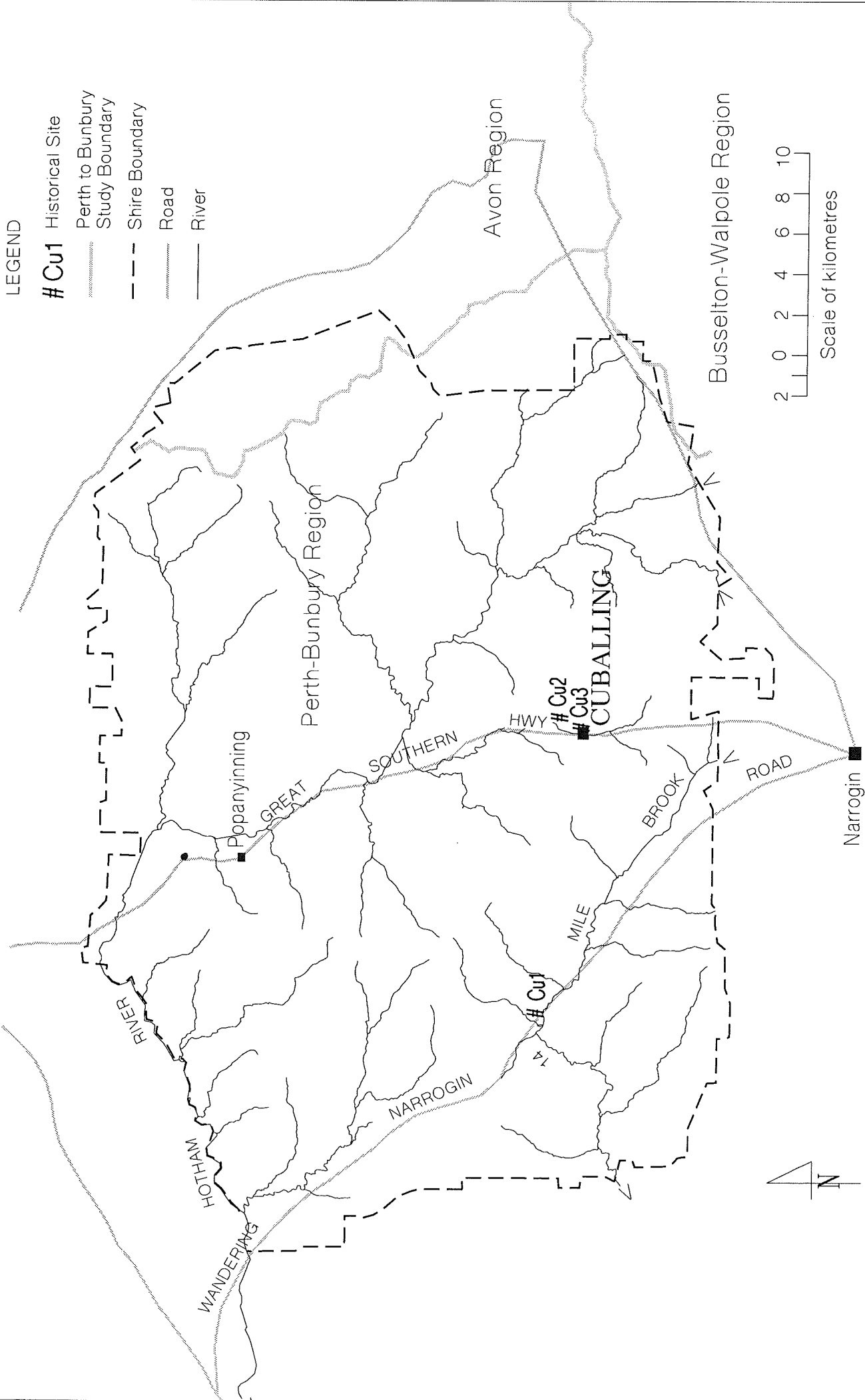
- Co1 # Historical Site
- - - Shire Boundary
- Road
- River
- ⋯ Perth to Bunboursy Boundary



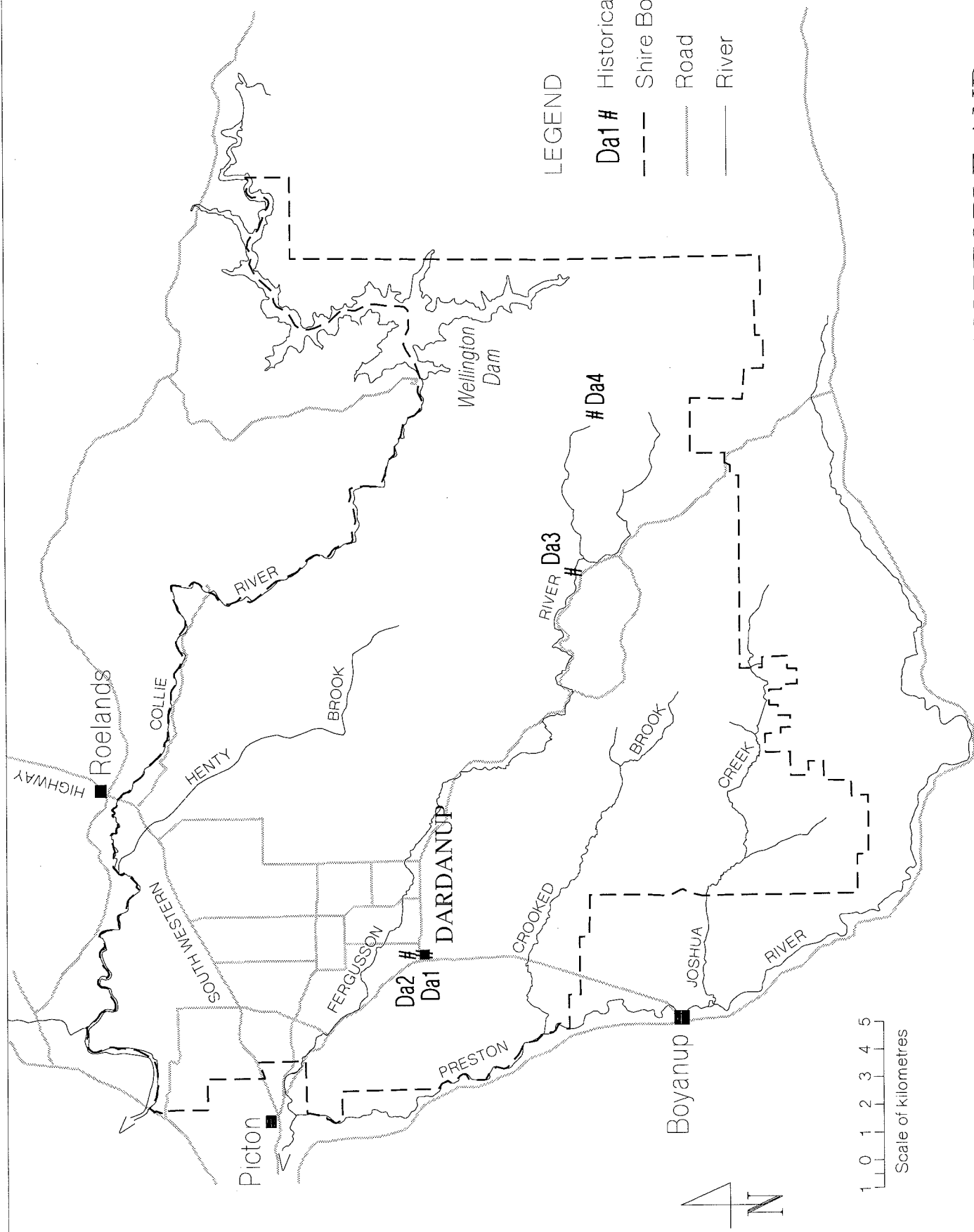
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF COLLIE

LEGEND

- # Cu1 Historical Site
- Perth to Bunbury Study Boundary
- Shire Boundary
- Road
- River

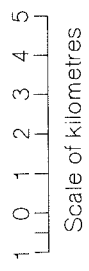
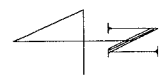


HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF CUBALLING

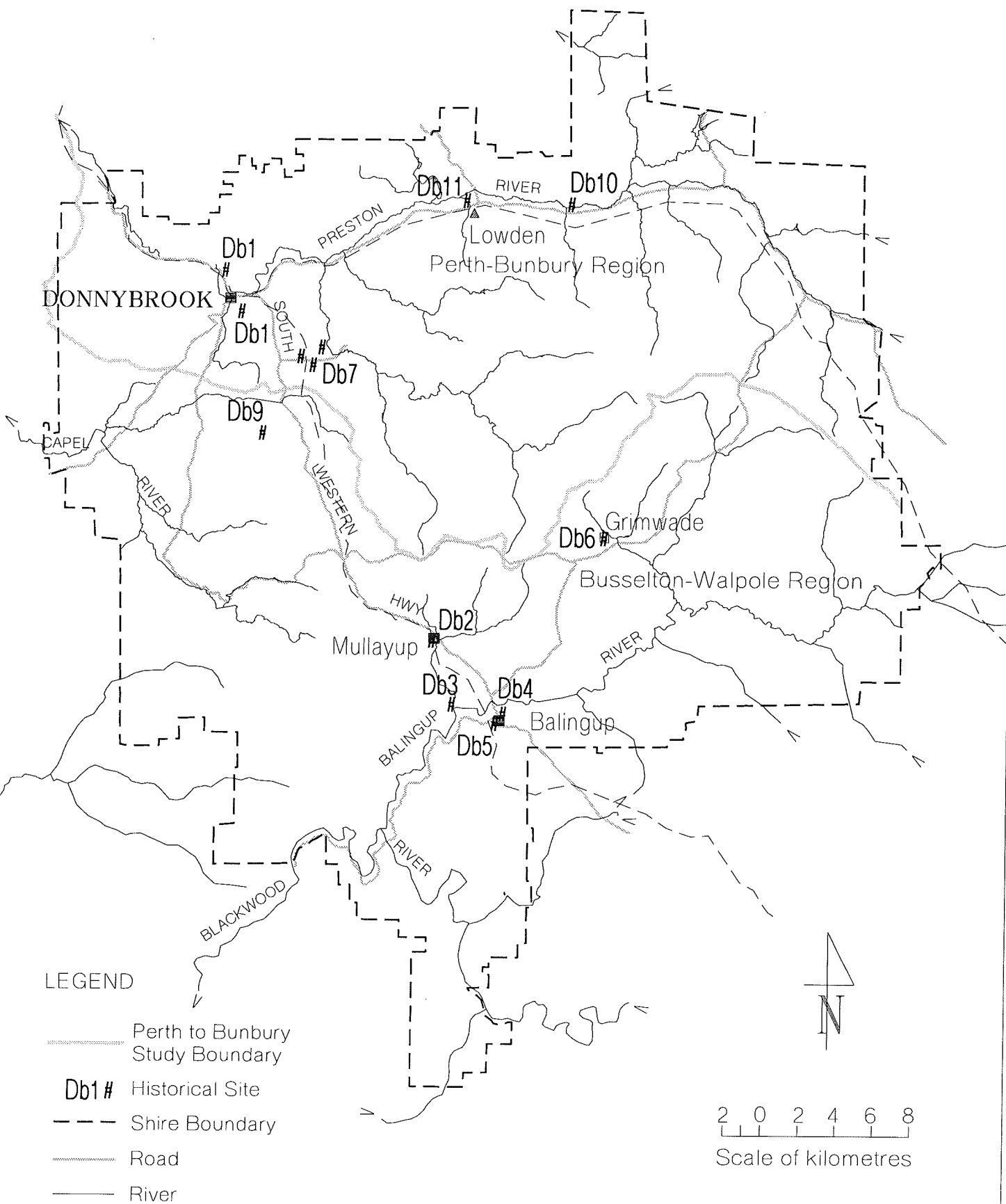


LEGEND

- Da1 # Historical Site
- Shire Boundary
- Road
- River

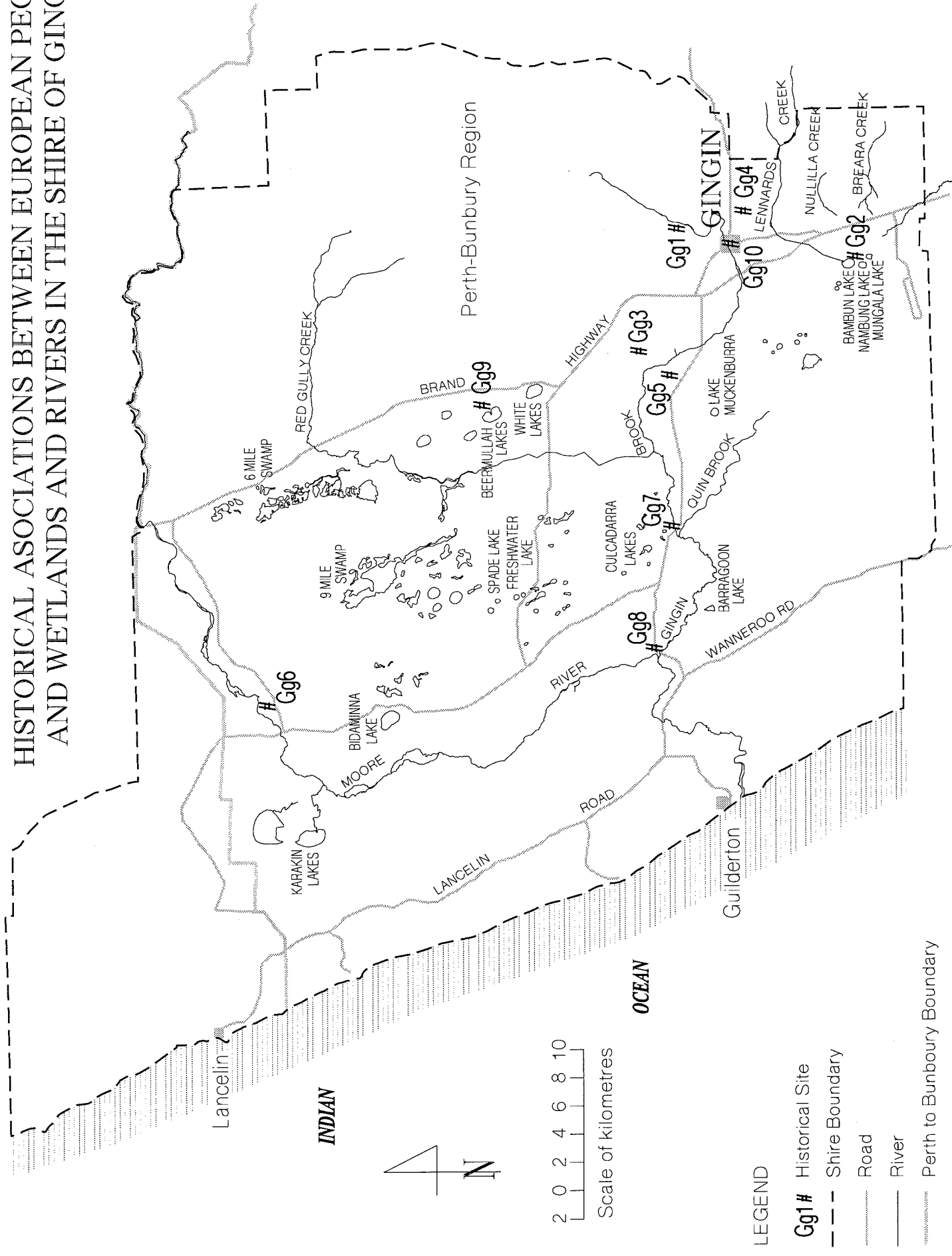


HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF DARDANUP

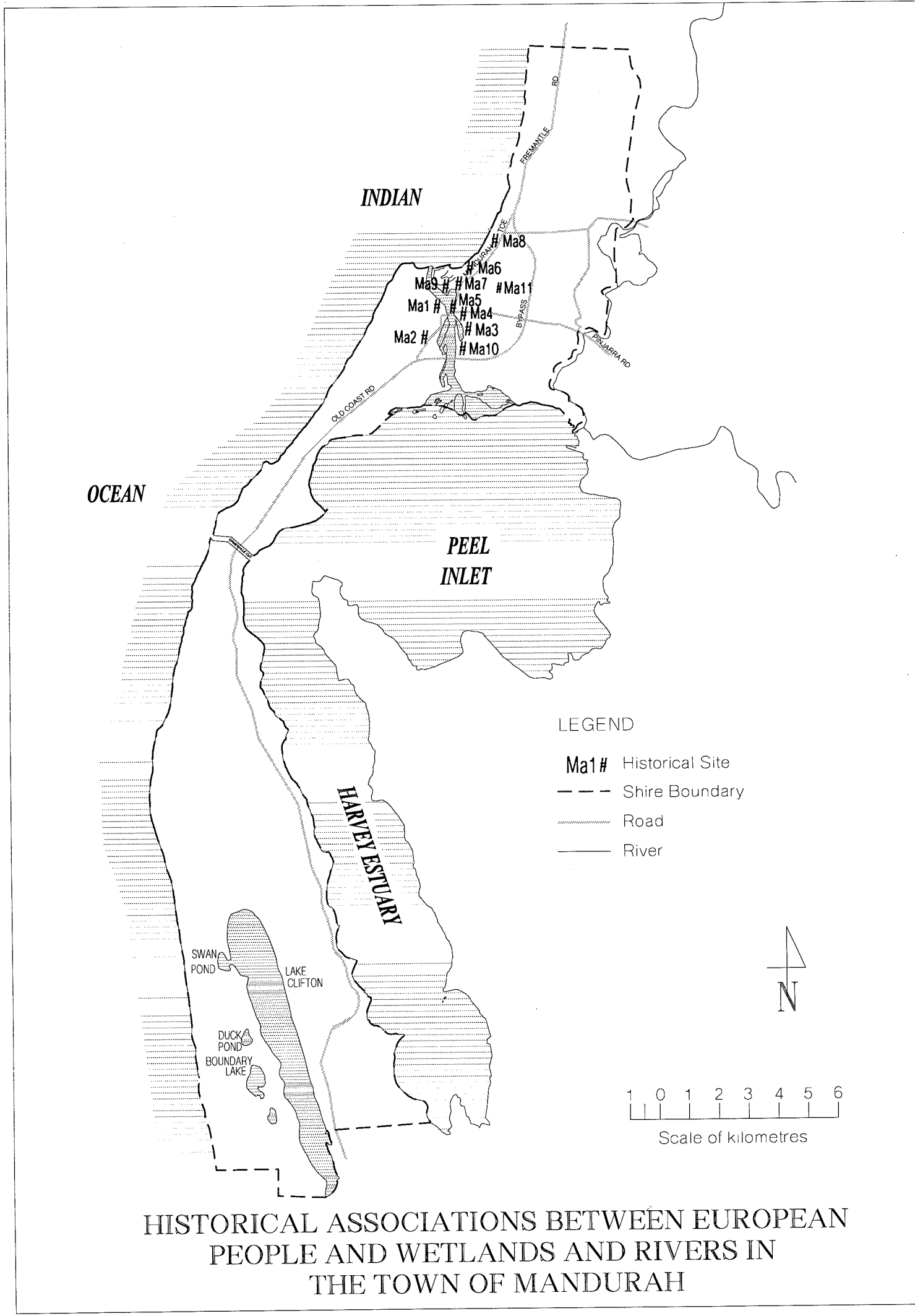


HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF DONNYBROOK-BALINGUP

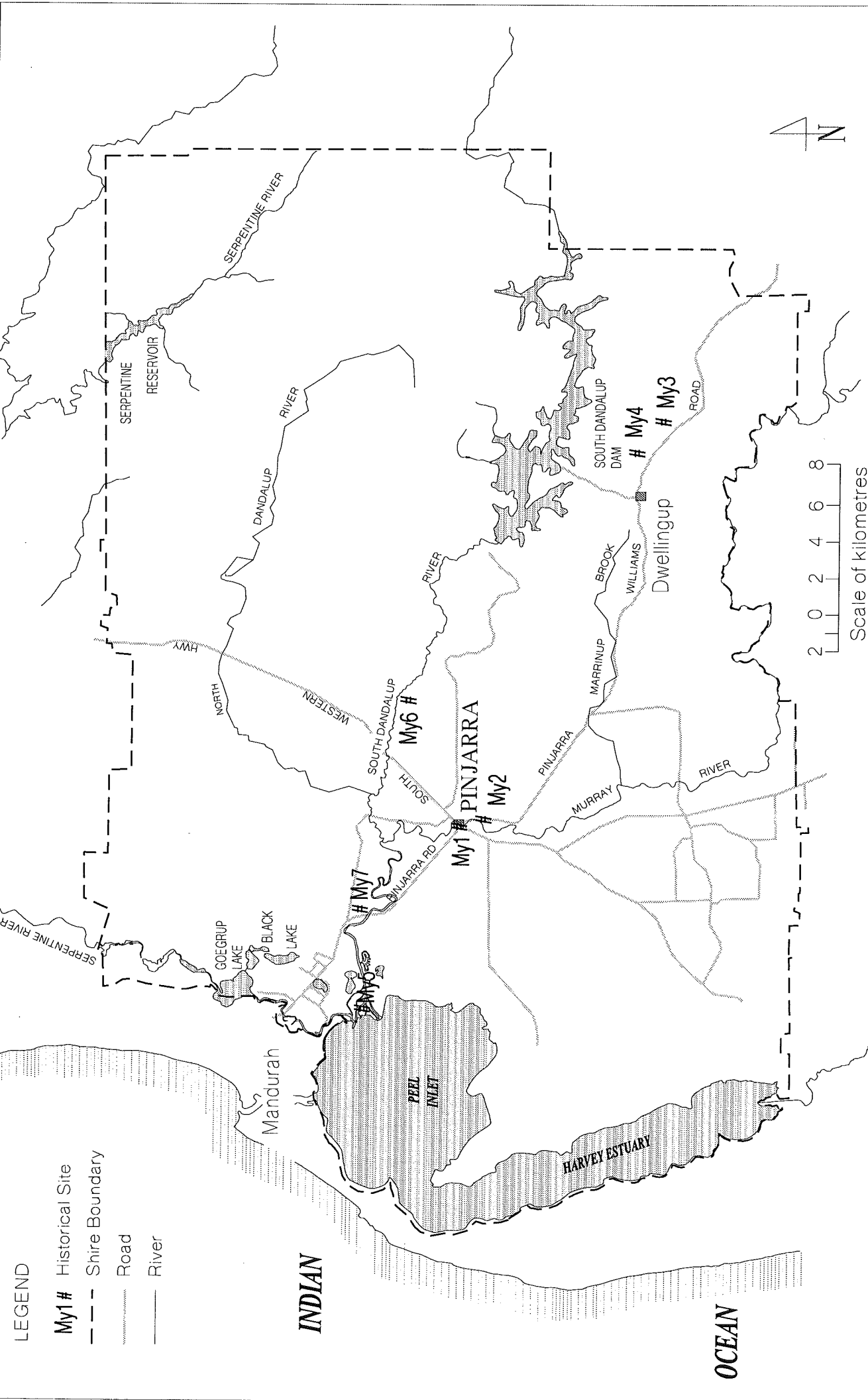
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF GINGIN



- LEGEND**
- Gg1#** Historical Site
 - Shire Boundary
 - Road
 - River
 - ||||| Perth to Bunbory Boundary

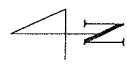
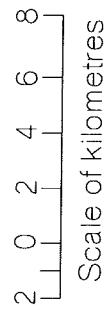


HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE TOWN OF MANDURAH

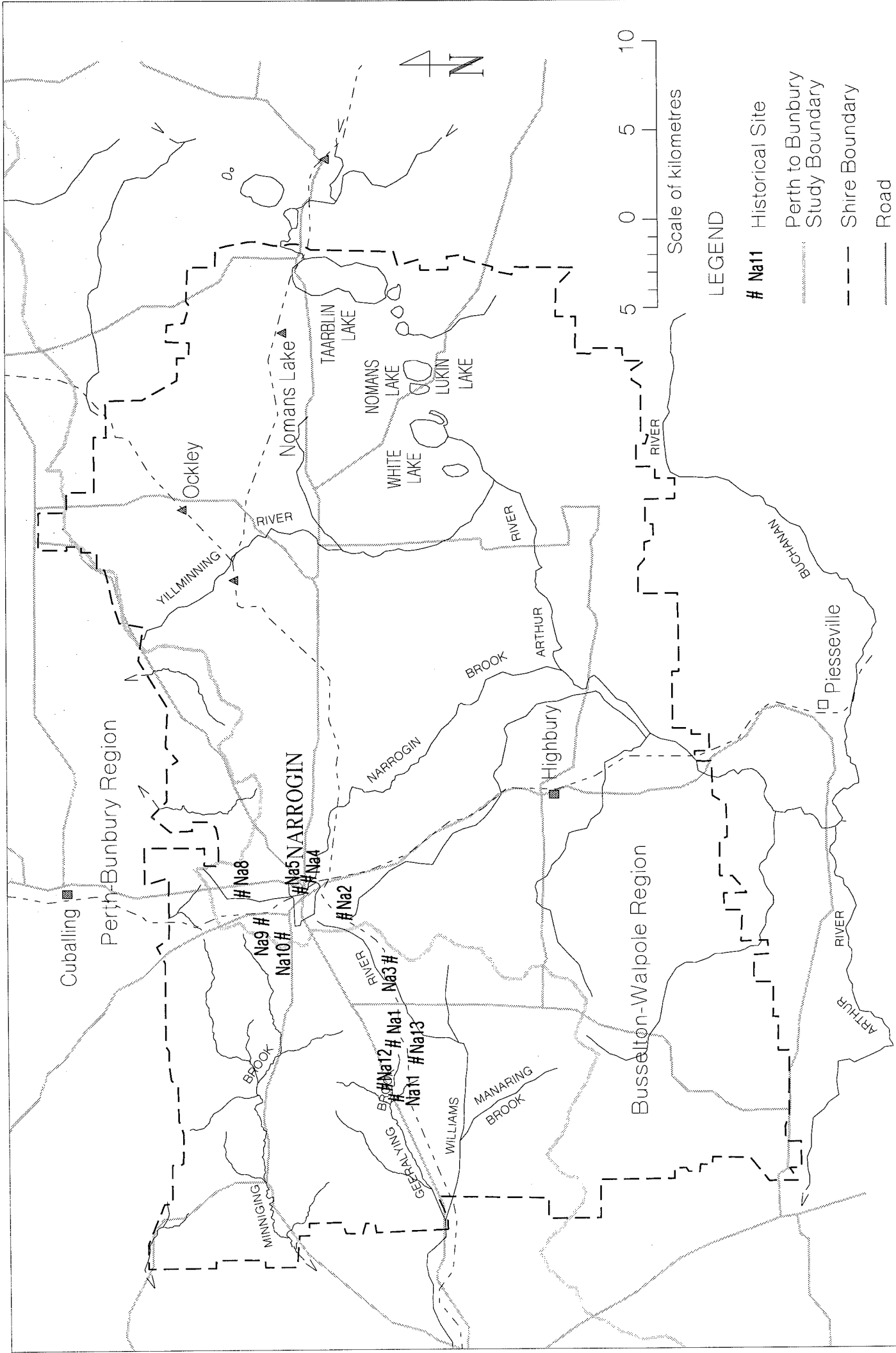


LEGEND

- My1 #** Historical Site
- Shire Boundary
- Road
- River



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF MURRAY



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF NARROGIN

LEGEND

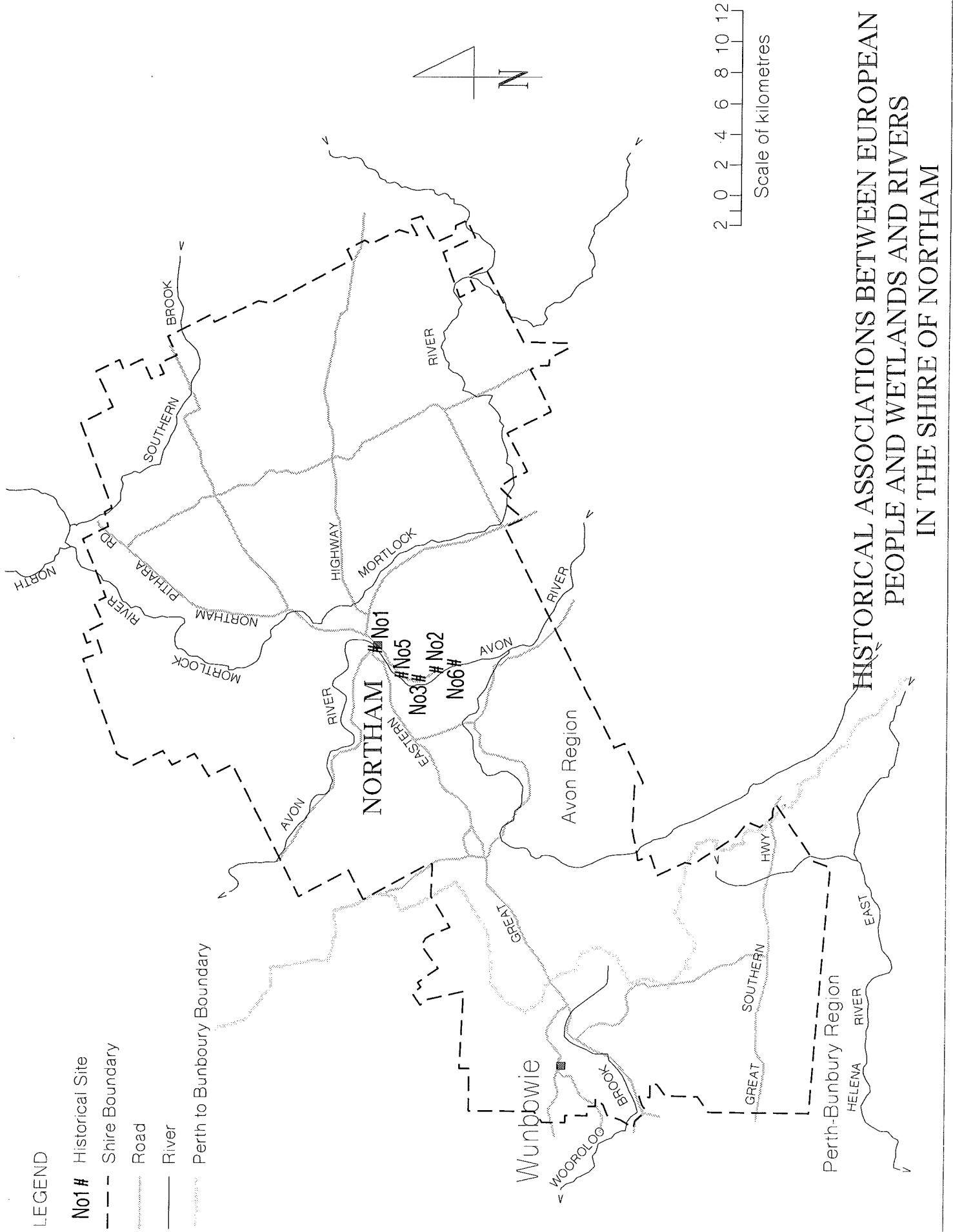
No1 # Historical Site

--- Shire Boundary

