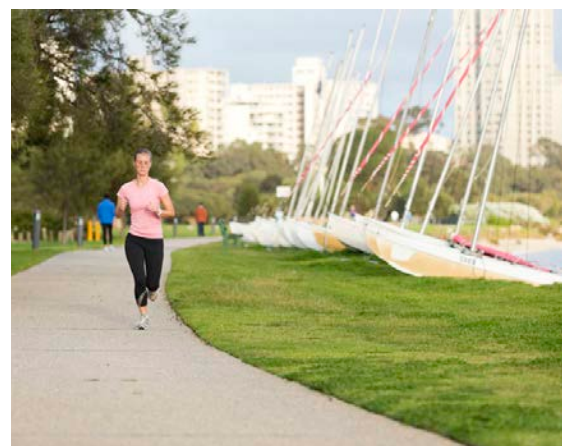
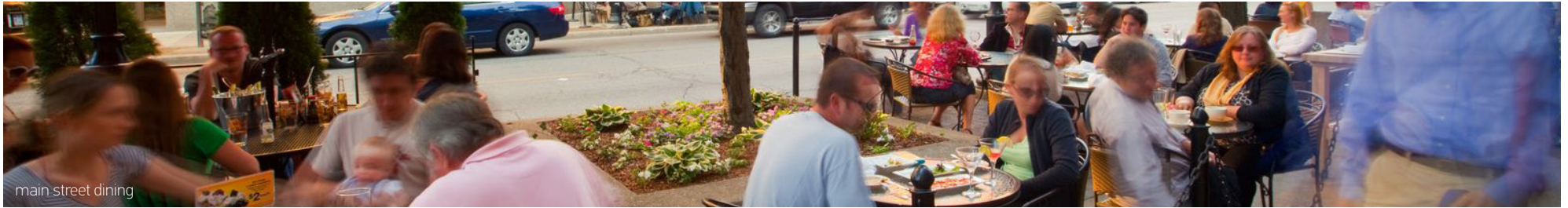


# SOUTH PERTH FORESHORE STRATEGY AND MANAGEMENT PLAN



MAY 2015





**City of South Perth**  
Civic Centre  
Sandgate Street  
SOUTH PERTH  
Western Australia 6151  
Telephone: (08) 9474 0777  
Facsimile: (08) 9474 2425  
[www.southperth.wa.gov.au](http://www.southperth.wa.gov.au)



**Swan River Trust**  
Technology Park, Western  
Precinct  
17 Dick Perry Avenue  
KENSINGTON  
Western Australia 6151  
Telephone: (08) 9278 0900  
[www.swanrivertrust.wa.gov.au](http://www.swanrivertrust.wa.gov.au)



**Urbis**  
Level 1  
55 St. Georges Tce  
PERTH  
Western Australia 6000  
Telephone: (08) 9356 0500  
Facsimile: (08) 9221 1779  
[www.urbis.com.au](http://www.urbis.com.au)



**NS Projects**  
Suite 4 Level 1  
437 Roberts Road  
SUBIACO  
Western Australia 6008  
Telephone: (08) 6363 0800  
Facsimile: (08) 6363 0899  
[www.nspm.com.au](http://www.nspm.com.au)



## SOUTH PERTH FORESHORE STRATEGY AND MANAGEMENT PLAN - DOCUMENT CONTROL:

DATE ISSUED	DESCRIPTION	REVIEWED BY	DATE SUPERSEDED
9 May 2015	Final May 2015	-	-
10 October 2014	Draft Revision 3 10 October 2014 for Swan River Trust approval	Swan River Trust	9 May 2015
5 September 2014	Draft Rev 2 5 September 2014 for council approval	Council (23 September 2013 Council Meeting)	10 October 2014
6 August 2014	Draft Rev1 6 August 2014 for Council review and endorsement	Council	5 September 2014
21 July 2014	Draft Rev0 21 July 2014 for Stakeholder Review	Swan River Trust; COSP Staff/Internal Reference Group; State Heritage Office; SJMP Advisory Group	6 August 2014
7 July 2014	Draft 7 July 2014 for Internal Review	COSP staff	21 July 2014
13 May 2014	Draft May 2014 for Internal Review	COSP staff	7 July 2014
29 April 2014	Draft April 2014 for Internal Review	COSP staff	13 May 2014
10 February 2014	Draft February 2014 for Internal Review	COSP staff	29 April 2014
1 July 2013	SPF 01 Draft for Stakeholder Engagement	Out for Comment – SPF Survey and other Stakeholder engagement	February 2014

## GLOSSARY & ACRONYMS:

<b>AHD</b>	Australian Height Datum, being the height above mean sea level	<b>LGA</b>	Local Government Authority	<b>ROS</b>	Regional open space
<b>Alienated Land</b>	Land held in freehold.	<b>Node</b>	A node is a recognised precinct of the foreshore with distinct characteristics, opportunities and management issues. 10 nodes were identified, named, and used throughout this document for the South Perth Foreshore.	<b>SJMP</b>	Sir James Mitchell Park
<b>AMP</b>	Asset Management Plan			<b>SP01, SP02 etc.</b>	Stormwater catchment areas of the City of South Perth, South Perth Catchment 01, Catchment 02 etc.
<b>ASS</b>	Acid sulphate soil/s			<b>SPF</b>	South Perth Foreshore
<b>ASSMP</b>	Acid sulphate soils Management Plan			<b>SPF01</b>	South Perth Foreshore 2013 and Beyond Part 01 Feedback and Opportunities (1 July 2013 draft)
<b>CoSP</b>	City of South Perth	<b>Piazza</b>	Also 'Plaza', 'Square': these refer to paved open pedestrian spaces commonly found at the heart of a town centre. These provide important gathering places and important foci for a range of activities, public interactions and the development and enhancement of community cohesion and social capital. Activities undertaken in piazzas and squares are an important aspect of urban fabric and community wellbeing.	<b>SPF02</b>	South Perth Foreshore 2013 and Beyond Part 02 Context and Background (1 July 2013 draft)
<b>Control of Reserve</b>	Reserves are generally under the control of Landgate, but may be placed under the control of an Authority or organisation.			<b>The SPF Plan</b>	South Perth Foreshore Strategy and Management Plan (this document)
<b>Crown Land</b>	All land except alienated land (includes reserved and leased Crown land, tidal waters, reclaimed land, river beds and lakes).			<b>The City</b>	The City of South Perth
<b>DoT</b>	Department of Transport			<b>The survey</b>	South Perth Foreshore 2013 and Beyond Part 03 Survey (1 July – 30 August 2013)
<b>EMP</b>	Environmental Management Plan	<b>POS</b>	Public open space	<b>The Trust</b>	Swan River Trust
<b>Fee Simple</b>	Also known as <b>Freehold</b> . The greatest estate that can be held by a person without being the absolute owner, which is the Crown. About 17.7 million hectares, or 7% of the State is freehold land.	<b>PTA</b>	Public Transport Authority of Western Australia	<b>WOF</b>	Whole of foreshore
<b>GPT</b>	Gross Pollutant Trap	<b>Resumption</b>	Land may be resumed for a variety of public purposes, generally using the powers of the Public Works Act, 1902. The Crown, a Crown Instrumentality, or a Local Authority has the right to resume land. The process of resuming land frees it of all encumbrances, rights or easements. Notice of such resumption is published in the Government Gazette and takes effect immediately on publication. The act of resumption gives owner(s) certain rights to claim compensation.	<b>WSUD</b>	Water sensitive urban design
<b>KFFMP</b>	Kwinana Freeway Foreshore Management Plan				
<b>Landgate</b>	Landgate formerly Department of Land Administration (DOLA).				
<b>Lease</b>	A grant of possession of property for a number of years at specified rentals and subject to various conditions. The registered proprietor has certain re-entry rights if the lessee defaults by not observing the conditions of the lease, or by not paying the specified rentals.				

# SOUTH PERTH FORESHORE STRATEGY AND MANAGEMENT PLAN

## ACKNOWLEDGMENTS:

The following people are acknowledged for their assistance and contribution towards the development of the South Perth Foreshore Strategy and Management Plan.

### **The Mayor and Councillors**

*City of South Perth*

### **Karen Lancaster**

*Landscape Architect, City of South Perth*

### **Mark Taylor**

*City Environment Manager/ Acting Infrastructure  
Director, City of South Perth*

### **Geoff Colgan**

*Acting Manager City Environment, City of South Perth*

### **The South Perth Foreshore Internal Reference Group**

*City of South Perth staff from various departments*

### **Paul Stephens**

*Swan River Trust*

**City of South Perth residents, other survey  
respondents, and all other stakeholders**

### **Sir James Mitchell Park Advisory Group**

*All members of the group 2012 – 2014*

### **City of South Perth Sustainability Advisory Group**

*All members of the group 2012 - 2014*

### **Marion Fredriksson, and Urbis team**

*Urbis*

### **Neill Stevens, and NSP team**

*NS Projects*

### **Glen McLeod-Thorpe**

*Swan River Trust*



## CONTENTS:

<b>1.0</b>	<b>INTRODUCTION</b>	6	<b>4.0</b>	<b>STRATEGY &amp; MANAGEMENT PLAN</b>	36
<b>2.0</b>	<b>EXECUTIVE SUMMARY</b>	8	4.1	Management Plan	36
	Project Delivery Strategy	8	4.2	Project Objectives	36
	The South Perth Foreshore – Site, Context and Background	8	4.3	Strategies	37
	The SPF Process – Planning and Stakeholder Engagement	9	4.3.1	Whole of Foreshore Strategies	39
	The SPF Plan	10	4.3.2	Foreshore Nodes – Node-specific Strategies	39
	Whole of Foreshore (WOF) Strategies – Summary Table	11	4.3.3	Node Priorities	39
	Node Strategies - Summary Table	12	4.3.4	Strategies	39
<b>3.0</b>	<b>THE SOUTH PERTH FORESHORE</b>	14	■	Whole of Foreshore: <b>Transport and Access</b>	40
3.1	Site location and description	14	■	Whole of Foreshore: <b>Infrastructure</b>	41
3.2	Site context	14	■	Whole of Foreshore: <b>Activation</b>	42
	Regional context	14	■	Whole of Foreshore: <b>Culture, Heritage &amp; Environment</b>	43
	Local context	14	●	Foreshore Node N1: <b>Mends Street (Piazza and Promenade)</b>	44
	Land Details, Ownership and Zoning	14	●	Foreshore Node N2: <b>Coode Street</b>	46
	Climate	16	●	Foreshore Node N3: <b>Mends Street Beach</b>	47
3.3	Background	16	●	Foreshore Node N4: <b>Coode Street Beaches</b>	48
	Historical	16	●	Foreshore Node N5: <b>Mill Point</b>	49
	Management strategies/ plans and policies	19	●	Foreshore Node N6: <b>Deck, Melaleuca Grove, Scented Garden</b>	50
	Path to Date – 2001 on	19	●	Foreshore Node N7: <b>The Lakes</b>	51
	Case Studies	20	●	Foreshore Node N8: <b>Esplanade West</b>	52
	Drafts of this document and Project Timeline	21	●	Foreshore Node N9: <b>Flagpole</b>	53
3.4	Existing site conditions and management issues	21	●	Foreshore Node N10: <b>Ellam Street</b>	54
	Geology and Soils	21	<b>5.0</b>	<b>PROJECT DELIVERY STRATEGY</b>	56
	Contaminated sites and Acid Sulfate Soils	21	5.1	Priorities and Timing	56
	Topography	22	5.2	Funding, Feasibility Framework and Implementation Plan	57
	River's edge- History, Walls and Beaches	22	<b>APPENDICES</b>		59
	Hydrological Processes including Stormwater Management	24	Appendix 01	Vegetation: Floristic Complexes, Existing Vegetation and Weeds	60
	Environment, Habitat Value & Biodiversity	27	Appendix 02	Fauna of the South Perth Foreshore and aquatic environment of Perth Waters	66
	Infrastructure and Services	30	Appendix 03	Post-European Settlement history – Historical Development & Land Use	68
3.5	Cultural and Social Value and Use	31	Appendix 04	Stakeholder Engagement	74
	Aboriginal heritage attributes	31	Appendix 05	Council Decision 10.2.1 South Perth Foreshore 2013 and Beyond Project Status 26 November 2013 and Actions taken in response to the Motion	80
	Post European settlement heritage attributes	32	Appendix 06	Scheme Maps	82
	Current site usage	32	Appendix 07	South Perth Foreshore aerial photo February 2014	90
	Recognised Community aspirations	34	Appendix 08	Map & Tables of Land details and ownership	91
			<b>REFERENCES</b>		94

# 1.0 INTRODUCTION

The City of South Perth (the City) in 2012 commenced a visioning process to guide future activities and development along the South Perth Foreshore in response to the City's Strategic Plan 2013-2023 (then in draft). The earliest stage of the project was named 'The South Perth Foreshore Vision' which developed into the stage of the project defined as the 'South Perth Foreshore 2013 and Beyond'. This was the body of work contained within the three draft documents (1 July 2013):

- Part 01 Feedback and Opportunities
- Part 02 Background and Context; and
- Part 03 The Survey (My Foreshore Our Future feedback period).

This three part document articulated a vision for the revitalisation of the South Perth foreshore, intended as a guiding document that captured the 'essence' of the project in the form of high-level requirements, design constraints and gave an overview of the project framework. The (draft) objectives and opportunities for the foreshore were the subject of extensive stakeholder feedback from late 2012 throughout 2013, to develop this final document, South Perth Foreshore Strategy and Management Plan (the SPF Plan).

The primary aim in establishing this SPF Plan is to balance the competing demands for use, development and management of this precious regional reserve / Regional Open Space (ROS) with the need to conserve and enhance a functional healthy river and foreshore environment. This document communicates the fundamental 'why and what' for the South Perth Foreshore and should be used as a gauge against which all future decisions for the site are validated.

The extent of the South Perth Foreshore is illustrated in *Figure 01*.

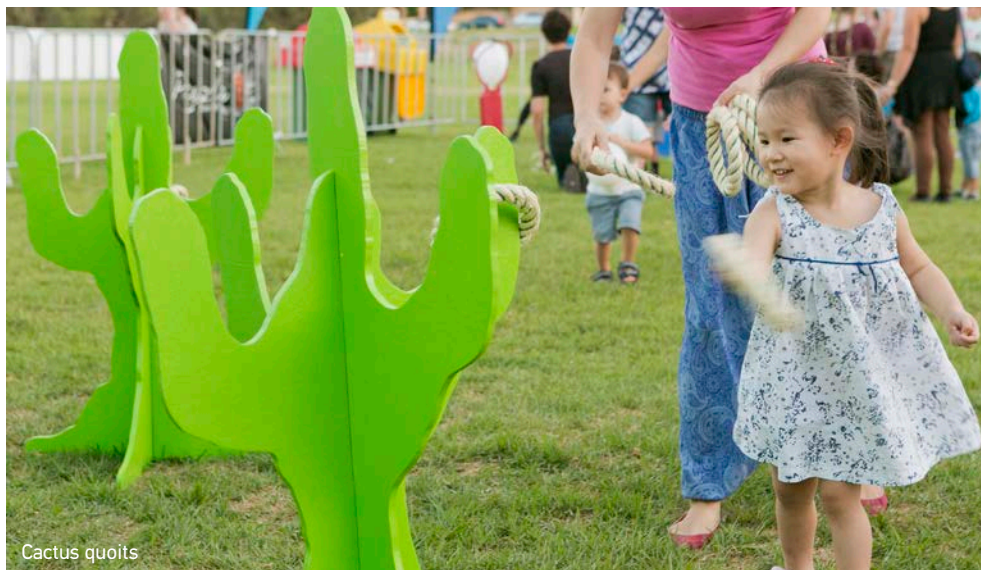


FIGURE 01: PROJECT SITE



Existing site condition east of Mand's Street Jetty





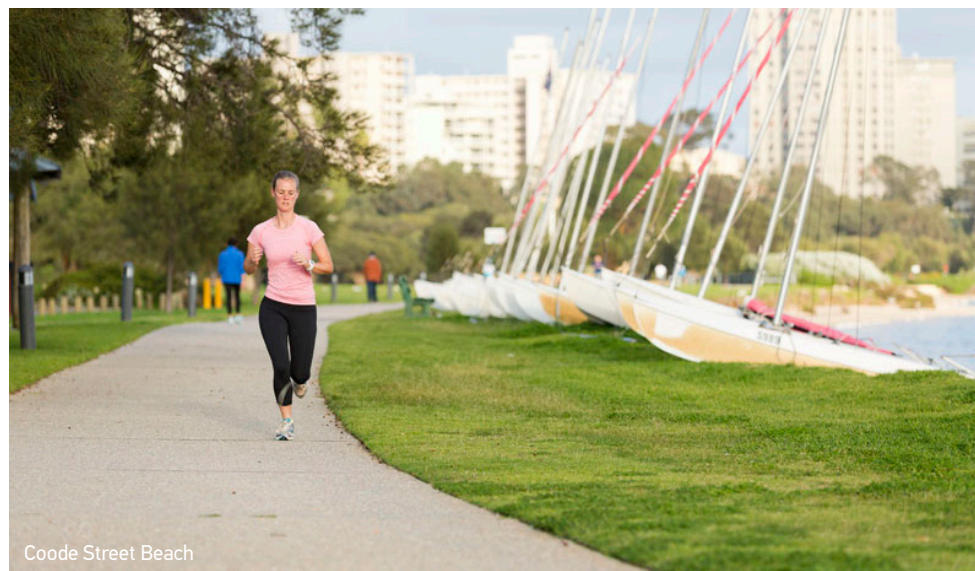
Cactus quoits



Fireworks on the foreshore



Food van



Coode Street Beach

## 2.0 EXECUTIVE SUMMARY

### PROJECT DELIVERY STRATEGY

Provision of good quality public open space (POS) involves shared professional understanding of key aspects of open space allocation and design. Planning and management of POS involves professionals in urban planning and design, such as planners and landscape architects, community development, recreation, health and fitness, engineering, horticulture and landscape management.