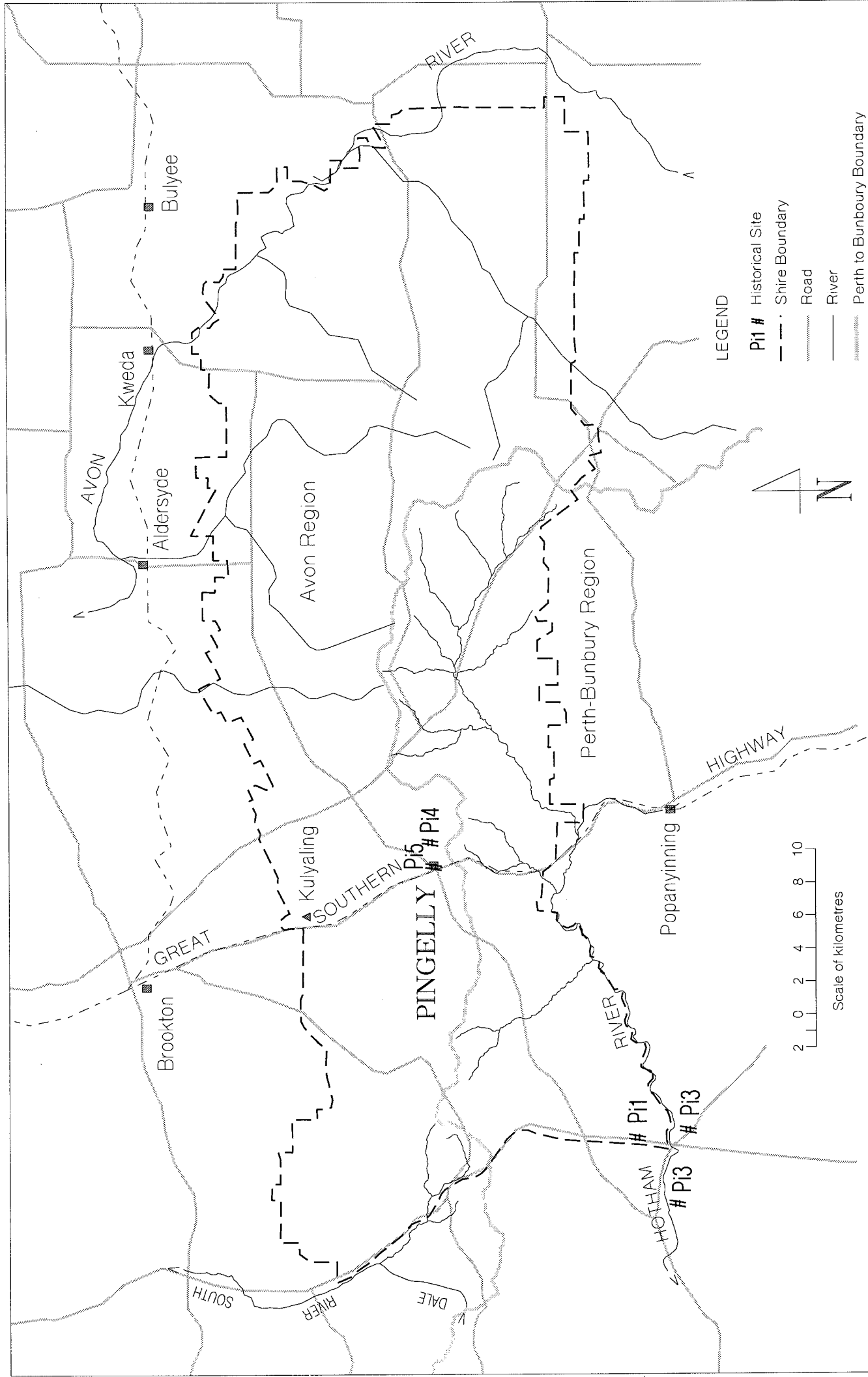
..... Road

— River

--- Perth to Bunbury Boundary



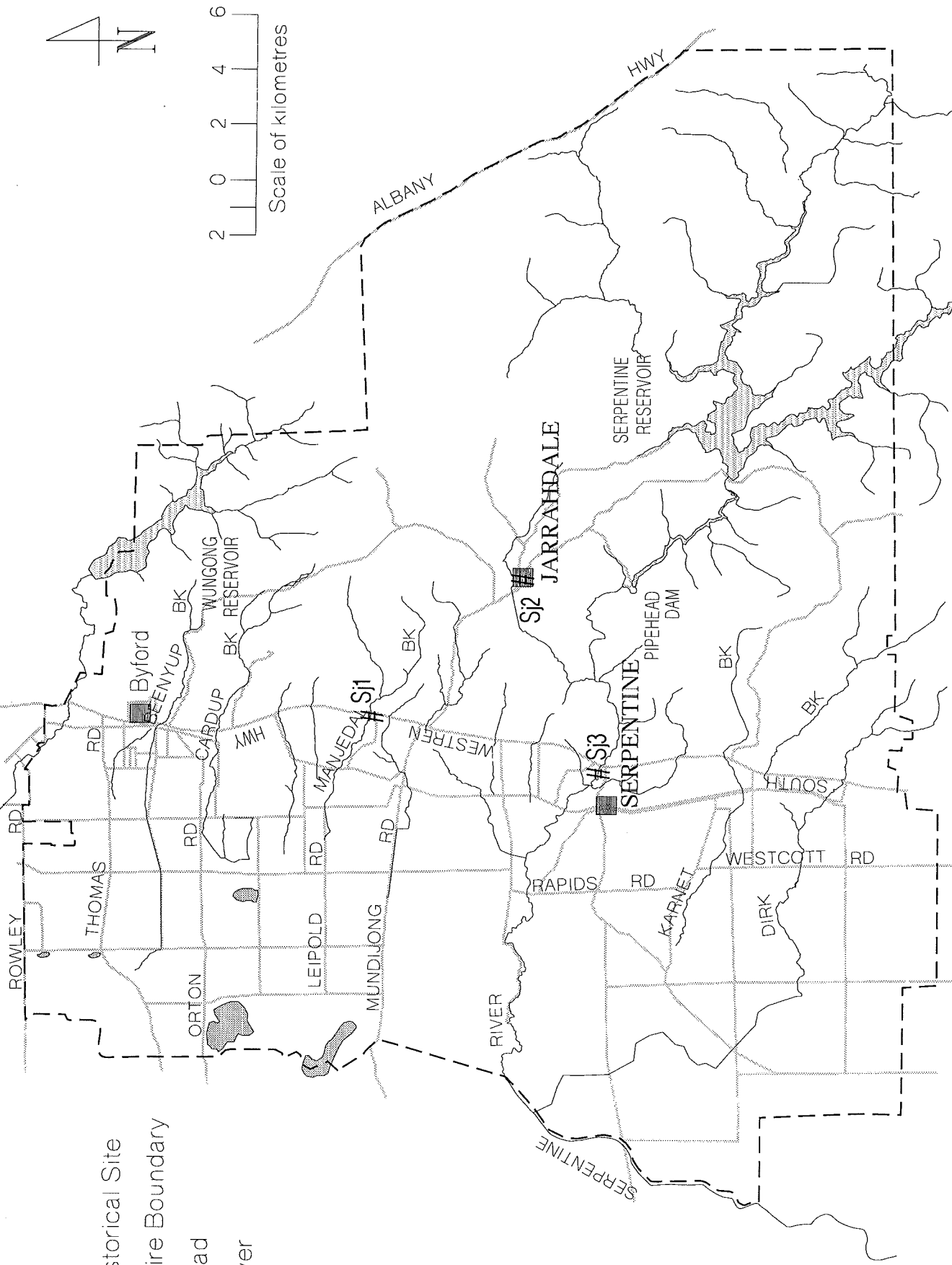
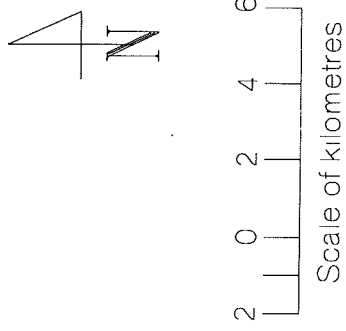
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN
PEOPLE AND WETLANDS AND RIVERS
IN THE SHIRE OF NORTHAM



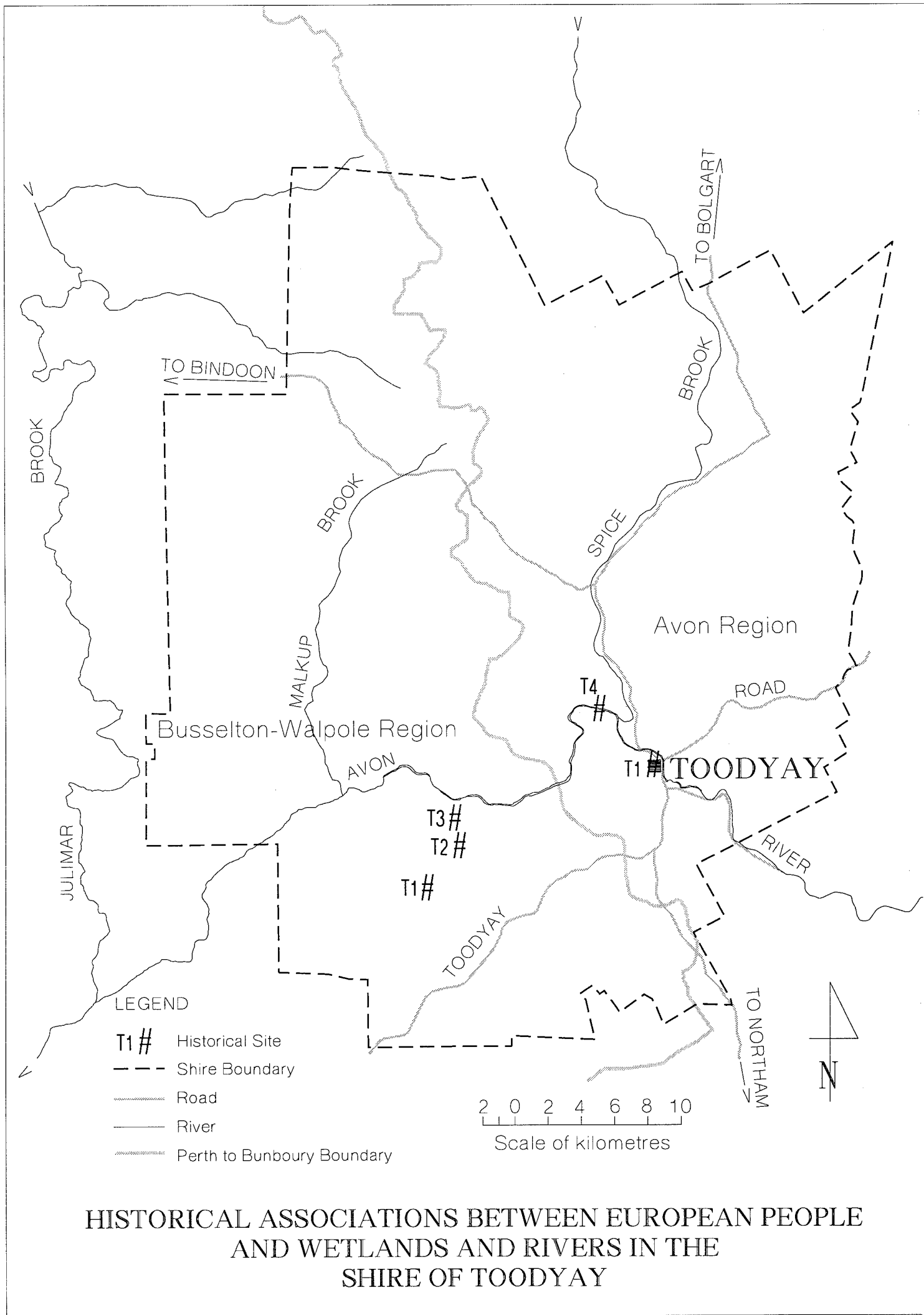
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF PINGELLY

LEGEND

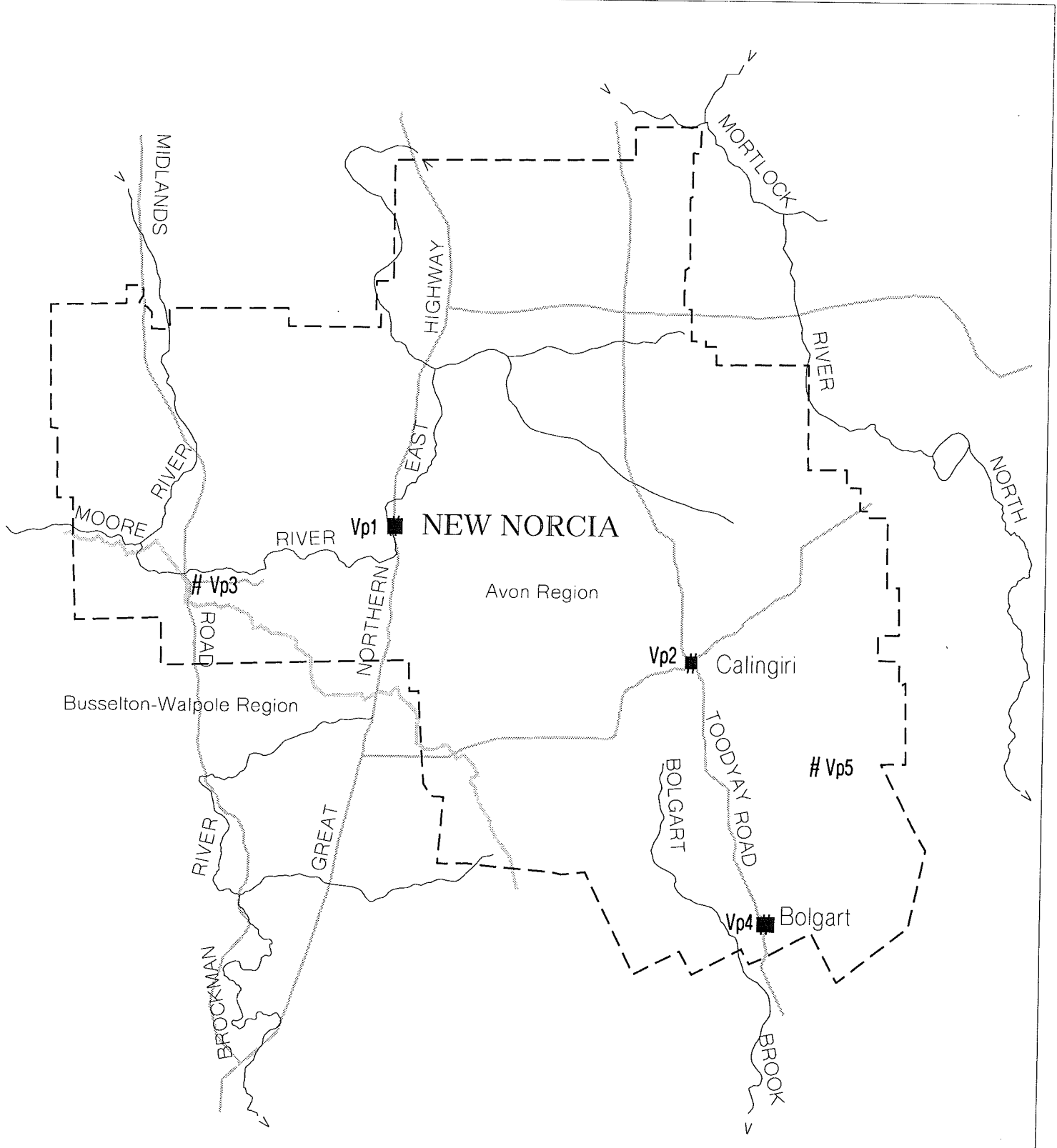
- Sj1 # Historical Site
- - - Shire Boundary
- Road
- River



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF SERPENTINE-JARRAHDAL

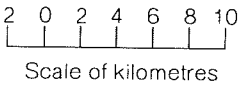


HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF TOODYAY

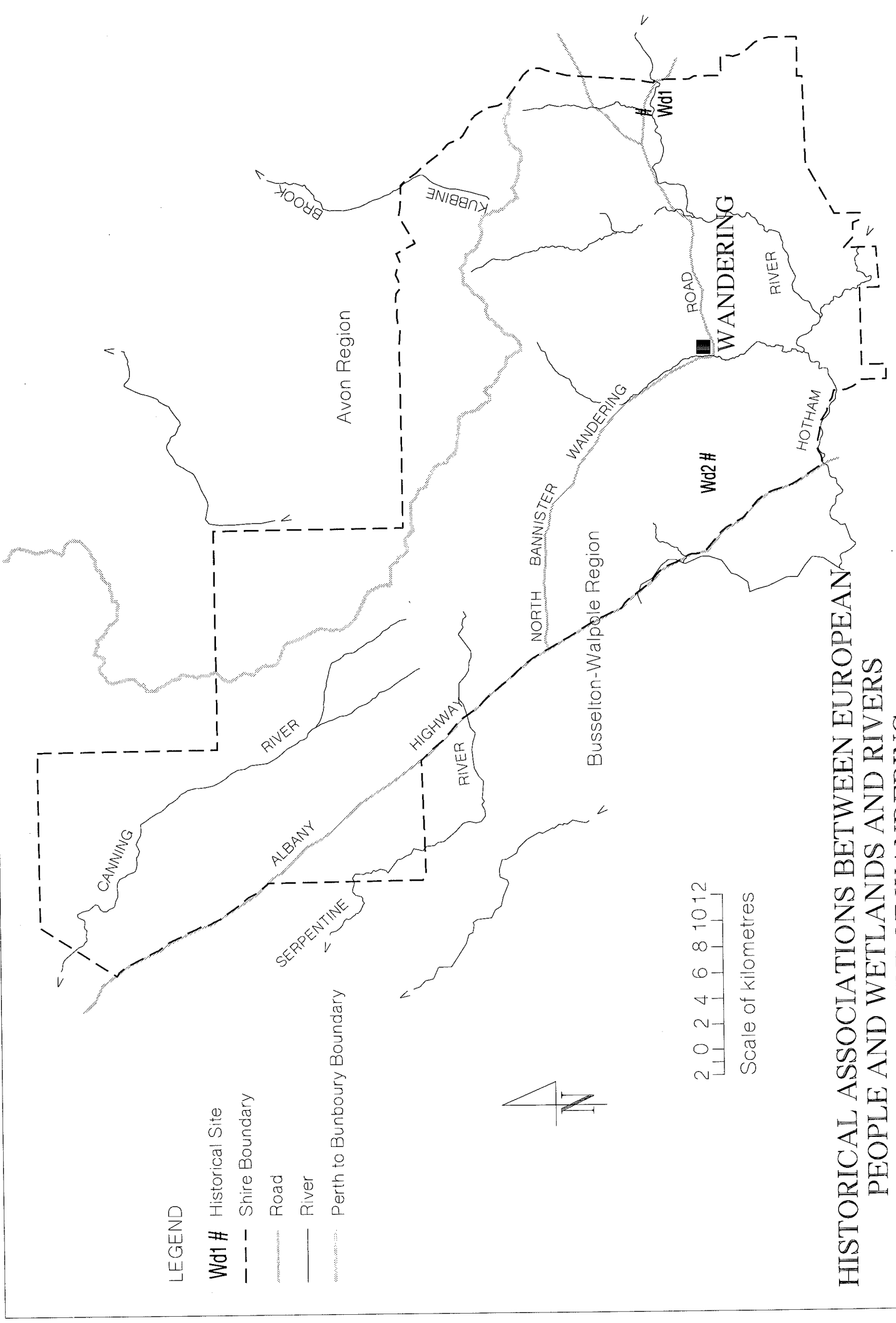


LEGEND

- Vp1# Historical Site
- - - Shire Boundary
- Road
- River
- Perth to Bunbory Boundary