The time and cost that could be attributed to the entire list of strategies outlined in this South Perth Foreshore Strategy and Management Plan (the SPF Plan) is above the capacity of the City's current funding and staffing, which will necessitate a Feasibility Framework and Implementation Plan being devised to feasibly manage this project.

Following adoption of the SPF Plan by council, the Feasibility Framework and Implementation Plan will be prepared based on the priorities identified. Opportunities for low cost interim activation strategies and projects which could be used to test ideas without expending large amounts of money will also be investigated.

City policy P103 Communication and Consultation will guide the level of stakeholder engagement required for the projects that are delivered from the listed strategies. The structure and scope of the Sir James Mitchell Park Community Advisory Group is proposed to be reviewed to form a South Perth Foreshore Advisory Group, and will play a role in advising on specific points related to future planning for the foreshore.

### THE SOUTH PERTH FORESHORE – SITE, CONTEXT AND BACKGROUND

The South Perth Foreshore (SPF) is an extensive area of public open space that occupies approximately 62 hectares of Swan River foreshore land. It stretches from the Narrows Bridge in the west to Ellam Street in the east, where it joins the Town of Victoria Park's foreshore reserves, including McCallum Park. With over 4 kilometres of north facing foreshore to the City of Perth, it is a significant central Perth Waters portion of the Swan Canning Riverpark. A large part of it is known as Sir James Mitchell Park, with the western end along the South Perth Esplanade known as The Esplanade Reserve, along with Clydesdale Reserve bounding Mill Point Road near Douglas Avenue. The physical and visual connections to the foreshore, particularly the Mends Street Precinct and the Perth Zoo; and public transport including ferry connections and the future train station near Richardson Park and the Kwinana Freeway, are also key factors.

The SPF is a regional reserve/ Regional Open Space (ROS) classified a 'Class C' Reserve and is zoned 'Parks and Recreation'. It has a considerable catchment area attracting users and tourists from throughout Perth, Western Australia, the nation and the globe. It is one of the major attractions of the area, for its beauty, ambience and amenity.

The South Perth Foreshore has undergone a vast array of physical and cultural transformations in recent history. A rich tapestry exists embedded both physically and spiritually within the site that is inextricably linked to its identity. The SPF services special events as well as its common and regular recreational activities that take place in the park and along the water. The foreshore forms part of a greater Perth Waters experience and circuit for users along the Swan River's edge and on or in the water.

Perth City's 'Perth Waters River park' is a circuit of parkland including the SPF of more than ten kilometres. It is a popular recreational playground, connecting with Kings Park, Perth's premier public open space. It provides a superlative city asset, environmentally, socially and recreationally, and should be retained as regional public open space (ROS) and be developed as a world-class attraction.

The SPF, as a component of the Perth Waters part of the Swan Canning Riverpark, is within the Swan River Trust's 'Development Control Area' under the Swan and Canning Rivers Management Act 2006. This requires the Swan River Trust to be consulted before any major works are undertaken on the foreshore. The foreshore is currently the responsibility of and managed by the City of South Perth (the City).



## THE SPF PROCESS – PLANNING AND STAKEHOLDER ENGAGEMENT

Strategic reports and policies, and previous and existing management strategies/ plans relevant to the preparation of the South Perth Foreshore 2013 and beyond document have all been reviewed in depth and incorporated into this plan. The planning work already undertaken to date on particular foreshore projects has also been considered. Better management and implementation of current day practices particularly considering water use and sustainable management are required. The City has identified the South Perth Foreshore as being in need of revitalisation to bring the area up to the standard expected of city waterways and riverparks in the developed world today. Revitalisation of the foreshore forms part of the City's Strategic Plan 2013-2023.

The preparation of this document is a collaborative process facilitated by the City of South Perth, assisted by consultants and in consultation with stakeholders such as the Sir James Mitchell Park and Sustainability Community Advisory groups, State Government agencies (including the Swan River Trust), indigenous groups, local business, schools and youth, elected members and the wider community.

The stakeholder engagement process collated ideas and comments from the many varied stakeholders, to ensure balanced and all-encompassing input was provided. A summary of the extensive stakeholder engagement process and the results is provided in the Appendices.

Stakeholders' aspirations were gathered during the stakeholder engagement exercises undertaken from late 2012 with the initial ideas-gathering stage of the project; and throughout 2013, particularly via the survey period of July-August 2013. These aspirations, identified in the draft SPF document as 'opportunities' have been developed into strategies and recommendations in this final document, based on the ratings and priority rankings from the survey. The Community Perspectives 2012 Survey Results (the City's CATALYSE Community Perceptions Survey) also specifically considered new uses on the South Perth Foreshore, and the responses to these were factored into the recommendations. The Community Perspectives 2014 Survey Results reiterated many of the aspirations and commentary received regarding the foreshore.

## THE PROCESS:



## 2.0 EXECUTIVE SUMMARY

### THE SPF PLAN

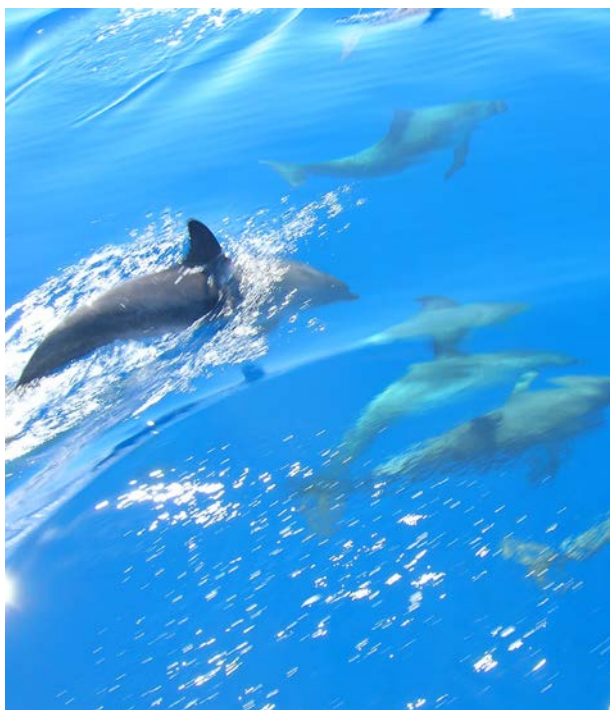
The purpose of this South Perth Foreshore Strategy and Management Plan (The SPF Plan) is to guide the management of the foreshore into the future. This includes the improvement of public infrastructure, recreation and tourism experiences, and environmental values and management. The primary aim is to balance the competing demands for use, development and management of this precious regional public open space (ROS) with the need to conserve and enhance a functional healthy river and foreshore environment for now and for future generations.

The SPF Plan identifies the most appropriate combination of uses for the SPF, while maintaining and preserving the environmental and heritage values of the area and its surrounds. It complements the regional planning approach of the Swan River Trust as well as providing for local residents, regional users, and commercial, event, and tourism enterprises.

This document outlines the findings from background investigation and stakeholder engagement activities undertaken to inform this final plan. Strategies and priorities for the SPF are outlined, to guide the long-term plan to revitalise the foreshore and adjacent commercial and tourist precincts.

This document will play a pivotal role when seeking Federal and State Government funding; as it demonstrates to higher levels of government any funding being sought will be appropriately spent in accordance with a well-researched, stakeholder tested plan.

This document communicates the fundamental 'why and what' for the South Perth Foreshore and should be used as a gauge against which all future decisions for the site are validated. It is needed to coordinate future works and management of the foreshore, by strategically considering the foreshore as a whole, along with the distinct strategies and management issues for the ten 'nodes' of the foreshore, these being the recognised precincts of the foreshore with distinct characteristics, opportunities and management issues.



### WHOLE OF FORESHORE AND NODE STRATEGIES

The Plan prioritises the ten Nodes, and lists strategies for the future of this precious foreshore reserve. These strategies are outlined as both strategies for the whole of foreshore (WOF Strategies 1 to 4, with various sub strategies listed) and Node- specific strategies for the 10 Nodes, again with component strategies listed.

These approaches to the foreshore will enable the development of foreshore spaces that are comfortable, convenient and accessible; activated, inclusive and well-connected; while being diverse and identifiable; and will ensure a sustainable future in which the foreshore provides a range of recreational and social opportunities, and enhances the natural and cultural environment of the City.

The following considerations are seen as important and relevant to the whole of the foreshore planning; with strategies (WOF 1 - 4) incorporating key considerations, sub strategies and actions, for each; to enable the holistic planning, management and funding for these. The numbering of these is arbitrary, and merely aligns with how they were presented in the draft SPF document. It is likely that one or more of these strategies and/or sub strategies may be targeted concurrently.

- WOF 1 Transport and Access;
- WOF 2 Infrastructure;
- WOF 3 Activation;
- WOF 4 Culture, Environment and Heritage.



In addition, strategies incorporating key considerations, component sub strategies and actions have been defined for each Node along the foreshore. The strategies for the Nodes have been listed in the order ranked of 'how important it is to revitalise' from the Part 03 Survey results. The Nodes, as a priority listing are:

- N1 Mends St
- N2 Coode St
- N3 Mends St Beach
- N4 Coode St Beach
- N5 Mill Point
- N6 Deck/ Melaleuca Grove/ Scented Garden
- N7 The Lakes
- N8 Esplanade West
- N9 Flag Pole
- N10 Ellam Street.

Following are Summary Tables of the Whole of Foreshore and Node Strategies.

## WHOLE OF FORESHORE (WOF) STRATEGIES – SUMMARY TABLE

Refer to each WOF Strategy in the document for sub strategies, things to consider and actions.

<b>STRATEGY WOF 1 TRANSPORT &amp; ACCESS</b>	Create a highly accessible and connected public open space, with improved access, connectivity and legibility for all users to the foreshore environment; and Identify transport considerations aimed to reduce car use and conflict between modes of transport; review current transport provisions; and investigate multi-modal transport options.
<b>STRATEGY WOF 2 INFRASTRUCTURE</b>	Manage the operation, maintenance, renewal and upgrade of infrastructure assets in order to meet community needs in a sustainable, cost effective and holistic manner.
<b>STRATEGY WOF 3 ACTIVATION</b>	Increase activation and appeal of existing spaces through ideas that are trialled and assessed and long term place making opportunities realised through good design, appropriate management, community activation and partnering.
<b>STRATEGY WOF 4 CULTURE, HERITAGE &amp; ENVIRONMENT</b>	4.1 Celebrate culture and heritage as a strong element of the foreshore's identity; and 4.2 Develop an environment that responds to the requirements of climate change and water sensitive urban design practice and provides biodiversity.



**TRANSPORT & ACCESS**



**INFRASTRUCTURE**



**ACTIVATION**













**CULTURE  
HERITAGE &  
ENVIRONMENT**

## 2.0 EXECUTIVE SUMMARY

### NODE STRATEGIES - SUMMARY TABLE

Refer to each Node Strategy in the document for sub strategies, things to consider and actions

<b>STRATEGY N1 MENDS STREET</b>		Develop the Mends Street node as: An active piazza and promenade; an arrival place with day/night activities; A gateway for the Mends Street precinct, with connecting stories and interpretation of heritage, zoo and the river; An integrated transport node utilising the river to connect with the Mends St Precinct and surrounding areas.
<b>STRATEGY N2 COODE STREET</b>		Develop the Coode Street node as a better serviced family recreational space, with improved facilities; a choice of food and beverage outlets; and a diversity of activities including all ages and abilities playground, rowing, sailing, boat mooring, and water play.
<b>STRATEGY N3 MENDS STREET BEACH</b>		Develop the Mend Street Beach node as a recreational amenity for use in the summer particularly for young families, with the addition of shade and shelter; and for rowing and kayaking.
<b>STRATEGY N4 COODE STREET BEACHES</b>		Develop the Coode Street Beaches node as an improved amenity for increased use in the summer particularly, with the addition of shade and shelter; and for catamarans/ rowing/ kayaking, and other beach activities.
<b>STRATEGY N5 MILL POINT</b>		Develop the Mill Point node with significant focus as a cultural and heritage hub with ecological improvements to Millers Pool and improved pedestrian and cycle links to Perth city.
<b>STRATEGY N6 DECK/ MELALEUCA GROVE/ SCENTED GARDEN</b>		Develop the Deck, Melaleuca Grove, Scented Garden node as a major picnic and passive recreation space; with interrelated components that form a continuous and connected pedestrian experience; capturing the essence of each through interpretation and way finding, and incorporating the site's history through interpretation.
<b>STRATEGY N7 THE LAKES</b>		Develop The Lakes node as a water-based, ecologically focused precinct, restored, expanded and integrated into its surroundings; providing a retreat for bird watching/breeding, ecology and learning; with volunteers involved in ecological restoration programs; and Develop the location for the establishment of a swan breeding habitat; with interpretive centre and café; and provide for family recreation with picnic facilities and play areas including a nature play space.
<b>STRATEGY N8 ESPLANADE WEST</b>		Develop the Esplanade West node as a waterfront promenade that relates to the water's edge, with opportunities for respite and seating, whilst maintaining Perth city vistas; and provision for cycling/ walking/ exercising activities.
<b>STRATEGY N9 FLAG POLE</b>		Develop the Flag Pole node as: A landmark site, representing national, state, local and Aboriginal significance, that expresses the historical background of the area; and A landmark event space for calendar civic and social events that provides recreational facilities throughout the year.
<b>STRATEGY N10 ELLAM STREET</b>		Develop the Ellam Street node as a high quality junior sport, events, and recreation area with improved access and connectivity to the greater Riverpark and the surrounding residential streets; improved interaction with the water's edge; and the introduction of food and beverage outlets.

Refer page 38 for indicative map diagram of the 10 Nodes.





Flag Pole node on Australia Day



Recreational paths



Coode Street Beach on Australia Day



Coode Street Beach

## 3.0 THE SOUTH PERTH FORESHORE

### 3.1 SITE LOCATION AND DESCRIPTION

The South Perth Foreshore is an extensive area of approximately 62 hectares of public open space. It stretches from the Narrows Bridge in the west to Ellam Street in the east, where it joins the Town of Victoria Park's Swan River foreshore, including McCallum Park. With over 4 kilometres of Swan River foreshore, facing north to the city of Perth, the foreshore is a significant Perth Waters central portion of the Swan Canning Riverpark.

A large part of it is known as Sir James Mitchell Park, with the area along the South Perth Esplanade known as The Esplanade Reserve; along with Clydesdale Reserve, a two hectare area of public open space separated by Douglas Avenue. For the purpose of this report, the study area also includes the Mends Street Precinct, being the gateway from the city of Perth to South Perth, including the Mends Street jetty through to the Perth Zoo.

### 3.2 SITE CONTEXT

#### REGIONAL CONTEXT

The South Perth Foreshore is a regional public open space (ROS) with a considerable catchment area attracting users and tourists from throughout Perth, Western Australia, the nation and the globe. The Mends Street Precinct is the gateway to South Perth and Perth Zoo, and incorporates regular commuter traffic via the ferry route between Mends Street jetty and Perth city's Barrack Street jetty, particularly pedestrians including tourists.

The foreshore has aesthetic, historic and social cultural heritage significance; with Aboriginal significance, and links as a historical site to the early rural days of Perth, being a site for dairy farming and market gardening, amongst other uses.

The adjoining Victoria Park foreshore at Ellam Street to the east provides for a continuous river park, including McCallum Park and Burswood Park. Connections north via the Causeway bridge over Heirisson Island to Point Fraser and Perth city's river parks, including the Elizabeth Quay currently under construction; and the Narrows Bridge to the west, provide for a continuous city 'Perth Waters' river park. This 10 kilometre circuit of parkland is a popular recreational playground, connecting with Perth's premier public open space Kings Park, immediately north-west of the Narrows Bridge. Adjoining, the western Kwinana Freeway Foreshore to the west of the Narrows Bridge encompasses the Milyu Nature Reserve. [This western foreshore is the subject of a separate plan - refer Kwinana Freeway Foreshore Management Plan, currently in draft 2014].

The combined Perth Waters Riverpark provides a superlative city asset, both environmentally, socially and recreationally, and should be retained as regional public open space (ROS) and be developed as a world-class attraction.