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF VICTORIA PLAINS



LEGEND

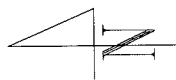
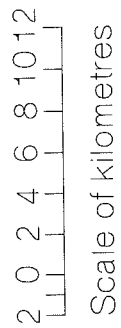
Wd1 # Historical Site

--- Shire Boundary

— Road

— River

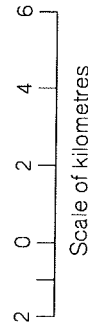
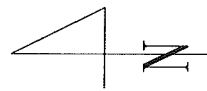
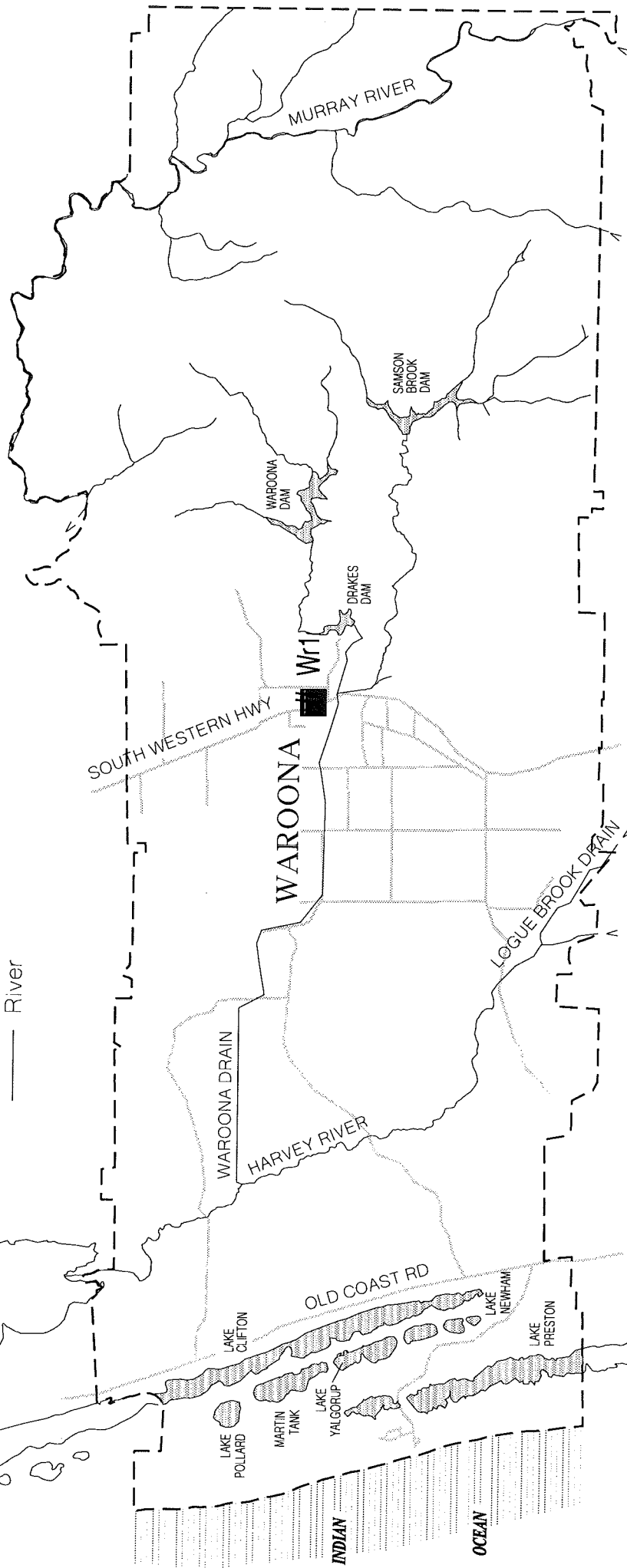
..... Perth to Bunbury Boundary



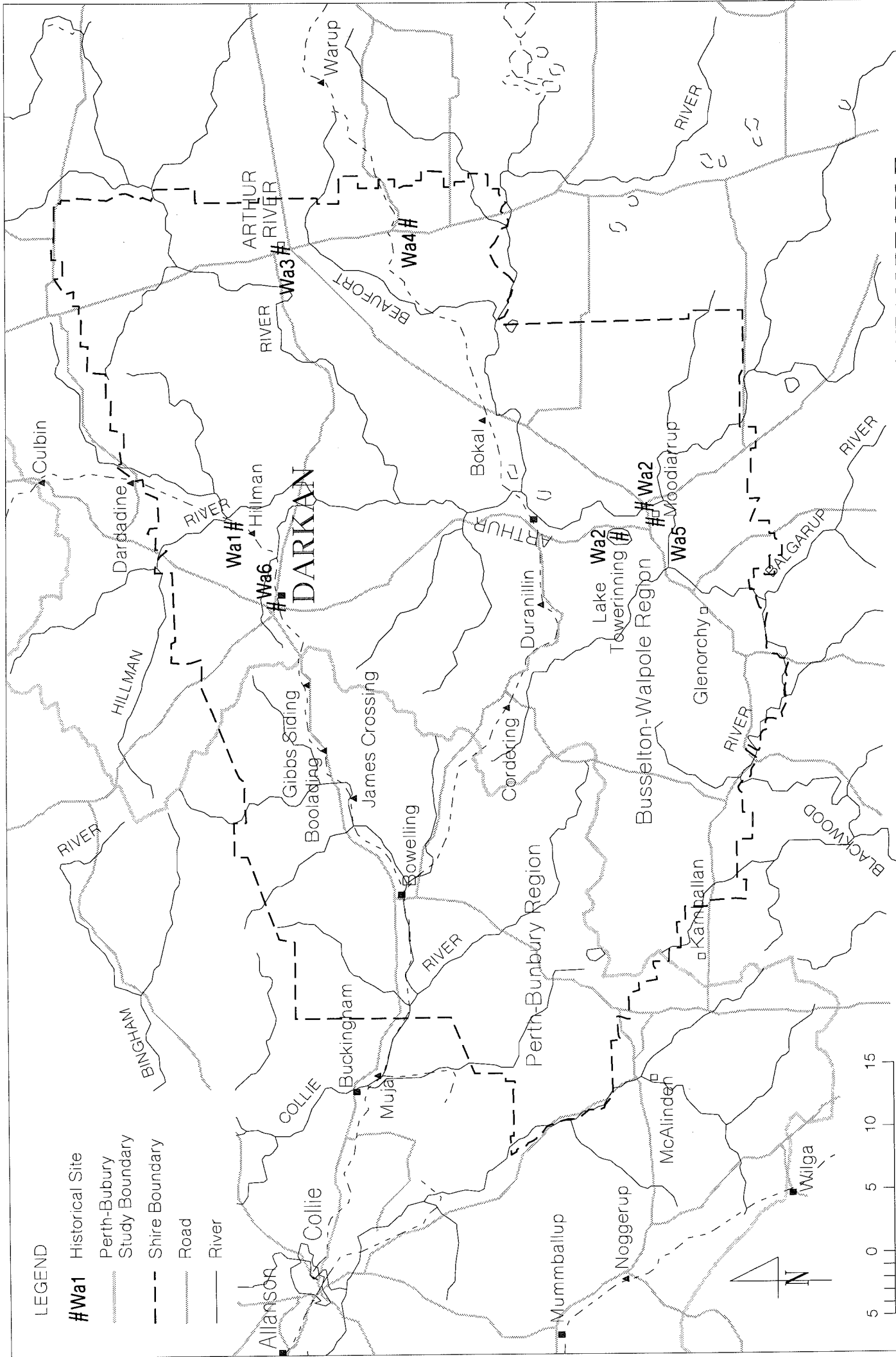
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF WANDERING