### LOCAL CONTEXT

The South Perth Foreshore is one of the major attractions of the area, for its beauty, ambience and amenity, with its most consistent return users being residents from surrounding areas. Its extent and form, stretching over 4 kilometres along the Swan River, provides for easy access by many local residents, including properties that abut and face the foreshore, nearby residents of South Perth, Kensington, and Victoria Park; and those that live in the greater City of South Perth, which stretches to Waterford, Manning and Salter Point to the south on the Canning River, and Como to the south-west.

### LAND DETAILS, OWNERSHIP AND ZONING

#### Size

The South Perth Foreshore (SPF) occupies approximately sixty (60) hectares of Swan River foreshore land.

As a comparison, Kings Park is 400 hectares with two thirds of the park protected as bush land, and the Botanic Gardens part of the park is 17 hectares.

#### Reserve Class C category

As defined by Landgate, reserves are areas of Crown Land reserved for various public purposes, e.g. parks, recreation, drainage or church sites. The reserve is identified by a number, e.g. Reserve No. 12345. Reserves may be vested, leased or Crown Granted in Trust.



There are three different categories of reserves:

1. CLASS "A" reserves forever remain dedicated to the purpose declared, until by an Act of Parliament it is otherwise amended. Class "A" is used where there is a need perceived for the highest form of protection, for example "Kings Park", or national parks.
2. CLASS "B" reserves are seen as warranting higher protection than usual, but not to the extent of Class "A". Class "B" reserves may be varied by Governor in Executive Council, but amendment must be notified to the Parliament.
3. CLASS "C" reserves form the vast majority of reserves. Amendments to or the declaration of Class "C" reserves are determined by the Governor in Executive Council.

The South Perth Foreshore (SPF) is categorised as a Class C reserve.

### Regional Open Space (ROS)

Classification of the different types of parkland (public open space) is based on its primary function and by expected catchment (local, neighbourhood, district or regional). Open space functions include:

- Recreation spaces which provide a setting for informal play and physical activity, relaxation and social interaction;
- Sport spaces which provide a setting for formal structured sporting activities; and
- Nature spaces provide a setting where people can

enjoy nearby nature and protect local biodiversity and natural area values.

The South Perth Foreshore is classified as a Regional reserve/ Regional open space (ROS) that is a vital part of greater Perth, Western Australia. Regional reserves are those larger areas of public open space expected to serve one or more geographical or social regions and attract visitors from outside any one area or local government authority (LGA). They are considered of regional significance because of their important contribution to the metropolitan region's sense of place and their attraction of users from throughout the region.

Regional open space (ROS) such as the SPF may accommodate all of the above listed functions, with important recreation and organised sport spaces as well as significant conservation and/or environmental features. ROS may provide substantial facilities for organised sport, play, social interaction, relaxation and enjoyment of nature. ROS can assist to protect biodiversity conservation and environmental values through retention of bushland, wetlands and other natural features.

Refer to the City's POS Strategy 2012 for more information on categories of reserve and POS (Public Open Space) management in the City. Other regional reserves in the area include Milyu Nature Reserve, part of the western Kwinana Freeway Foreshore, and Canning River Foreshore. Refer also the Department of Sport and Recreation's Classification framework for public open space 2012.

### Swan Canning Riverpark – Perth Waters

As a component of the central Perth Waters portion of the Swan Canning Riverpark, the SPF is in the Swan River Trust's 'Development Control Area' under the Swan and Canning Rivers Management Act 2006. This requires the Swan River Trust to be consulted before any major works are undertaken on the foreshore.

### Land Zoning and Ownership

The SPF is comprised of a number of Crown reserves and freehold land owned by the City of South Perth. The history of the land resumed for the purpose of "Swan River Improvements and Foreshore Recreation Grounds" is shown in Appendix 03 and remains current. The details relating to all foreshore land are shown on the Map & Tables of "Land details and ownership" at Appendix 08. The location of the various parcels of land are indicated on the map contained within this Appendix.

The SPF is zoned Parks and Recreation in both the Metropolitan Region Scheme (MRS) and the City's Town Planning Scheme (TPS No. 6).

## 3.0 THE SOUTH PERTH FORESHORE

The MRS zones all but parts of Lots 198 and 199 east of Douglas Avenue (previously Special Zone A) and the triangular portion near Ranelagh Crescent and Meadowvale Avenue, as 'Parks and Recreation' which is indicated in dark green on the Scheme Maps. Land shown such is reserved under the MRS in order to comply with the Metropolitan Region Town Planning Scheme Act, 1959, as amended. Such land is not reserved by the City's Local Scheme (TPS No.6 currently) as the provisions of the MRS already apply.

The Local Scheme Reserve zoning of the City's TPS No.6 zones as 'Parks and Recreation', which is indicated light green on the Scheme Maps, the remainder of the SPF (Lots 198 and 199 and the Ranelagh Crescent triangle). Building height limits are also indicated on the Scheme Maps.

'Parks and Recreation' zoning indicates its intended use and any change of zoning would require approval from the State Government.

The private land in the vicinity of the foreshore is predominantly residential, with densities ranging from R15 through to R100; with commercial and retail zoning to the Mends Street precinct.

Refer to the Appendix 03: Post-European Settlement history – Historical Development & Land Use for information and history of the previously zoned 'Special Zone A' land on the foreshore, a zone description that is no longer applicable.

Refer to the Appendices for relevant Scheme Maps and Maps & Tables of Land details and ownership.

### CLIMATE

Perth has a Mediterranean climate with mild wet winters and hot dry summers. The locality of the South Perth foreshore has a uniquely north facing aspect whilst being protected from Perth's most prominent hot summer winds. Climatically these conditions lend themselves to a relatively comfortable outdoor environment for the majority of the year, although strong and often cool south-westerly winds can impact the amenity of recreational areas and use of parts of the foreshore.

Refer Figure 02: The Site, Context and Climate.



### 3.3 BACKGROUND

#### HISTORICAL

The South Perth Foreshore has undergone a vast array of physical and cultural transformations in recent history. A rich tapestry exists embedded both physically and spiritually within the site that is inextricably linked to its identity. These layers include the Beeloo Noongar Aboriginal people, Chinese market gardening, as well as dairy farming and flour milling activities.

Recreational activities included bathing and picnicking, golfing, horse racing, football, hockey, soccer and rugby.

Little of this history is currently evident along the foreshore, except through some signage and a few remaining structures, most notably the jetties (replacements, not originals) and the Old Mill.

Refer Figure 03 for a diagrammatic representation of the foreshore's most significant historical and cultural information, Aboriginal and Post European settlement heritage attributes under Cultural and Social Value and Use later in this document. The Appendix 03 Post-European Settlement history – Historical Development & Land Use for further information on the history of the site through the nineteenth and twentieth centuries (through to 2000).



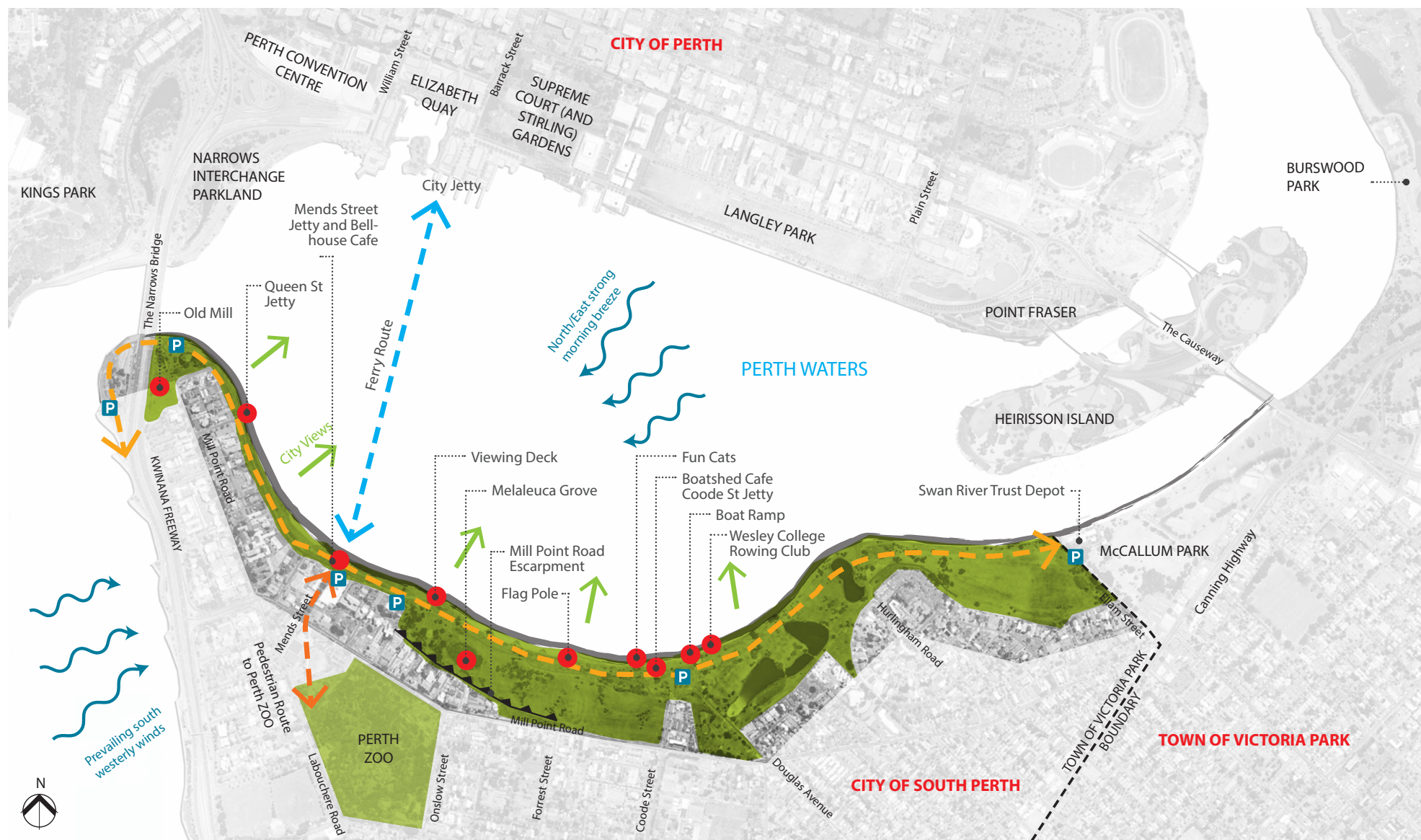


FIGURE 02: THE SITE, CONTEXT AND CLIMATE

### 3.0 THE SOUTH PERTH FORESHORE

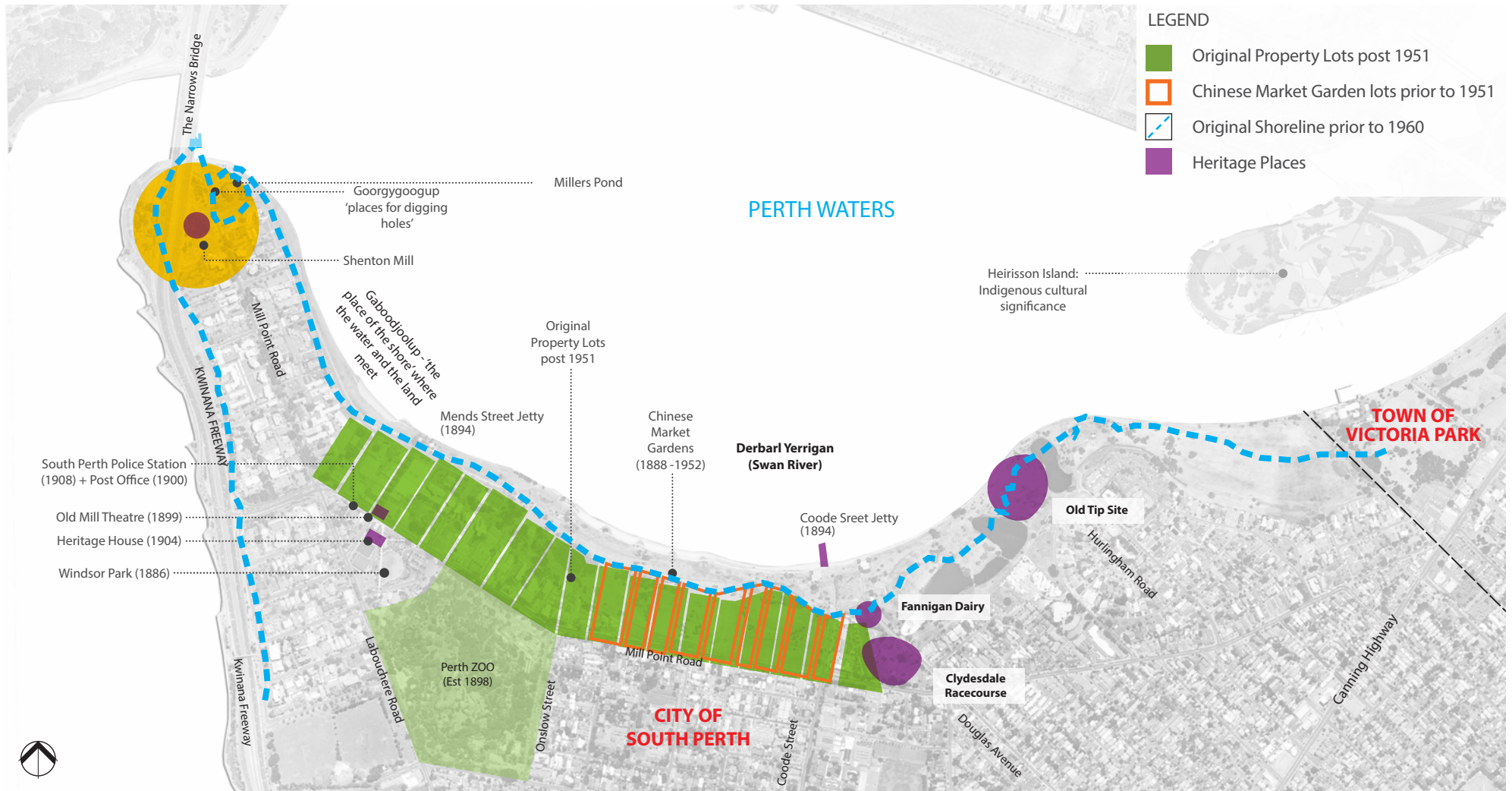


FIGURE 03: HISTORY AND CULTURAL INFORMATION



## MANAGEMENT STRATEGIES/ PLANS AND POLICIES

Strategic reports and policies; and previous and existing management strategies/ plans relevant to the preparation of the SPF Plan include:

- **Sir James Mitchell Park Foreshore Management Plan**  
Swan River Trust Report No: 32, April 2001,  
City of South Perth and Swan River Trust;
- **South Perth Foreshore Renovation Plan 2005**,  
MP Rogers & Associates, with Ecoscape (Australia)  
Pty Ltd. ;
- **Bringing back the swans : the potential to encourage more black swans onto the Swan River, Report 2000/63**,  
ATA Environmental, Western Australia Water and Rivers Commissions, Bamford Consulting Ecologists, M.P. Rogers & Associates;
- **City of South Perth Strategic Plan 2013-2023**;
- **City of South Perth Economic Development Strategy 2013– 2016**;
- **City of South Perth Asset Management Plan 2013 – 2023**;
- **Public Open Space Strategy**,  
Professor David Hedgcock, Curtin University, for City of South Perth, 2012;
- **City of South Perth Integrated Catchment Management Plan**,  
JDA Consultant Hydrologists and Ecoscape. 2004;

- **Policy P211 Water Sensitive Urban Design, 2013**  
City of South Perth;
- **South Perth Bike Plan 2012-2017**,  
Final Report, Lamwise, May 2012.

[These documents are all available on the City's website and from City libraries. Refer References for further relevant documents.]



Net-work - Artist: Do Ho Suh

## PATH TO DATE – 2001 ON

### 2001 to 2014

In 2001 the Foreshore Management Plan for Sir James Mitchell Park was finalised and endorsed by the City and the Trust, and provided a plan to ensure that the best management practices of the time were utilised to continue to enhance the foreshore for the benefit of the South Perth and wider communities.

This plan was followed in 2005 by the adoption by council of the Foreshore Renovation Plan which included proposals for beach and river edge improvements.

Commitment by the City to these plans resulted in improvements and management of the foreshore. In 2008 - 2009, a series of headlands and small beaches with appropriate local planting were resculptured to improve access to the river; 200 metres west of the Mends Street Jetty and another 400 metres in the vicinity of the flag pole and Coode Street. The work was part of a \$1.6 million project undertaken by the City, with a \$510,000 contribution from the Swan River Trust. In 2009, the Tree Planting Project was undertaken in Sir James Mitchell Park (refer Trees under the Environment, Habitat Value & Biodiversity section of this document for more information). This was followed in 2010 with the construction of the Viewing Deck east of Mends Street.

## 3.0 THE SOUTH PERTH FORESHORE

### Projects implemented:

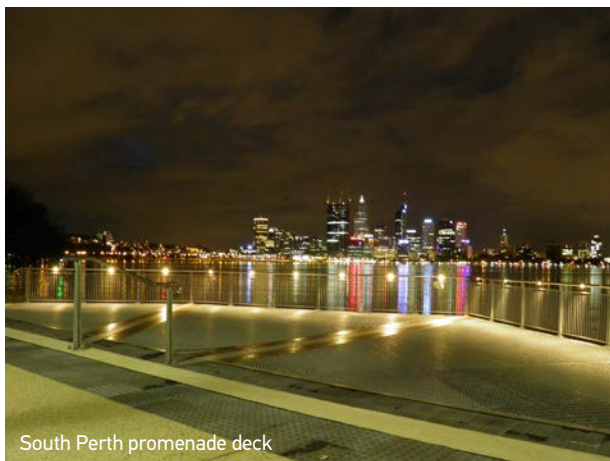
- Sir James Mitchell Park Tree Planting Project, 2009;
- Beaches Project, 2008 -2009;
- The Viewing Deck Project, 2010;

In addition to the aforementioned projects, the City has also incrementally upgraded:

- BBQ and picnic areas, including shelters;
- Playgrounds at Scented Gardens (2012) and
- Coode Street (partial upgrade), 2013;
- Garden and tree planting; and

### Installed:

- Wayfinding signage;
- Pathways for pedestrians and cyclists (partial upgrade);
- End of Trip facilities for cyclists;
- Lighting infrastructure.



### Projects proposed not yet implemented:

- Swan Habitat Lake Hurlingham;
- Flag Pole Project;
- Mends Street (Piazza and Promenade);
- Old Mill Redevelopment incorporating Millers Pool.

The City has undertaken work on a number of other foreshore projects, which to date have not been implemented, and are at various stages of design. The SPF Plan is needed to coordinate these future works and consider the foreshore as a whole. It prioritises the various aspirations and projects for future consideration, in order to establish a hierarchy of nodes and strategies. The planning work already undertaken on these foreshore projects has been considered as part of this strategy and plan. Better management and implementation of current day practices particularly considering water use and sustainable management are also required.

### CASE STUDIES

Several case studies were reviewed as part of this report in order to inform and guide the vision for the South Perth Foreshore. Aspirations, benchmarks, as well as issues and pitfalls to avoid and things to resolve were drawn from the studies conducted. Comparisons of site, scale, as well as economic factors were made, with the findings listed.

Refer to the document South Perth Foreshore 2013 and beyond Part 02 Background and Context [Revision C 1 July 2013] for more information.

## DRAFTS OF THIS DOCUMENT AND PROJECT TIMELINE

The foreshore Objectives, Nodes and Opportunities were outlined in the draft (Revision C, 1 July 2013) South Perth Foreshore document, Part 01 Feedback and Opportunities; which was supported by Part 02 Background and Context.

These were the subject of extensive stakeholder engagement throughout 2013, including a public survey (SPF Part 03 Survey). These draft documents were developed from earlier drafts developed with stakeholder and community input, from late 2012 to mid-2013. To assist with prioritising future planning and revitalisation, the information gained from this process, including recommendations provided during the feedback period (July-August 2013), were incorporated into this final SPF Plan. The earlier 'opportunities' for the foreshore have now been developed into future Strategies for the foreshore and are outlined in this document. Refer Appendices for further background information.

## 3.4 EXISTING SITE CONDITIONS AND MANAGEMENT ISSUES

### GEOLOGY AND SOILS

The geological formations of the South Perth precinct are made up of Quaternary deposits of partly lithified or unconsolidated sediments which are related to erosion and deposition processes during the Pleistocene and Holocene eras.

The major part of the South Perth precinct is made up of sandy plains, which have peaty podzols in the swampy areas known as the Bassendean Soil Unit (McArthur and Bettenay, 1974).

The South Perth peninsula is made up of:

1. Aeolian deposits of the Karrakatta Soil unit (deep yellow sands over limestone); and
2. Marine deposits of the Vasse unit consisting of mixed layers of recent estuarine deposits are present along the southern Perth Water foreshore.

The early settlers found the soil consisted of excessively drained deep yellow sands, except for the northern shore where the land was sandy loam.

### CONTAMINATED SITES AND ACID SULFATE SOILS

Asbestos Containing Material (ACM) has been identified on numerous occasions around Lake Hurlingham and Lake Douglas which were formerly a rubbish tip site. 'Negligible' size pieces of ACM have been found but have been left undisturbed in situ. Management of these sites in relation to asbestos should be undertaken with reference to the City's Asbestos Removal Guideline 3.4.4.2 (in draft form March 2014).

Other contamination details of the site relating to the former rubbish tip site are unknown, and it is recommended that soil testing is undertaken to ascertain this prior to any works in the area. Refer recommended strategies for The Lakes node particularly.

The Department of Environment and Conservation (DEC) has compiled maps of ASS risk areas which provide a broad-scale indication of the areas where ASS are most likely to exist so that disturbance of ASS is avoided where possible. The SPF's probability of ASS occurrence is 'high to moderate' risk of ASS occurring within 3 metres of natural soil surface for the entire foreshore, except the Esplanade and west to Mill Point, where the probability is considered moderate to low.

Field analysis results undertaken in 2012 at Mill Point around Millers Pool indicate that ASS may exist onsite in surface samples and at depths from 4.5 meters below ground level (mbgl).



## 3.0 THE SOUTH PERTH FORESHORE

Laboratory analysis results confirmed the presence of PASS (Potential Acid Sulfate Soils); with samples collected from between 1.0 mbgl to 4.5 mbgl exhibiting net acidity levels above the DEC action criteria. These soils present a potential environmental hazard and may cause damage to the natural and built environment if allowed to oxidise. Disturbed soils located at 1 mbgl and deeper are therefore required to be neutralised within this location. Treatment requirements and excavation procedures will need to be managed.

As a result, an Acid Sulfate Soil and Dewatering Management Plan (ASSDMP) has been prepared prior to the commencement of works in the Millers Pool area and details the management and monitoring of the anticipated ASS disturbance and dewatering management requirements. Treatment and validation of ASS onsite must be undertaken as per the DEC guidelines. Offsite treatment of ASS must be undertaken by an accredited landfill facility.

Throughout the foreshore, site-specific investigations and management strategies for ASS soil disturbance and/or lowering of the water table will be required, and soils will need to be tested to determine if ASS will require management. One such area is between the two main sections of the Melaleuca Grove, where imported Jandakot soil that was used for fill during the 1980s, is proving infertile and needs to be assessed for ASS.

### TOPOGRAPHY

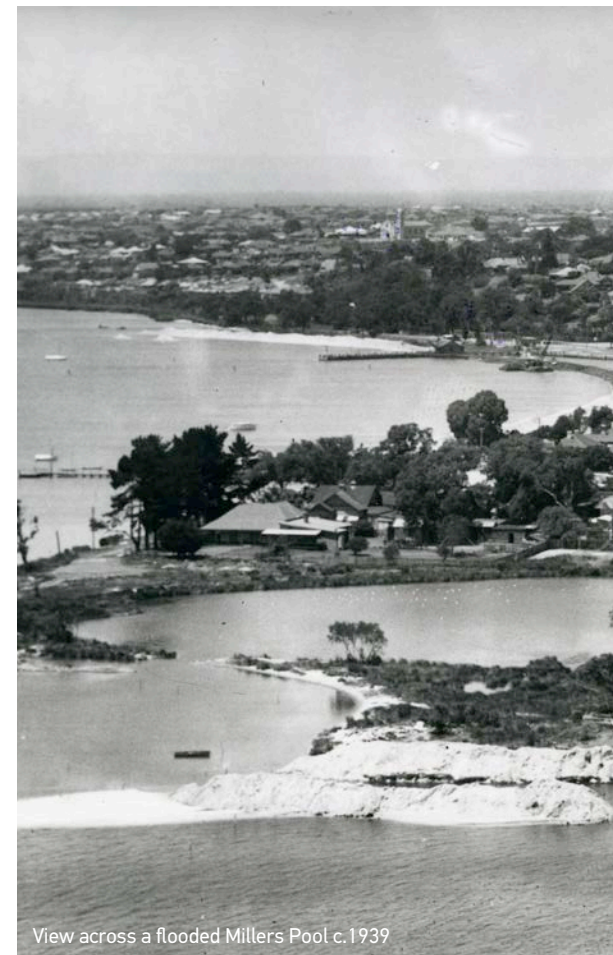
South Perth is part of the Bassendean Dune System, which consists of a series of low hills (Balla, 1994). Apart from the central hill, the land in South Perth is below 15m AHD (Australian Height Datum, being the height above mean sea level) and was originally subject to areas of frequent flooding.

The present day foreshore topography is between 2m and 4m AHD, however this would have been much lower before reclamation took place. The foreshore now consists of relatively flat land, which is only broken by a small rise adjacent to Parker Street.

### RIVER'S EDGE- HISTORY, WALLS AND BEACHES

#### History of the river's edge

The South Perth Foreshore's river edge has been altered radically over the years with parts of what is now the foreshore originally part of the Swan River. The existing foreshore area was reclaimed in 1939 at Miller's Pool and again in 1966, which extended the foreshore 50m into the river. Further changes to the foreshore were made with the construction of the Narrows Bridge and Kwinana Freeway, which involved re-aligning the Melville Water Foreshore and removing 60m from Point Belches.



View across a flooded Millers Pool c.1939

### River Walls – Flooding, Replacement & Repair

The South Perth Foreshore is approximately 4.2 kilometres in length, with over two kilometres of hard wall edge. The hard edging comprises a variety of retaining walls, capping slabs and gabion baskets of various age and condition; with most constructed by the now defunct State Public Works Department. Following this Department's demise in 1985, no State Government Department took overall responsibility for river wall maintenance, with a result of many sections of wall falling into disrepair. The Foreshore Renovation Plan 2005 included an assessment of the walls to provide the City with construction requirements and an indication of longer term maintenance costs.

The Swan and Canning Rivers Management Act (2006) identified shared responsibility for river wall maintenance between the State (Swan River Trust) and Local Government. As a result, the City and the Trust now jointly contribute to the rehabilitation of walls along the South Perth Foreshore; however the City is mainly tasked with maintenance spending.

River wall height along the South Perth Foreshore is generally below that currently required to prevent flooding in most storm and/or high tide events. The foreshore walls were constructed in order to mitigate the effects of sea level rise, erosion and mitigate flood events. The top of the walls generally sits at around 1.12 AHD, well below the 1.25m AHD that now constitutes the 100 year Average Recurrence Interval (ARI) flood level in Perth Water.

Currently along the length of the walling there are numerous isolated tripping hazards and sink holes as well as damaged drainage pipes and outlets. These are a public safety issue and require rectification. The most severely damaged sections of the wall have been fenced since late 2012, to improve safety along these portions of the river's edge.

In late 2014, the City plans to replace the walls either side of the Mends Street jetty, between Mends Street beach to near the viewing deck, enabled by grant funding of \$1 million from the Swan River Trust. The walls will be constructed to a height of 1.35m AHD, being the engineer's recommendation for future climate change adaptation and best practice flood mitigation. The form of the wall's capping, similar to that used along the Swan River near the Swan Brewery, is designed for wave management, with a curved frontage to the river.

There are also numerous other damaged and failing sections of wall which require rectification, but due to the limited funding available, it could be many years before they are replaced.



Flooding near Mends St 2011

## 3.0 THE SOUTH PERTH FORESHORE

### Beaches

Stable and unstable sandy beaches and eroding shoreline naturally occurred along the foreshore. The Foreshore Renovation Plan 2005 recommended foreshore beach projects to improve foreshore-river access, minimise risk, and create diversity and ecological sustainability. The renovation of the beaches west of Coode Street and the singular beach west of Mends Street was completed in 2008 to 2009. The plan also recommended beaches at Ellam Street, which to date remain unrealised.

The Swan River Trust favours the re-nourishment of beaches and the revegetation of foreshore landscapes over the construction of retaining walls. The construction of retaining walls as a foreshore treatment is seen by the Swan River Trust as a last resort, and as a development requiring the approval of the Minister for Environment under the Swan River Trust Act.



### HYDROLOGICAL PROCESSES INCLUDING STORMWATER MANAGEMENT

#### Water Bodies – The Lakes & Wetlands

The remnant of Millers Pool near Mill Point's Narrows Bridge is a vastly altered lake from an original natural river's edge pool, that was altered predominantly for Narrows Bridge and Kwinana Freeway works.

Three other lakes are located east of Coode Street. These are all man-made lakes, constructed during 1985 - 1986 for stormwater management, utilising low lying foreshore land to beautify the existing stormwater and drainage system. The Hurlingham, Douglas, and Tondut Lakes all receive urban stormwater from the surrounding suburbs, which is then drained into the river and used for irrigating the park. The area east of the lakes contains an open stormwater drainage channel.

An artesian bore utilising the Leederville aquifer, located near Lake Tondut in Clydesdale Park, is also used to maintain water levels in the lakes and to provide the bulk of the irrigation requirements. Several freshwater springs were known in the area; however these are no longer active.

The Melaleuca Grove near the viewing deck east of Mends Street, which is a remnant pocket of original wetland vegetation with Melaleucas and boardwalk access, is the only part of the foreshore recognised as wetlands.

### Stormwater Management

In addition to the lakes, the urban water management system is comprised predominantly of pit and pipe networks, of various ages and condition. The overall drainage system is largely fragmented, comprising of approximately eighteen catchment areas, as defined in the City's Integrated Catchment Management Plan. End of drainage line treatments generally consist of direct discharge into the Swan River. There are approximately fifteen stormwater outlets into the Swan River along the foreshore.

Two stormwater pumping stations are contained within the study area; one north of Queen Street and the second north of Frasers Lane. Both pumping stations integrate with gross pollutant traps (GPT) prior to discharge into the Swan River. GPTs should be installed for all outlets discharging into the river which do not currently have a GPT in place.

Three catchment areas integrate with compensating basins/ artificial lakes and GPTs prior to discharge into the Swan River. They are:

1. Catchment SP02 discharges to the Swan River via Millers Pool compensating basin. Millers Pool does not contain a GPT;
2. Catchment SP25 discharges to the Swan River via two interconnected artificial lakes Lake Douglas and Lake Tondut;
3. Catchment SP26 discharges to the Swan River via Hurlingham artificial lake/ compensating basin.



An open stormwater drainage channel north of Swanview Terrace, of approximately 365 metres in length, is fed by Catchment SP26's stormwater, prior to discharge into Hurlingham Lake. Groundwater from the adjacent lawns may also discharge into the open stormwater drainage channel. Further analysis of the existing sub-soil drainage network would need to be undertaken to provide clarity.

### Stormwater Management in surrounding precinct

Management Practice M354: Stormwater drainage for proposed buildings, states that for the surrounding Hurlingham and Mill Point drainage precinct, new developments are to generally dispose of private stormwater via a private drainage connection (PDC). A PDC is a direct connection into the City's street drainage network at a specified and controlled discharge rate.

### Groundwater

The City of South Perth is located on the Cloverdale groundwater mound. The Perth Groundwater Atlas (Water and Rivers Commission, 1997) provides maximum recorded groundwater contours for the Perth metropolitan area, based on the maximum recorded groundwater levels at Water and Rivers Commission (now Department of Environment) bores. The maximum recorded groundwater levels near the Swan River foreshore are typically less than 2 m AHD.