LEGEND

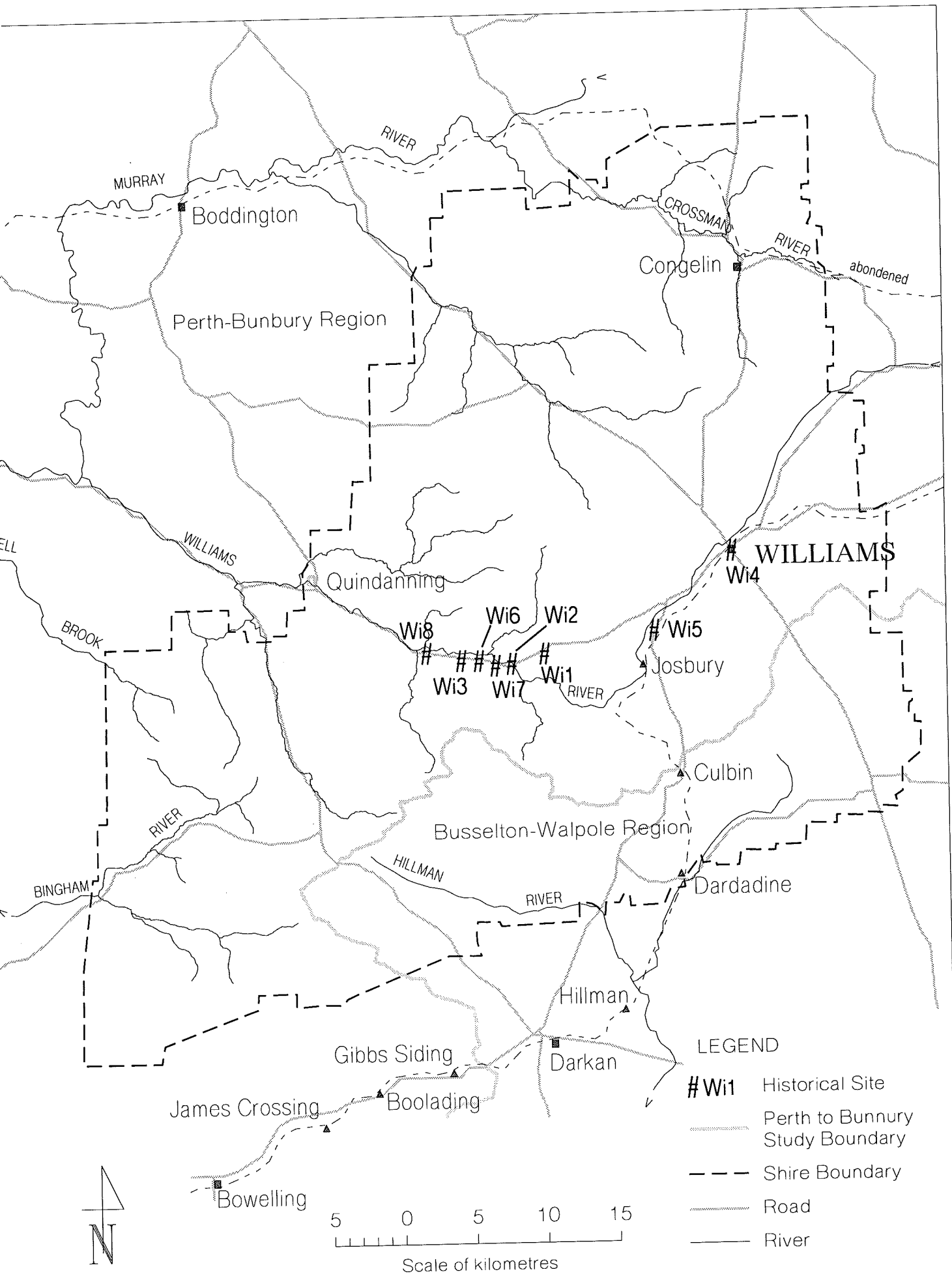
- Wr1 #** Historical Site
- Shire Boundary
- Road
- River



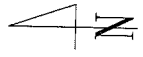
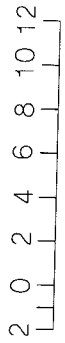
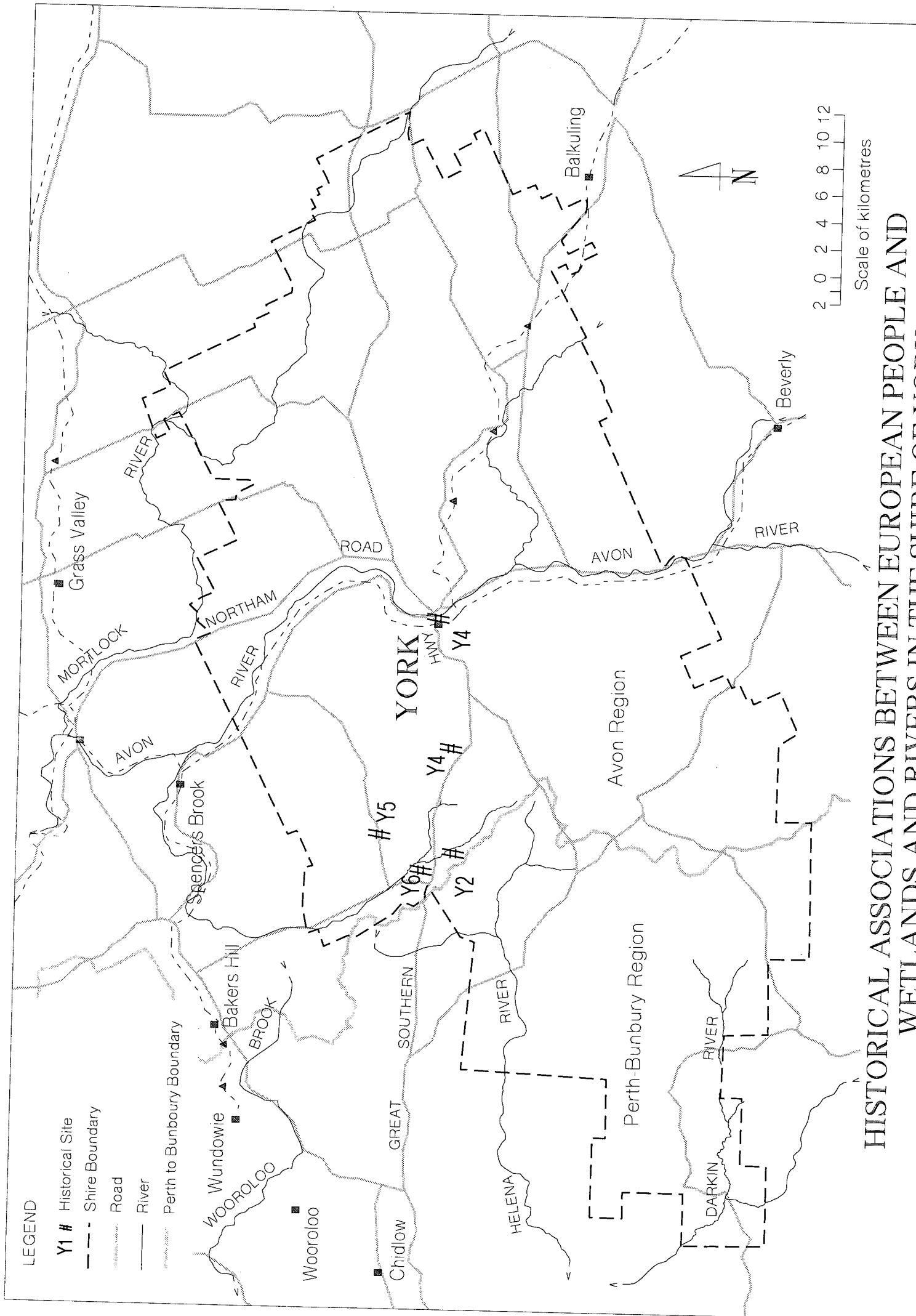
HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF WAROONA



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF WEST ARTHUR



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF WILLIAMS



HISTORICAL ASSOCIATIONS BETWEEN EUROPEAN PEOPLE AND WETLANDS AND RIVERS IN THE SHIRE OF YORK