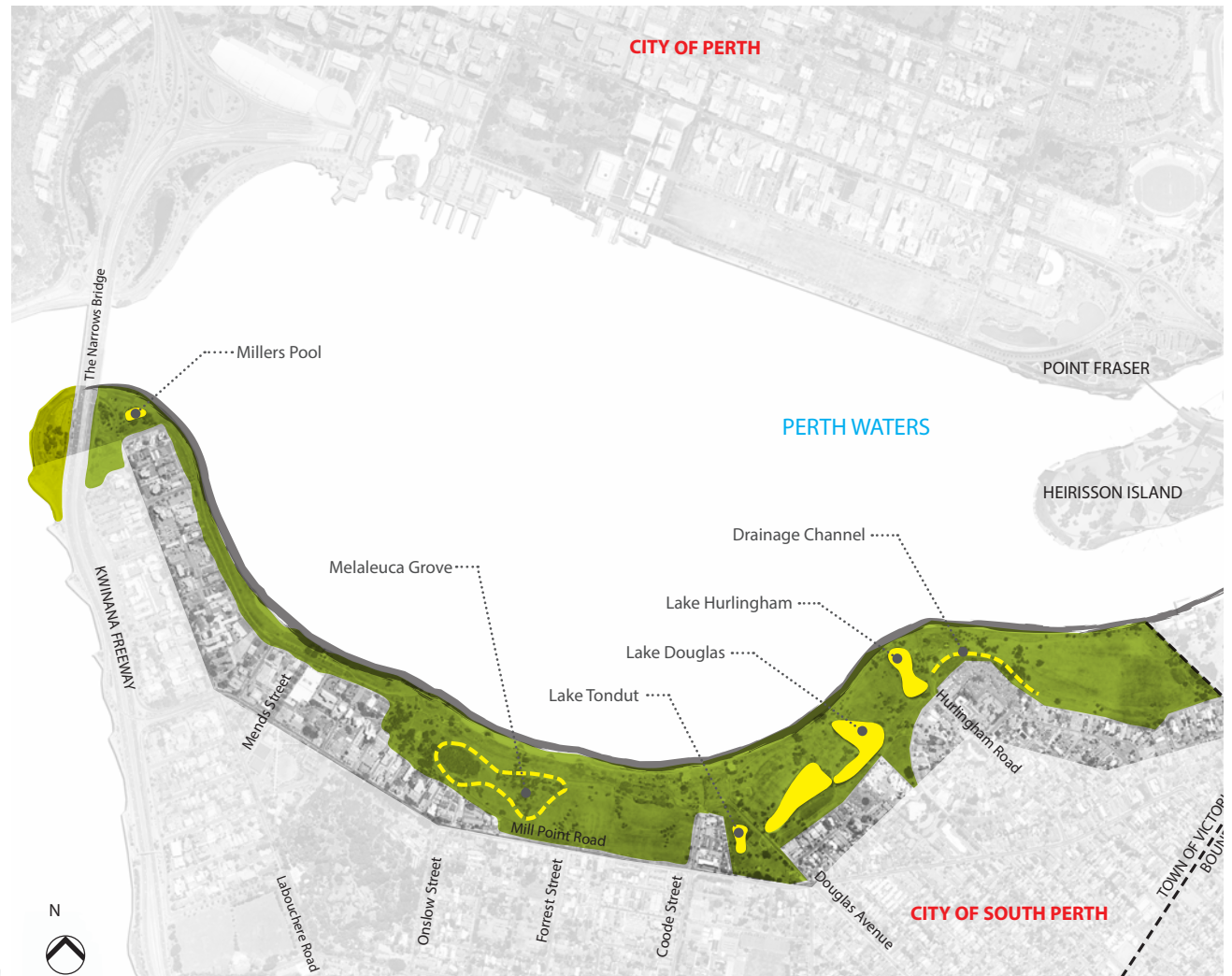


FIGURE 04: WATER BODIES - LAKES AND WETLANDS

## 3.0 THE SOUTH PERTH FORESHORE

### Bathymetry

The riverbed is rocky and stable and varies in depth between 0.6 and 1.5m. There are two banks of shallow clay mud flats which stretch in two north south oriented bars in the Perth Water. There are several navigation channels, which range between 1m and 1.5m below low water mark. The South Perth section of the channel originally had a large shelly fossil bed, which was excavated by the Public Works Department for reclamation at Coode Street.

The river foreshore contains several underground aquifers up to 1,000m deep, which are refilled by rainwater, although extensive bore construction has reduced the amount of low salinity water in these formations.

To the west of the Causeway, the river is estuarine in character. The physio-chemical composition of the river is dependent on the high winter rainfall received in the catchment. This results in a salt-water wedge forming in the deeper basins, such as Melville Water. In the shallower Perth Water, the stratification is less pronounced due to the agitation of the different saline layers by wind. Hydrological change also varies due to tidal influence, which ranges between 0.15 and 1m AHD (Swan River Trust, 1994).

### Flooding and sea level rise

In 1862, severe flooding of the South Perth river flats occurred, with these floods causing Miller's Pool to become filled with sediment. In 1929, Perth received an unusual climatic sequence of strong westerly winds and very heavy rains in the hinterlands. Floodwaters inundated all of Mill Point and the South Perth Esplanade including the Chinese market gardens adjacent to Mill Point Road. Flooding has been mostly reduced by reclaiming the low lying land and the construction of limestone retaining walls. As Perth Water experienced its highest tide in recorded history, in May 2003 severe flooding occurred along the entire foreshore, from Mill Point to Ellam Street.

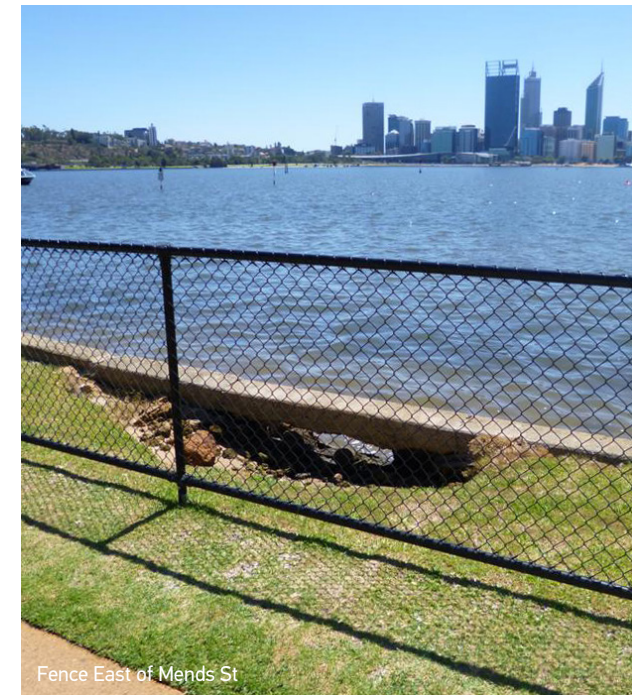
For historical information Refer Appendix 03 Post-European Settlement history – Historical Development & Land Use.



River Overflow

### Erosion and Accretion

The degree of erosion along the South Perth foreshore has been markedly reduced due to construction of the retaining walls and beach headlands. Little erosion occurs along the shelly banks of the non-walled foreshore near Coode Street. While these artificial beaches are more resilient forms, large areas of river wall are damaged allowing erosion and salt water penetration of foreshore areas, particularly near Ellam Street to the east.



Fence East of Mends St



## ENVIRONMENT, HABITAT VALUE & BIODIVERSITY

One of the key aims of this plan is to maintain, rehabilitate, and enhance environmental and habitat values whilst ensuring the amenity and enjoyment of the foreshore for all users, human and otherwise. Restorative works will also provide important habitat for native fauna including frogs, lizards and birds, particularly the iconic Black Swans of Perth. Protection and enhancement of existing positive attributes and the improvement of biodiversity along the foreshore is vital.

### Vegetation

Refer *Appendix 01 Vegetation: Floristic Complexes of the South Perth Foreshore and Existing Vegetation* including Weeds for further information on plant species related to each floristic complex of the foreshore and the existing vegetation.

Three floristic complexes are recognised in the foreshore area, but these native plant communities are poorly represented on the foreshore as a result of clearing for development since European settlement. Settlement and subsequent development of the foreshore has resulted in the introduction of exotic plants with few examples of remnant native vegetation remaining.

These vegetation communities also have great significance to the Aboriginal community, particularly the remnant *Casuarina* (Sheoak) and *Melaleuca* (Paperbark), *Banksias* and *Acacias* (Wattles). Despite the importance of the *Banksia* species to local Aboriginal people in the area, this plant species is poorly

represented on the foreshore, with only a few recently planted Swamp *Banksia* (*Banksia littoralis*) existing. Altered soil conditions from the reclamation works, and irrigation and fertiliser regimes have affected the suitability of the site for *Banksia* species, with little success with recent plantings.

### Remnant Vegetation

Only a couple of significant stands of remnant native vegetation consisting of *Melaleuca raphiophylla* (Swamp Paperbark) and *Eucalyptus rudis* (Flooded Gum) remain in the reserve and therefore require retention and management. Refer the strategies and recommendations for the Whole of Foreshore - Culture Environment & Heritage; and particularly the Node Strategies for the Lakes node and Deck/ *Melaleuca* Grove/ Scented Gardens node; regarding improvements to the vegetation of the foreshore.



Eucalyptus rudis trees west of the Scented Gardens



Succession tree planting of Melaleucas, 2012



## 3.0 THE SOUTH PERTH FORESHORE

### Trees

All trees along the foreshore have been recorded in the City's Tree Register electronic database as part of its asset management.

There are 11 foreshore trees deemed by the City as 'Significant Trees' and listed on the Significant Tree Register with a Tree Preservation Order and calculated amenity value (monetary value of tree). Refer Appendix 01 Vegetation: Floristic Complexes of the South Perth Foreshore and Existing Vegetation including Weeds for further information.

The issue of additional tree plantings has been the cause of major public concern since the release of the first landscaping plan in 1975. As a result, a tree planting

program was designed in 1985 to allow vistas of the river and city through broad 'view corridors', representing a compromise between the competing needs for habitat, shade, aesthetic appeal and views to Perth city and the river. Aligned with this plan, during the 1980s many hundreds of trees were planted, including in the Coode Street and Lakes area, where following earlier clearing only low plants grew including large areas of weeds such as castor oil plants and Acacias (particularly *Acacia cyclops*). Many trees were vandalised, with hundreds of trees around Douglas Avenue being killed.

The subsequent 2009 Tree Planting Program resulted in 94 trees being planted. Succession planting of trees has occurred since, with a total of 136 trees planted to date, including 114 *Melaleucas* (Paperbarks) to the Melaleuca

Grove as succession and supplementary planting; and replacement Native Peppermints (*Agonis flexuosa*), Eucalypts, and *Casuarina obesa* trees.

However, the resulting shade cover in our sunny climate has been identified by the community as lacking, and more shade trees need to be planted, judiciously located as per the recommended Shade and Vista Analysis. A Tree Planting Program is also required to manage succession planting and senescent trees. (Refer Whole of Foreshore Strategies).

Tree management will include the removal, relocation, or trimming of trees only when this would improve the health of the tree, for removal of weedy species or diseased specimens, or for safety reasons.



Melaleuca Grove



*Ficus rubiginosa* (Port Jackson Fig) near Ranelagh Street

### Lawns and garden beds

The majority of the foreshore reserve is reticulated turf; mostly maintained to a quality suitable for recreational use. There are also planted beds of ornamental bushes, such as roses; and waterwise garden beds of local and native plants, particularly around the carparks and street entries.

However, biodiversity hot spots are relatively small compared to the vast areas of reticulated turf that make up the great majority of the reserve's area. Like all areas of reticulated turf, it is vulnerable to potential water restrictions of longer and drier summers. The POS Strategy (2012) identified the foreshore as one of the City's areas in need of review regarding the extent of reticulated turf and lack of biodiversity. The City's eco-zoning and hydro-zoning program is to be applied to the SPF to increase areas of biodiversity as well as better management of irrigation water, refer Whole of Foreshore strategies.

Constructed in 2009, the beaches' planted areas utilise local and waterwise plants and are a good example of the introduction of biodiverse hydrozoned vegetation. For more information refer to Appendix 01 Vegetation: Floristic Complexes of the South Perth Foreshore and Existing Vegetation including Weeds.



### Swan Habitat

The foreshore has been recognised as a significant location for black swans, with the recommendation that the lakes area around Lake Hurlingham, Lake Douglas and Lake Tondut is developed as an ecological area for swan habitat and breeding. The proposal was a result of a recommendation of the Bringing Back the Swans report (2000); as well as recommendations from the Foreshore Renovation Plan by MP Rogers & Associates (2005). Concept plans were prepared by Urbis in 2011 but the project has not been implemented to date.

The project's objectives are:

- Improve water quality and nutrient uptake through a densely planted edge treatment;
- Provide a safe nesting site for the black swan by limiting access by pedestrians and domestic animals;
- Provide a café, interpretive centre and play area associated with the lake that utilises the existing car park and toilet infrastructure;
- Provide educational signage and information relating to the location of flora and fauna.



## 3.0 THE SOUTH PERTH FORESHORE

### Fauna

Refer Appendix 02 Fauna of the South Perth Foreshore and aquatic environment of Perth Waters for more detail on the fauna of the South Perth Foreshore.

### Weeds and Disease

Refer Appendix 01 Vegetation: Floristic Complexes of the South Perth Foreshore and Existing Vegetation including Weeds for more detail on the weeds of the South Perth Foreshore, including their ongoing management.

Phytophthora cinnamomi, commonly called root rot or Dieback, a soil-borne water mold that produces an infection, is present in Lake Tondut's Weeping Willows (*Salix babylonica*). They are gradually being removed as they die, and the trees are being replaced with more local tree species.

Wood rot fungus is adversely affecting the Flooded Gums (*Eucalyptus rudis*) and Tuarts (*Eucalyptus gomphocephala*) near the Scented Gardens, as the soil around them is too high, the area around the established trees having been filled when the gardens were constructed.

Termites, borer and lerp are also present in this area and in the stands of trees near Hurlingham Lake. Management is ongoing.

### INFRASTRUCTURE AND SERVICES

The SPF has a CoSP maintenance budget allocated each year just to maintain the 'status quo' without capital expenditure on upgrades to infrastructure. It is noted that the City currently has insufficient funding for the effective management and replacement of assets on the South Perth Foreshore.

Current issues include high water use, ageing reticulation infrastructure, water quality problems associated with the man-made lakes, turf management; lack of biodiversity; lack of shade and deteriorating river walls.

The irrigation for Sir James Mitchell Park is drawn from the Leederville Aquifer and pumped into Lake Tondut. Water is also sourced from Lake Douglas which is predominantly storm water. This water is pumped from Ellam St to the boat ramp west of the Narrows Bridge to irrigate all turf and shrub areas.

Most of the main paths in the park, other than the path along the Esplanade, have lighting provided; with the most recent lighting installed in late 2013.

There are numerous electric barbecues and picnic tables, most of which have shelters with solar powered lights installed.

Public toilets are found at the Narrows Bridge to the west, Mends Street Jetty, Scented Gardens, Boat Shed Café at Coode Street, Clydesdale Reserve and the Hurlingham Road car park.

Attached to the Clydesdale toilets is the City's maintenance shed that houses equipment used for maintaining the reserve.

This plan outlines the improvements that can be made to the area in order to better utilise and manage the foreshore.





### 3.5 CULTURAL AND SOCIAL VALUE AND USE

#### ABORIGINAL HERITAGE ATTRIBUTES

The South Perth area was once inhabited by the Beeloo Noongar/ Bibbulmun river people prior to European settlement (Collard et al, 1996). They used the foreshore area particularly around Mill Point for camping and fishing, prawning and crabbing; and also for the extraction of honey from native beere or Banksia species, and other trees.

The South Perth foreshore side of the river is known by Noongar/ Bibbulmun people as Gaboodjoolup or 'the place of the shore'. Further east is Joorolup or 'place of the jarrahs' (Collard et al, 1996).

During the 1850s, there were violent confrontations between Noongar/ Bibbulmun people and the very small white population in the area. After this time, a

camp near the present day Causeway was established and occasionally Noongar/ Bibbulmun people would use the South Perth area (Florey, 1995).

Original vegetation communities of the foreshore have great significance to the Aboriginal community for many reasons. Of particular importance are the remnant Casuarinas (Sheoaks) and Melaleuca (Paperbark) groves which symbolise camp sites and places of quietness and coolness. Their bark and foliage was historically used for culinary and medicinal purposes, including to aid in child birth and care by women. Paperbark was used for shelter and as a canvas for paintings. Eucalypt trees also had medicinal purposes. Other plants including Banksias and Acacias (Wattles) also have significance in relation to the foreshore. There are many stories to be told.



*"The Swan River is a place that is important to all of us. As a kid, I have fond memories of coming down to the foreshore with my family - including my nonna - and we would all swim, crab and have a BBQ on the foreshore - everyone was there - from all communities and walks of life and the river provided. Aboriginal people seem to understand this and its importance and it is now up to all of us and the general community to learn more and be responsible to understand, protect and be a part of - for the future of all."*

City of South Perth Aboriginal Engagement Strategy 2013.

## 3.0 THE SOUTH PERTH FORESHORE

### POST EUROPEAN SETTLEMENT HERITAGE ATTRIBUTES

European heritage sites include the Old Mill, Mends Street Jetty and Coode Street Jetty. Mends Street also retains a significant number of heritage buildings, including shops, post office, and the Windsor Hotel, providing a streetscape with heritage value as the entry from the foreshore to this precinct including the Perth Zoo, also of heritage value.

Refer to Appendix 03 Post European Settlement History – Historical Development and Land Use and the City’s Municipal Heritage Inventories for further reading on history and heritage attributes.

### CURRENT SITE USAGE

The South Perth Foreshore, including Sir James Mitchell Park, Clydesdale Reserve, and The Esplanade is currently recognised as a regional reserve which services special events as well as its common and regular recreational activities that take place in the park or along the water. The foreshore forms part of a greater Perth Waters experience and circuit for users along the Swan River’s edge and on or in the water. Many users of the foreshore reside outside the South Perth district and travel to visit the park.

### Events

The SPF is currently recognised as a regional open space/ reserve (ROS) which services special events such as Australia Day Celebration Zone (Skyshow) and the City’s Fiesta, and iconic events including concerts. It also provides for community and sporting events; and

smaller public and private events such as weddings and functions. Site specific civic events are also held, such as Australian citizenship ceremonies at the Flag Pole.

### Recreational activities – land based

The common and regular activities that take place in the park or along the water include low-impact recreational activities, such as walking, jogging, cycling, playing, watching or exploring natural features; dog walking and exercising; bird watching; picnicking and social gatherings.

Children’s play is catered for with a number of playgrounds: a small playground to the east of the jetty at Mends Street (replaced early 2014); a large playground adjacent to the Scented Gardens (2011); the recently replaced partly completed Coode Street playground (2013) and Hurlingham accessible playground (installed 1990 and reaching its use-by date).

Extensive lawn areas provide informal sporting and play areas for all ages. These areas also provide picnic facilities including barbecues, public toilets, seating and shelters, to a lesser or greater extent for each.

The Melaleuca wetland and lakes areas provide nature spaces that provide an opportunity for low-impact recreational activities such as bird watching. The limited biodiversity available results in limited nature-based opportunities, despite the SPF’s foreshore location.

### Recreational activities – water based

On Perth Waters, adjacent to the foreshore, water based activities such as swimming, fishing; canoeing, sailing

and windsurfing provide opportunities to enjoy the river environment and foreshore.

At Coode Street, recreational boating is provided for with a public boat ramp near the Wesley College Rowing Club, which provides private storage and launching facilities for the nearby school.

As the population of Perth increases, so too does the volume and variety of aquatic activity within the Riverpark, creating a range of challenges in management. To ensure the safe, equitable, sustainable use of the waterways with minimal conflicts into the future, the Swan River Trust and the Department of Transport (DoT) have reviewed aquatic use and management in the Swan Canning Riverpark and produced the document ‘Sharing the Rivers’. To balance the ecological needs of the rivers with maximising community benefit and amenity, this document outlines the allowed recreational use of the river, including maps of designated areas, speed restrictions and the like.

### Commercial enterprises and recreational activities

Other activities on and in the foreshore vicinity include the Boatshed Café and Surf cat hire at Coode Street; the Bellhouse Café at Mends Street Jetty; restaurants, cafes, the Windsor Hotel and other traders in Mends Street; and the Old Mill heritage and tourism centre; and the nearby Perth Zoo.

The City and the Swan River Trust recognise that limited commercial activity is necessary for the benefit of users; however any such activity should be in harmony with the values of the foreshore.



The Node Strategies identify the existing recreational commercial enterprises, including those currently existing at Mends Street and Coode Street; as well as strategies for supplementary activities and enterprises at these nodes, and The Lakes, Ellam Street and Mill Point. Refer to the Node Strategies for more information.

### Pedestrians and Cyclists

The South Perth Foreshore forms part of a greater circuit and experience for pedestrians and cyclists along the Swan River's edge. The journey is shared by commuter traffic and recreational users throughout the week as well as weekends. The permanent bike counter near the Scented Gardens west of Mends Street indicates a daily average of 1371 cyclists during the week and 1467 on weekend days (average between January 2013 and January 2014.)

Over the years the City has invested heavily in the upgrade and upkeep of both dedicated and shared pedestrian and cycle paths and related infrastructure such as end of trip cycle facilities. Future planning for these facilities is supported by the South Perth Bike Plan 2012-2017 which recommends consolidating existing routes so that they are more efficient and provide greater amenity.

The popularity of cycling along the foreshore is undoubted, however a diversity of choice (including the provision of options for shorter journeys for the casual or family user) is lacking. Connections with the existing path and road network are also lacking in places. A lack of physical connection such as cyclist/

pedestrian bridges and transport options coupled with dis-continuous shade discourages these journeys and adversely impacts user experiences.

### Transport and Access– Public and Private

Public Transport is provided by the Public Transport Authority (PTA). The Transperth bus network currently services the South Perth, including separate east and west services utilising Labouchere Road and Mill Point Road. There is no continuous east-west service, and no services along the South Perth Esplanade.

There is currently regular but limited use of the ferry system between the jetties at Barrack Street in Perth city to Mends Street in South Perth; however during the 2012-2013 summer, a night time summer trial of ferry services ran to determine future viability of increasing frequency and extension of ferry service to other routes. The Coode Street ferry service that ran from Perth city's Barrack Street jetty has not run for over a decade. Refer to the Appendix Post-European Settlement history – Historical Development & Land Use for more information on the ferries' history.

There is a need to better coordinate the existing bus and ferry service, and develop an integrated, well serviced transport system. For visitors, the primary mode of transport to access the foreshore is by car, with limited public transport options other than the day-time ferry from Perth city's Barrack Street Jetty.

Private Transport by vehicle is well serviced by access roads and carparks. Any future additional carpark provision is to be within the road reserves, not within the POS.

Provisions for pedestrians and cyclists are well accommodated across the foreshore, with dedicated paths for each, providing alternative transport options. However, conflicts exist between cyclists, pedestrians and vehicles at particular destinations along the foreshore, and these need to be resolved.



Scented Gardens Playground



Shelter near Scented Gardens



## 3.0 THE SOUTH PERTH FORESHORE

### RECOGNISED COMMUNITY ASPIRATIONS

The preparation of the SPF Plan is a collaborative process facilitated by the City of South Perth, assisted by consultants and in consultation with stakeholders such as the Sir James Mitchell Park and Sustainability Community Advisory groups, State Government agencies (Swan River Trust), indigenous groups, local business, schools and youth, and the wider community. The stakeholder engagement was aimed at collating ideas and comments from the many varied stakeholders, to ensure balanced and all-encompassing input was provided. A summary of the stakeholder engagement process is provided at Appendix 04.

The City has identified the South Perth Foreshore as being in need of revitalisation to bring the area up to the standard expected of city waterways and riverparks in the developed world today. Revitalisation of the foreshore forms part of the City's Strategic Plan 2013-2023.

In the Community Perspectives 2012 Survey Results (the City's CATALYSE Community Perceptions Survey), key areas to continue improving include a third set of priorities, being services that are performing well but have been marked as ones to focus on improving further. This includes streetscapes, footpaths, cycleways, parks, sporting grounds and street lighting. The survey indicated 51% were satisfied, but 26% of respondents were dissatisfied with street artworks and public art.

The 2012 survey also specifically considered new uses on the South Perth Foreshore, with the following

percentages of respondents indicating they would like to see on the foreshore: 82% festivals, concerts and events, 82%; outdoor exercise equipment 78%; nature playground 78%; areas that can be used for junior sport 75%; interpretive and historical trails 73%; 72% public art installations and a water playground 58%.

The City recognises the foreshore's importance and has identified the need to create this future vision and plan for the South Perth Foreshore.

Community and others' aspirations were gathered during the stakeholder engagement exercises undertaken in 2013, particularly via the SPF Survey period of July-August 2013. From the initial early 2013 idea-gathering stage of the project, and subsequent community engagement including the survey period, it is clear that the foreshore is an iconic and well-loved place in South Perth, but the community believes it is fairly tired and in need of revitalisation, including some new activities and attractions to bring it back to life.

These community aspirations, identified in the draft SPF document as 'opportunities' have been developed into Strategies and recommendations for actions in this final document; based on the ratings and priority ranking from the survey. [Refer South Perth Foreshore 2013 and beyond 'My Foreshore Our Future' Feedback Survey Results 1 July to 30 August 2013 Rev. 1; the Executive Summary of which has been included in this document in Appendix 04].







## 4.0 STRATEGY & MANAGEMENT PLAN

### 4.1 MANAGEMENT PLAN

The aim of establishing the South Perth Foreshore Strategy and Management Plan (SPF Plan) is to balance the competing demands for use and development with the need to conserve and enhance a functional healthy river and foreshore environment.

The purpose of this SPF Plan is to guide the management of the foreshore into the future. The foreshore is currently the responsibility of and managed by the local government authority the City of South Perth. This plan includes the improvement of public infrastructure, recreation and tourism experiences, and environmental values. This document also considers physical and visual connections to the foreshore particularly strategic zones associated with the Mends Street Precinct and the Perth Zoo; and public transport including ferry connections and the potential future train station location at Kwinana Freeway near Richardson Park.

The SPF Plan identifies the most appropriate combination of uses for the foreshore area, while maintaining and preserving the environmental and heritage values of the area and its surrounds. It complements the regional planning approach of the Swan River Trust as well as providing for local residents, regional users, and commercial, event, and tourism enterprises.

This document outlines the findings from background investigation and stakeholder engagement activities undertaken to inform the plan. Strategies and priorities for the South Perth Foreshore are outlined, to guide the

long-term plan to revitalise the foreshore and adjacent commercial and tourist precincts; while managing the foreshore for its recreational, environmental, water management and biodiversity values.

This plan provides definition relating to strategies for the foreshore, and provides a strategic framework for future technical delivery and budgeting. This document will play a pivotal role when seeking Federal and State Government funding; as it will provide a clear plan for the future that demonstrates to higher levels of government any funding being sought will be appropriately spent in accordance with a well-researched, stakeholder tested plan.



### 4.2 PROJECT OBJECTIVES

The objectives of the project were derived from the City's Strategic Plan 2013 – 2023, and further informed by document reviews and community conversations and feedback.

The objectives outlined in the draft SPF Part 01 were evaluated by the community during the public feedback period 'My Foreshore Our Future' survey (the Survey) which ran from 1 July to 30 August 2013. This resulted in the following objectives of the project, which were endorsed by council in November 2013.

The project objectives are:

- 1. Create opportunities for increased social activity**  
Provide diverse activities to support the City's changing demographic.
- 2. Develop and enhance existing parkland, flora and fauna.**  
Protect and enhance vegetation, restore water quality and develop and maintain suitable habitats for fauna.
- 3. Encourage healthy lifestyles**  
Provide diverse recreational opportunities, both passive and active. Encourage people to engage with nature and spend more time outdoors.
- 4. Recognise and celebrate history and cultural heritage**  
Promote awareness and knowledge about site and cultural history through interpretation, place making and engagement initiatives.



## 5. Foster and promote sustainability

Establish more sustainable water and energy practises, climate responsive planning and design and maintenance strategies.

## 6. Improve accessibility and connectivity

Provide for access to an integrated, well serviced public and alternative transport system including an integrated pedestrian and cycle network. Provide clear wayfinding within and from outside the site. Provide access to everyone, including people with disabilities.

## 7. Maintain vistas

Preserve vistas to the City and the Swan River.

## 8. Governance

Ensure responsible business principles, budget allocation and best practice infrastructure asset management are applied:

Objective 7, (Previously numbered Objective 8 in the draft document) to 'maintain vistas' was included as the visual relationship between the foreshore, the river and Perth City to the north are an important factor in its management. Management of the foreshore will consider this relationship and balance it with the demands for increased recreational use and further development of facilities. The challenge is to balance improved infrastructure to meet the needs of the reserve's users; enhancement and protection of the environment of the area and maintenance of its visual amenity.

From the survey, all of the South Perth Foreshore 2013 and beyond project's eight objectives listed, other than 'Facilitate economic development' rated highly with an average rating of over 3.5. Objective 8 'Governance' was not listed in the survey, as it is a given.

Refer to the Appendices on Stakeholder Engagement and the Council Decision for more information on the survey period and these objectives.

## 4.3 STRATEGIES

Since the adoption of the Management Plan in 2001, the City has incrementally constructed and implemented numerous projects and sustainability objectives throughout the South Perth Foreshore. These projects were the result of work undertaken as part of the earlier plans (refer Previous Strategies/ Management Plans and Path to Date in this document).

From this, the City recognised that in order to improve the foreshore in a holistic, sustainable and cost effective way, undertaking stand-alone projects such as these was not a logical or effective way forward. This SPF Plan synthesises all current work and future aspirations into this plan with a project delivery strategy for the next phase of management of the South Perth Foreshore.

The size of the foreshore necessitates two concurrent approaches to the strategies:

- Strategies for the whole of the foreshore: Strategies WOF 1 to 4 (Refer 4.3.1), and
- Node-specific strategies: Node Strategies N1 to N10 (Refer 4.3.2).

These concurrent approaches to the foreshore will enable the development of foreshore spaces that are comfortable, convenient and accessible; activated, inclusive and well-connected; while being diverse and identifiable. This will ensure a sustainable future in which the foreshore provides a range of recreational and social opportunities, and enhances the natural and cultural environment.



## 4.0 STRATEGY & MANAGEMENT PLAN

**4.0 STRATEGY & MANAGEMENT PLAN**

**Transport and Access**

**Infrastructure**

**Activation**

**Culture, Environment and Heritage**

KWINANA FREEWAY FORESHORE

THE NARROWS BRIDGE

KWINANA FREEWAY

WENDS STREET

COODE STREET

ELLAM STREET

VICTORIA PARK FORESHORE



### 4.3.1 WHOLE OF FORESHORE STRATEGIES

The following considerations are seen as important and relevant to the whole of the foreshore planning:



**WOF 1** Transport and Access;



**WOF 2** Infrastructure;



**WOF 3** Activation;



**WOF 4** Culture, Heritage & Environment.

Strategies incorporating key considerations, component or sub-strategies, and actions have been defined for each to enable the holistic planning, management and funding for these. The numbering of these four WOF Strategies is arbitrary, and merely aligns with how they were presented in the draft document. It is likely that one or more of these strategies and/or sub strategies may be targeted concurrently.

### 4.3.2 FORESHORE NODES – NODE-SPECIFIC STRATEGIES

In addition, strategies incorporating key considerations, component strategies and actions have been defined for each Node along the foreshore. The 10 nodes are recognised precincts of the foreshore with distinct characteristics, opportunities and management issues.

While each node has been shown diagrammatically as a distinct area, each node remains part of the whole foreshore; and planning will consider each node in context with its neighbouring nodes for development of well-connected spaces.

From west to east the 10 foreshore Nodes are:

#### Mill Point

West of the Narrows Bridge, Point Belches, Old Mill & Millers Pool

#### Esplanade West

The lawn area west of the beach;

#### Mends Street Beach

The single beach west of Mends Street;

#### Mends Street (Piazza and Promenade)

The area between Mends Street and the Mends St jetty;

#### Deck, Scented Garden and Melaleuca Grove

The viewing deck and its surrounds including the Scented Gardens, Melaleuca Grove and the picnic, barbecue and playground area;

#### Coode Street Beaches

The beaches west of Coode Street;

#### Flagpole

The flagpole and civic ceremony area of Sir James Mitchell Park;

#### Coode Street

Jetty and surrounds of Sir James Mitchell Park and along Coode Street to Mill Point Road;

#### The Lakes

Clydesdale Reserve with Lake Tondut and the area

of Sir James Mitchell Park with Lake Douglas, Lake Hurlingham and the open stormwater drain;

#### Ellam Street

The area to the west of Ellam Street (the eastern side is McCallum Park in the Town of Victoria Park).

### 4.3.3 NODE PRIORITIES

The Node strategies have been listed in order of the priority ranking attributed to each node during the feedback period (Refer Appendix 04 Stakeholder Engagement).

In order of priority, the nodes are:



**N1 Mends St**



**N2 Coode St**



**N3 Mends St Beach**



**N4 Coode St Beach**



**N5 Mill Point**



**N6 Deck Melaleuca Grove/ Scented Garden**



**N7 The Lakes**



**N8 Esplanade West**



**N9 Flag Pole**



**N10 Ellam Street**

### 4.3.4 STRATEGIES

The following pages provide detail on each of the Strategies.

# WHOLE OF FORESHORE TRANSPORT AND ACCESS

**CURRENTLY:** Provisions for pedestrians and cyclists are well accommodated across the foreshore, with dedicated paths for each. Other modes of transport such as bus and ferry links are lacking, with conflicts existing between cycle, pedestrian and vehicles at particular destinations along the foreshore. For visitors, accessing the foreshore is difficult as the primary mode of transport is by car with limited other alternatives.

## THINGS TO CONSIDER:

- Cycle/pedestrian/vehicle volumes and conflicts (the average speed for cyclists in the park, clocked at the permanent counter near the Scented Gardens is 30 km/hr)
- Underutilised 'end of trip' bicycle facilities
- Inadequate east-west public transport links
- Confused hierarchy between the path network vs private motor vehicle access (to car parks) in the park;
- Inadequate Way finding signage for all modes of transport (walking, cycling, public transport and private motor vehicle);
- Inadequate connectivity to the park for all modes of transport (walking, cycling, public transport and private motor vehicle);
- Inadequate Ferry services and access to various areas of the park;
- Inconsistent and unclear parking controls in the area.



## STRATEGY WOF 1 TRANSPORT & ACCESS

Create a highly accessible and connected public open space, with improved access, connectivity and legibility for all users to the foreshore environment; and  
Identify transport considerations aimed to reduce car use and conflict between modes of transport; review current transport provisions; and investigate multi-modal transport options.

## WOF 1 STRATEGIES

- **WOF 1.1** Improve the paths for cyclists and pedestrians;
- **WOF 1.2** Improve access for all, including those with disabilities;
- **WOF 1.3** Develop an integrated public transport network
  - bus/ferry/cycling/shuttle service/water taxis/ Circuit Cat Bus/ road tram;
- **WOF 1.4** Improve signage and way finding in the park for pedestrians and cyclists;
- **WOF 1.5** Improve parking facilities and management;
- **WOF 1.6** Bike/Segway/Electrical Bike Hire.

## WOF1 ACTIONS INCLUDE:

- i. Set priorities and program based on recommendations from the City of South Perth Bike Plan and related studies;
- ii. Set priorities and program based on recommendations for Access for All;
- iii. Engage a transport consultant to prepare a Multi-modal Transport Study including recommendations to resolve the conflict between cyclists, pedestrians and vehicles. The study should consider the requirements of Amendment No.25 to TPS No.6 and opportunities associated with the potential future train station at Kwinana Freeway near Richardson Park; and include integrated transport options and public transport including buses, and ferry services to/from Mends and Coode Street Jetties;
- iv. Prepare a Wayfinding & Signage Strategy for the foreshore and consider further way-finding signage improvements. Liaise with relevant authorities to prepare the strategy for the wider Perth Waters and tourist precinct;
- v. Review current parking provisions (including numbers, time and taxi allocations); and location of car parks; with any further car park bays to be limited to road reserves, not within the POS;
- vi. Liaise with existing bike hire operators (Town of Victoria Park and the City of Perth) to extend services to South Perth.



# WHOLE OF FORESHORE INFRASTRUCTURE

**CURRENTLY:** Ageing infrastructure in areas of the foreshore includes: irrigation, river walls, park furniture (drink fountains, seats, bins, barbecues, signs, shelters, and picnic facilities), toilets and stormwater drainage system.

## THINGS TO CONSIDER:

- River wall degradation
- Infrastructure and built structures
- Aging irrigation system
- Location, quality and maintenance of water bodies, bins, toilets, seating, signage and information
- Turf management
- Hydrozoning, ecozoning and irrigation infrastructure improvements



## STRATEGY WOF 2 INFRASTRUCTURE

Manage the operation, maintenance, renewal and upgrade of infrastructure assets in order to meet community needs in a sustainable, cost effective and holistic manner.

## WOF 2 STRATEGIES

- **WOF 2.1** Improve safety and lighting;
- **WOF 2.2** Improve park facilities - including signage, toilets, and furniture such as bins, seats, picnic tables etcetera;
- **WOF 2.3** Increase shade and shelter.

## WOF2 ACTIONS INCLUDE:

- i. Prepare a Reserve Facilities Strategy and Assets Management Plan (AMP), including an Asset Condition Survey of all assets, facilities and services (furniture, power, water, stormwater drainage etcetera). AMP to include future maintenance budgets, to ensure 'whole of life' management and a determination of impairment due to climatic factors such as wind and salt. Strategy to include a Material Palette; Public Realm Guidelines, and Project Timeline;

- ii. Seek priority funding for river wall/ river edge/ beach upgrades and implement;
- iii. Develop an Irrigation and Hydro-zoning/ Eco-zoning Plan with cost estimates and priorities;
- iv. Input into traffic and transport study/s regarding carparks and path networks (refer WOF 1);
- v. Implement the Wayfinding & Signage Strategy (from WOF1) to upgrade reserve signage and other wayfinding infrastructure;
- vi. Liaise with Public Transport Authority and Swan River Trust on jetty and river infrastructure;
- vii. Complete the lighting infrastructure upgrade including areas identified for safety reasons;
- viii. Prepare a Shade and Vista Analysis for improved shade and shelter (whilst maintaining vistas); and related plan for implementation, incorporating ecozoning and hydrozoning to increase biodiversity;
- ix. Develop a Water Sensitive Urban Design (WSUD) Program with cost estimates and priorities and implement.

# WHOLE OF FORESHORE ACTIVATION

**CURRENTLY:** Regulations and approvals preclude short term events and activation along the foreshore, coupled with a limited number of events planned as part of the community events calendar.

## THINGS TO CONSIDER

- Storage operations/requirements
- Insurance
- Regulations
- Improved use and engagement of heritage buildings, such as Heritage House
- Use of technologies – such as Wi-Fi and podcast walk trails

## STRATEGY WOF 3 ACTIVATION

Increase activation and appeal of existing spaces through ideas that are trialled and assessed and long term place making opportunities realised through good design, appropriate management, community activation and partnering.



## WOF3 STRATEGIES

### WOF 3.1 Outdoor activities and facilities:

- Outdoor chess, game tables;
- Ping Pong/ table tennis;
- Rollerblading around the city/circuit events;
- Deck chair and umbrella rental;
- Outdoor Thai Chi, Yoga, exercise classes;
- Night walks;
- Kite flying;

### WOF 3.2 Events and performances:

- Culture and theatre;
- Live music;
- Dancing and lessons;
- Keys to the City – Pianos;
- Red Bull Air Race and similar;
- Outdoor cinema – movies & sporting events;
- Scientific and educational events – tide readings for kids and river history walks;

### WOF 3.3 Water-based activities and facilities:

- Temporary or permanent water play;
- Swimming bath/Floating Pool/ Pontoon;
- Showers;
- Paddle boats;
- Boating – dragon boat racing, canoe, kayak, temporary boat moorings;

### WOF 3.4 Public art:

- Decorative street lighting such as fairy lights;
- Temporary exhibitions, sculpture walk

### WOF 3.5 Leasing Arrangements

- No land on the South Perth foreshore be subject of a lease exceeding 21 years (including options).

## WOF3 ACTIONS INCLUDE:

- i. Investigate 'partnering' opportunities with community and interest groups, Department of Transport, other LGAs, and commercial stakeholders including the Perth Zoo;
- ii. Trial temporary short term activation solutions to test and assess long term interest;
- iii. Review regulations and approvals process for events and activation along the foreshore;
- iv. Investigate operator interest in hire or long term facilities for lease with reference to the specific Node Strategies;
- v. Liaise with groups through expressions of interest that target performance artists and arts organisations and similar, regarding event opportunities;
- vi. Engage with local businesses including foreshore traders and community enterprises.
- vii. Develop a strategy for events and activation that includes the foreshore and incorporates the opportunities/strategies recommended.



# WHOLE OF FORESHORE CULTURE, HERITAGE & ENVIRONMENT



**CURRENTLY:** The foreshore has a very strong cultural history and heritage, both European and Indigenous, which is currently unrealised.

The environment doesn't demonstrate best practise principles from a climatic, water management and operations perspective.

## THINGS TO CONSIDER

- Interpretive signage
- Aboriginal and Settlement History
- Lack of shade
- Climate change implications
- Lakes water quality
- Protection and enhancement of biodiversity
- Sustainable water and energy use

### STRATEGY WOF 4

Culture, Heritage & Environment

4.1 Celebrate culture and heritage as a strong element of the foreshore's identity; and

4.2 Develop an environment that responds to the requirements of climate change and water sensitive urban design practice and provides biodiversity.



## WOF4 STRATEGIES

- **WOF 4.1** Tourism attractions and facilities
  - Introduce commercial activity associated with Aboriginal culture (e.g. Dance, food)
  - Celebration of visitors
- **WOF 4.2** Educational events and facilities
  - Signage and interpretation of history (including Aboriginal, European, Chinese market gardening and ecological/natural history)
  - Walking tours
- **WOF 4.3** Highlight and interpret heritage/ culture/ history
- **WOF 4.4** Environmental improvements and management
  - Add to biodiversity (including ecozoning/ hydrozoning)
  - Water Sensitive Urban Design (WSUD)
  - Climate change adaptation.

## WOF4 ACTIONS INCLUDE:

- i. Investigate culture & heritage in order to prepare a Culture and Heritage Interpretation Plan to provide a framework for interpretation across the foreshore, to enable key messages and themes to be represented utilising various media, while allowing site-specific stories to be told;
- ii. Engage an Aboriginal project officer to research and coordinate aspects of the project;
- iii. Engage a multidisciplinary Archaeological team to prepare an Archaeological Management Plan;
- iv. Prepare a climate change response / adaptation plan for the river foreshore;
- v. Prepare and implement a plan for ecozoning and hydrozoning to increase biodiversity (refer WOF 2);
- vi. Undertake weed mapping of the entire foreshore and document this in an Environmental Management Plan (EMP) for the foreshore;
- vii. Undertake a Flora and Fauna Survey of the foreshore (to update 2001 records) and incorporate findings in above EMP;
- viii. Prepare and implement a Tree Planting Program (including succession and senescent tree planting);
- ix. Prepare a study of the water bodies including lakes and wetland/s and the river's edge and stormwater drainage; and incorporate into WSUD Program (refer WOF 2) to improve the reserve's water quality.
- x. Undertake soil analysis and prepare a Management Plan including an ASSMP.



## FORESHORE NODE N1: Mends Street (Piazza and Promenade)

**CURRENTLY:** A major arrival point for many visitors to South Perth, linking the ferry terminal to Mends Street and the Perth Zoo beyond. The Mends Street precinct is a major commercial centre for South Perth, however has suffered some economic downturn in trading over the last few years. The area is busy from early morning till around dusk and then is very quiet in the evenings. The street environment is in need of upgrade. The foreshore area has a pavilion and small playground with associated car parking.

### THINGS TO CONSIDER

- Gateway to the City and Perth Zoo
- Obstruction / retention of vistas
- Ageing streetscape in Mends Street
- Conflicts between cyclists/pedestrian/ vehicles
- Traffic, parking and access issues
- Lack of precinct identity
- Jetty repairs and pedestrian circulation around jetty
- Taxis congestion
- Mends Street and Jetty Precinct redevelopment

Strategy N1 Mends Street

### DEVELOP THE MENDES STREET NODE AS:

An active piazza and promenade; an arrival place with day/night activities;

A gateway for the Mends Street precinct, with connecting stories and interpretation of heritage, zoo and the river;

An integrated transport node utilising the river to connect with the Mends St Precinct and surrounding areas.

### NODE STRATEGIES

- **N1.1** Pedestrian friendly piazza and promenade:
  - Improved relationship between retail facades and streetscape;
  - Improved information/ signage from both Perth City and the Zoo;
  - Improved connection between jetty and Mends Street/Harper Terrace;
- **N1.2** Lighting;
- **N1.3** Jetty improvements:
  - Provide diversity of commercial activity at the jetty;
  - Provide opportunities for boating, mooring, and berthing/jetty extensions;
- **N1.4** Integrated transport:
  - Such as bus/ CAT service/ tram/ ferry/ water taxis;

- **N1.5** Increased activation along the Mends street retail centre and foreshore promenade:
  - Buskers, festivals, culture, food, events, including at evening and night;
- **N1.6** Create an identity and gateway;
- **N1.7** Interpretation of culture/heritage/history.

### NODE N1 ACTIONS INCLUDE:

- i. Undertake a retail and place activation strategy for the Mends Street Precinct;
- ii. Prepare a Node Plan for the foreshore Piazza and Promenade, to connect with the commercial area of Mends Street, to connect with Perth Zoo including Windsor Park and the future Civic Triangle; in conjunction with stakeholders including the Mends Street Traders and Perth Zoo;
- iii. Liaise with Swan River Trust and PTA regarding jetty use, extensions and opportunities for boat mooring;
- iv. Consult with City of Perth and Perth Zoo regarding branding, marketing and integration of assets;
- v. Prepare Financial Business Case/ Economic Strategy for Mends Street and associated Piazza and Promenade.







## FORESHORE NODE N2: Coode Street



**CURRENTLY:** This is a well utilised area with a family focus. It caters for a variety of uses including boat launching, playground and cafe. The parking provision provides good access; however there are currently conflict issues with vehicles, pedestrian and bikes that need addressing. Easy access and the scale of the area mean that it is used as an events space throughout the year.

### THINGS TO CONSIDER

- Improve connectivity to Boatshed Café;
- Resolve conflicts between different users groups such as cyclists, pedestrians, children, and boat/trailer activity;
- Upgrades to the jetty access, boat ramp, and toilet block;
- Improve visual and physical connection between Coode Street and the existing lakes.



### STRATEGY N2 COODE STREET

Develop the Coode Street node as a better serviced family recreational space, with improved facilities; a choice of food and beverage outlets; and a diversity of activities including all ages and abilities playground, rowing, sailing, boat mooring, and water play.

### NODE STRATEGIES

- **N2.1** Upgrade family recreation facilities
  - toilet, barbeques, shade
- **N2.2** Upgrade playground facilities
  - water play, all ages and abilities
- **N2.3** Improve transport options and connectivity
  - ferry, bus, other links between adjoining nodes
- **N2.4** Provide diversity of food and beverage outlets
  - restaurants, cafes, kiosk, micro-brewery
- **N2.5** Increased opportunities for water based activities
  - rowing, sailing, boat mooring, water play
- **N2.6** Upgrade boat ramp and boating facilities

### NODE N2 ACTIONS INCLUDE:

- Analyse the results of the Shade and Vista Analysis (from strategy WOF 2.3) in preparation for a Node Plan to improve shade and shelter;
- Prepare a Node Plan to ameliorate conflicting uses and enhance the visitor / recreation experience by designing upgraded family and recreation facilities including playground and water based facilities; with provision for food and beverage outlets;
- Investigate operator interest in establishing other food/beverage outlets;
- Investigate opportunities for ferry/ boat mooring with liaison with PTA;
- Trial of short term activation ideas.



## FORESHORE NODE N3: Mends Street Beach



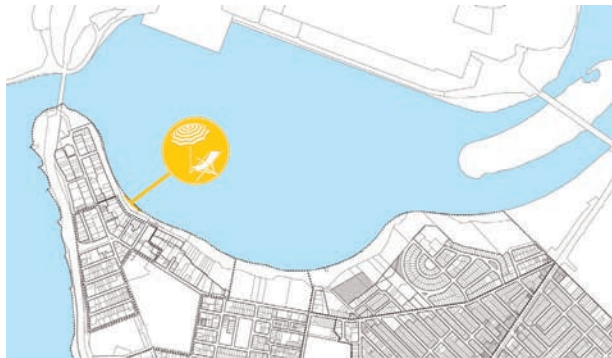
**CURRENTLY:** Mend St Beach provides a shallow swimming bay and buffers against wave movement. It is an attractive amenity, providing an opportunity to engage directly with the water, but is rarely used.

### THINGS TO CONSIDER

- Lack of shade
- Underutilised

### NODE STRATEGIES

- **N3.1** Improve shade and shelter (whilst maintaining vistas)
- **N3.2** Introduce kayak/canoe launching pads



### STRATEGY N3 MENDS STREET BEACH

Develop the Mend Street Beach node as a recreational amenity for use in the summer particularly for young families, with the addition of shade and shelter; and for rowing and kayaking.

### NODE N3 ACTIONS INCLUDE:

- Analyse the results of the Shade and Vista Analysis (from strategy WOF 2.3) in preparation for a Node Plan to improve shade and shelter;
- Investigate the introduction of kayak/ canoe launching pads;
- Prepare a Node Plan to improve shade and shelter and introduce kayak/ canoe launching pads;





# FORESHORE NODE N4: Coode Street Beaches



**CURRENTLY:** Coode Street Beaches provides a series of shallow swimming bays with buffers against wave movement. It is an attractive amenity, providing an opportunity to engage directly with the water, with the existing catamaran hire the current main use

## THINGS TO CONSIDER

- Lack of shade
- Underutilised



## STRATEGY N4 COODE STREET BEACHES

Develop the Coode Street Beaches node as an improved amenity for increased use in the summer particularly, with the addition of shade and shelter; and for catamarans/ rowing/ kayaking, and other beach activities.

## NODE STRATEGIES

- **N4.1** Improve shade and shelter (whilst maintaining vistas)
- **N4.2** Introduce kayak/canoe launching pads
- **N4.3** Introduce beach activities
  - sand play and deckchairs
  - volleyball facilities / pontoon / swimming
- **N4.4** Introduce beach art/sculptures
  - temporary or permanent



## NODE N4 ACTIONS INCLUDE:

- Analyse the results of the Shade and Vista Analysis (from strategy WOF 2.3) in preparation for a Node Plan to improve shade and shelter;
- Investigate the introduction of kayak/ canoe launching pads and trial their introduction;
- Trial short term activities, particularly during the summer months, including sand play, deckchairs, beach umbrellas, volleyball, swimming pontoon;
- Trial the introduction of beach art/ sculptures.
- Prepare a Node Plan incorporating the findings of the Shade & Vista Analysis, and informed by the results/ response to the short term activities to develop the node long term.





## FORESHORE NODE N5: Mill Point



**CURRENTLY:** The Old Mill and Millers Cottage are situated across the river from the City of Perth and Kings Park and tucked under the wing of the Narrows Bridge. The area is rich in history, including the site of the reclaimed Millers Pool, an important site to the Aboriginal people and later to the settlement of Perth in 1829. The area also has a strong physical and historical link to the Milyu Reserve to the west and currently hosts the location for jet ski use, with carpark and boat ramp.

### THINGS TO CONSIDER

- Freeway noise attenuation
- Transport and connectivity
- Redevelopment of Old Mill precinct including Millers Pool



### STRATEGY N5 MILL POINT

Develop the Mill Point node with significant focus as a cultural and heritage hub with ecological improvements to Millers Pool and improved pedestrian and cycle links to Perth city.

### NODE STRATEGIES

- N5.1 Improved pedestrian and cycle links to the city
- N5.2 Rehabilitate existing lake (Millers Pool)
- N 5.3 Improve cycling infrastructure
  - drink/food stop (permanent or temporary)
- N5.4 Introduce sustainable energy initiatives
  - Solar
  - Wind
- N5.5 Interpretation of culture/heritage/history



### NODE N5 ACTIONS INCLUDE:

- i. Assess the feasibility of the current Old Mill Redevelopment proposal and test alternative business case scenarios; and develop a new Node Plan to suit the Strategy N5 for Mill Point.
- ii. Refer Strategy WOF 4 for information regarding the actions to prepare a Culture and Heritage Interpretation Plan for the whole of foreshore, and incorporate this as a significant node in the planning for such;

*Note that the area east of the Narrows Bridge is considered in the Kwinana Freeway Foreshore Management Plan, not in this SPF Plan.*



## FORESHORE NODE N6: Deck, Melaleuca Grove, Scented Garden



**CURRENTLY:** The Deck is a viewing space cantilevered over the river. The Scented Garden is an intimate space at the base of the southern bank planted with scented flowers and foliage, and popular for events such as weddings. It is the location for the World Peace Dreamer Statue, one of the few elements of public art within the SPF.

The Melaleuca Grove is the only remnant pocket of original wetland vegetation and has boardwalk access. Remnant Flooded Gums (*Eucalyptus rudis*) also remain. There is considerable historical significance for the Grove's remnant trees, and in relation to the history of the Chinese Market Gardens.

Adjacent to the Scented Garden is a popular playground, and the riverfront area is extremely popular for picnics and barbecues.

These components are co-located, yet very distinct and disconnected from one another. Access is unclear and signage and information is lacking. For the most part, usage is passive.



### THINGS TO CONSIDER

- Access
- Cycle/ pedestrian/ children conflicts
- Remnant vegetation / protection and enhancement of biodiversity
- Major picnic and passive recreation space

#### STRATEGY N6 DECK, MELALEUCA GROVE, SCENTED GARDEN

Develop the Deck, Melaleuca Grove, Scented Garden node as a major picnic and passive recreation space; with interrelated components that form a continuous and connected pedestrian experience; capturing the essence of each through interpretation and way finding, and incorporating the site's history through interpretation.

### NODE STRATEGIES

- N6.1 Undertake improvements of Scented Gardens;
- N6.2 Improved access and connectivity;
- N6.3 Expand and enhance Melaleuca Grove/ boardwalk;
- N6.4 Introduce fodder garden for educational purposes, managed in partnership with Perth Zoo.

### NODE N6 ACTIONS INCLUDE:

- Analyse the results of the Shade and Vista Analysis (from strategy WOF 2.3) in preparation for a Node Plan;
- Prepare a Node Plan to consider biodiversity, passive recreation, improved access and connectivity and interpretation, incorporating an expanded and enhanced Melaleuca Grove and improved Scented Gardens; and
- Consider the naming of this node to better reflect its improved interrelatedness;
- Liaise with Perth Zoo in relation to developing a 'fodder garden'; plan for and implement garden.





## FORESHORE NODE N7: The Lakes



**CURRENTLY:** The area contains a series of interconnected man-made lakes – Hurlingham Lake, Douglas Lake and Lake Tondut, and an open storm water drain. These all receive urban stormwater from the surrounding suburbs, which is then drained into the river and used for irrigation of the reserve.

It is an attractive and peaceful environment with an abundance of bird life. The lakes, predominantly surrounded by lawns, suffer from issues of poor water quality and algal blooms from time to time.

### THINGS TO CONSIDER

- Undefined link to Hurlingham road;
- Improve pedestrian legibility and access;
- Upgrades to water quality, vegetation, hydrology, fauna habitat;
- Limitations and risks associated with history as a dump site;
- Picnic and passive recreation space;
- Site for development of a swan habitat.

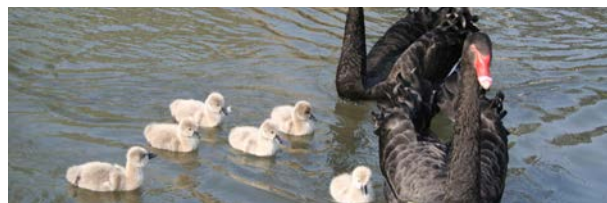


### STRATEGY N7 THE LAKES

Develop The Lakes node as a water-based, ecologically focused precinct, restored, expanded and integrated into its surroundings; providing a retreat for bird watching/breeding, ecology and learning; with volunteers involved in ecological restoration programs; and Develop the location for the establishment of a swan breeding habitat; with interpretive centre and café; and provide for family recreation with picnic facilities and play areas including a nature play space.

### NODE STRATEGIES

- **N7.1** Enhance and encourage the flora/fauna of the lakes;
- **N7.2** Ecological rehabilitation of the lakes and open drain;
- **N7.3** Improve storm water management and water harvesting capabilities of the lakes and drain;
- **N7.4** Nature play space;
- **N7.5** Environmental education and information;
- **N7.6** Interpretive centre with café.



### NODE N7 ACTIONS INCLUDE:

- Develop a Node Plan to build on previous planning for the swan habitat, including design for improvements to the water quality of the lakes and enhancing fringing vegetation for bird refuge; which incorporates improved path and bridge connections back to the adjoining streets; while integrating the area into its surroundings.
- Replace the Hurlingham playground with an accessible nature play space in The Lakes area, which incorporates improved picnic / recreation areas for families (following installation of accessible playground at Node N2 Coode Street);
- Investigate site qualities and geology (including ASS & contamination) in preparation for above planning, and for remediation;
- Investigate and plan for water sensitive urban design (WSUD) for implementation of improved storm water management and water harvesting;
- Partnership/s with Perth Zoo and environmental organisations;
- Promote education and involvement by school groups and other volunteers.
- Investigate opportunities for an Interpretive Centre with café.





# FORESHORE NODE N8: Esplanade West



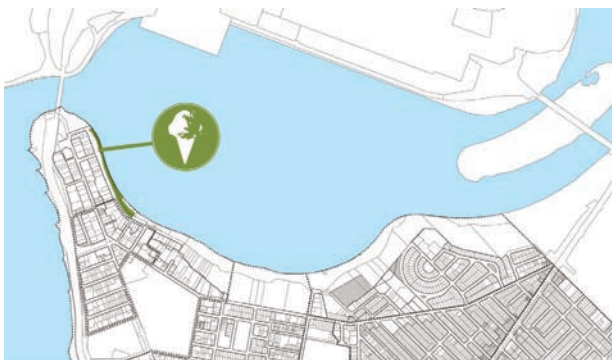
**CURRENTLY:** This precinct is currently an open lawn area, with a small jetty (Queens St) and pedestrian and cycle paths. It is a passive area used mainly for walking, exercising and cycling. There is no shade provided so the area tends not to be used during the summer days.

## THINGS TO CONSIDER

- Obstruction / retention of vistas;
- Inundation by storm surges/ river wall failure;
- Lack of shade and shelter.

## STRATEGY N8 ESPLANADE WEST

Develop the Esplanade West node as a waterfront promenade that relates to the water's edge, with opportunities for respite and seating, whilst maintaining Perth city vistas; and provision for cycling/ walking/ exercising activities.



## NODE STRATEGIES

- **N8.1** Improved facilities:
  - seating and picnic;
- **N8.2** Improved lighting infrastructure:
  - safety
  - feature;
- **N8.3** Improved relationship to water's edge;
- **N8.4** Improved shade and shelter facilities (whilst maintaining vistas).

## NODE N8 ACTIONS INCLUDE:

- Analyse the results of the Shade and Vista Analysis (from strategy WOF 2.3) in preparation for a Node Plan to improve shade and shelter (whilst maintaining vistas);
- Investigate the recreational value of turf areas located across the length of the Esplanade reserve, given that its primary community use occurs on its dual cycle and pedestrian paths. This may include planting of native plant species and reduction in turf areas to particular 'vista picnic spots'.
- Investigate priorities and recommendations from the City of South Perth Bike Plan and related studies and incorporate into Node Plan;
- Prepare Node Plan to develop the node as a waterfront promenade with improved seating, picnic facilities, shade and shelter and lighting; in order to encourage more users to prolong their stay; and provide facilities for walkers/ exercisers and cyclists such as drink fountain/s.



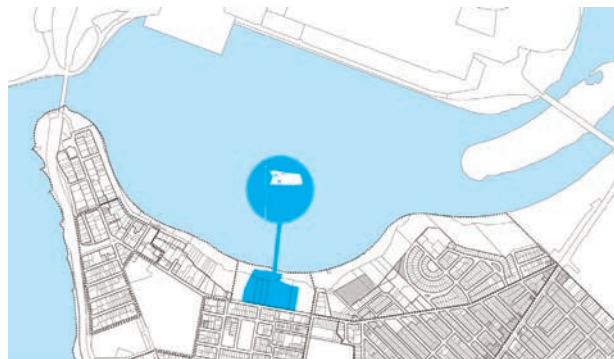
# FORESHORE NODE N9: Flagpole



**CURRENTLY:** A symbolic location for the celebration of civic events, marked by a flagpole and a limestone Coat of Arms constructed in the grass. The area looks 'tired'; is disconnected from the rest of the park and provides no reason to stop and linger

## Things to Consider

- Underutilised
- Degraded infrastructure
- Disconnected to the surrounding park
- Site of Australia Day and other civic ceremonies
- One hundred years of Chinese History (market gardens)
- Major event space
- Flag Pole Project



## STRATEGY N9 FLAG POLE

Develop the Flag Pole node as:

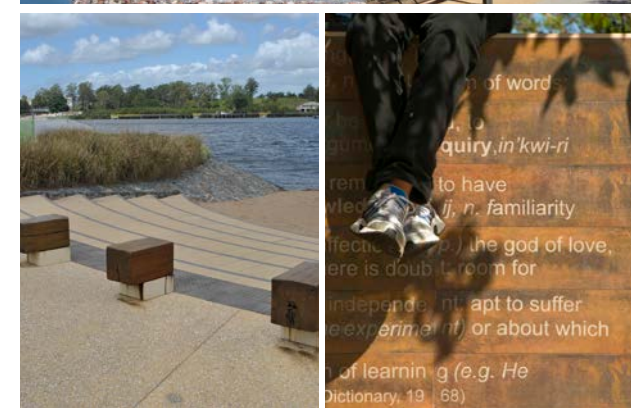
- A landmark site, representing national, state, local and Aboriginal significance, that expresses the historical background of the area; and
- A landmark event space for calendar civic and social events, that provides recreational facilities throughout the year.

## NODE STRATEGIES

- **N9.1** Improve family and picnic facilities;
- **N9.2** Expression of site history:
  - Chinese market gardens;
  - European Settlement;
  - Aboriginal history;
- **N9.3** Develop the area as a civic ceremony and events space.

## NODE N9 ACTIONS INCLUDE:

- Review the detailed plan prepared for the upgrade of the Flagpole site and prepare an updated Node Plan;
- Prepare schedule of events and event requirements for input into upgrade plans;
- Refer Strategy WOF 4 for information regarding the actions to prepare a Culture and Heritage Interpretation Plan for the whole of foreshore, and incorporate this as a significant node in the planning for such;





## FORESHORE NODE N10: Ellam Street

**CURRENTLY:** A vast expanse of lawn predominantly used for dog walking and off-leash exercising, active recreation pursuits and passing pedestrian and cyclist traffic. The precinct abuts the Town of Victoria Park foreshore and the two are poorly connected, both physically and visually. This area of the park is subject to flooding and the ground is very boggy during the winter months.

### THINGS TO CONSIDER

- Unclear and poor road access
- Safety particularly at night due to poor lighting
- Lack of shade
- Ground inundation / drainage issues
- Underutilised
- Minimal residents benefiting due to the surrounding low density

### STRATEGY N10 ELLAM STREET

Develop the Ellam Street node as a high quality junior sport, events, and recreation area with improved access and connectivity to the greater Riverpark and the surrounding residential streets; improved interaction with the water's edge; and the introduction of food and beverage outlets.

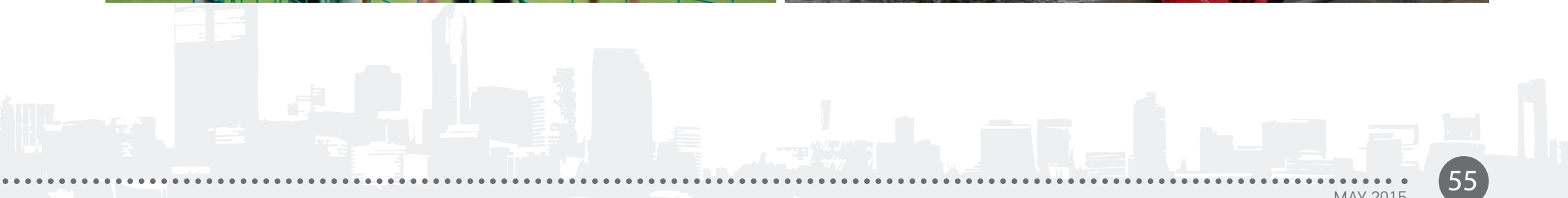
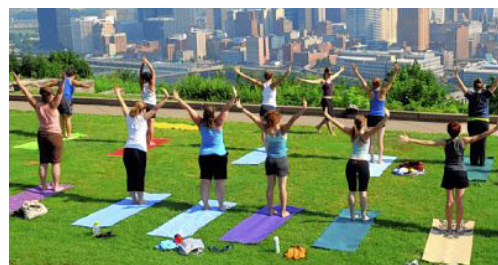
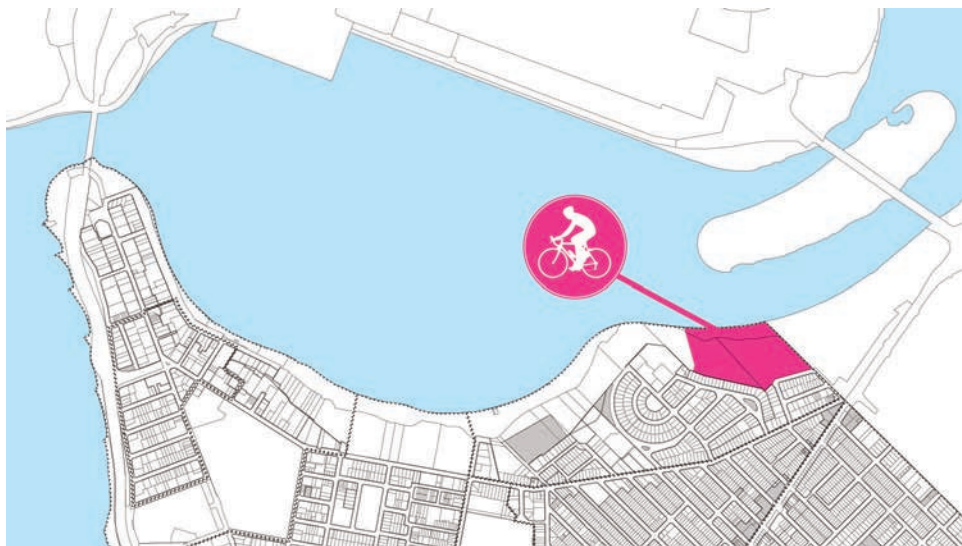
### NODE STRATEGIES

- **N10.1** Pedestrian/ cycle link to Heirisson Island
- **N10.2** Improved interaction with the water's edge
  - introduce new beaches
  - planted edge treatment with boardwalk
- **N10.3** Improve exercise, sport and recreation facilities
  - Fitness facilities
  - Outdoor sporting infrastructure
  - Water based activities such as rowing
- **N10.4** Improve access and signage
- **N10.5** Commercial activity
  - Food
  - Beverage
- **N10.6** Utilise area as an events space

### NODE N10 ACTIONS INCLUDE:

- i. Liaise with City of Perth regarding Heirisson Island Masterplan proposal and Perth Waters planning, and possible integration with it regarding a pedestrian/ cycle link;
- ii. Geological and hydrological investigation and planning for effective subsoil drainage to allow area to be modified as suitable for winter use;
- iii. Investigate the demand and opportunities for junior sport; and the provision of fitness facilities and infrastructure and incorporate into the Node Plan;
- iv. Engage the local community and relevant stakeholders to define "appropriate" events for this space, taking into account the WOF 3 recommendations for activation of the foreshore; as well as the provision of food and beverage providers/ outlets (whether permanent or temporary);
- v. Develop a Node Plan to consider the above, along with beaches development and provision for water based activities such as rowing; and development of a picnic and passive recreation space near the foreshore; and food and beverage providers/ outlets.





## 5.0 Project Delivery Strategy

### 5.1 PRIORITIES AND TIMING

Strategies are listed for both the whole of foreshore (Strategies WOF1 to WOF4) and Node Strategies (N1 to N10). Each Strategy has a list of component strategies (originally in the draft SPF01 identified as 'opportunities' for the foreshore). The 65 component strategies – 17 for the whole of foreshore - and 48 for the 10 Nodes - have been listed in the preceding pages.

The Strategies, component strategies and 'actions' for each Whole of Foreshore (WOF) Strategy and Node Strategy, forecasts 10-30 years' of actions forward for the planning of the South Perth Foreshore.

The 1-4 numbers assigned to the WOF Strategies do not signify which is most important but are merely identifiers. Project delivery of the 4 WOF Strategies and their 17 component strategies may be run concurrently with the delivery of one or more of the 48 specific Node Strategies.

The Node Strategies are listed in the order of ranking from the Survey of 'how important it is to revitalise', with 1 being the most important, and 10 being the least important. This provides the City with a priority listing of Nodes.

For example, the Node Strategy for the Mends Street Node is priority strategy N1.

The Mends Street Strategy N1 is:



#### Strategy N1 Mends Street

Develop the Mends Street node as:

- An active piazza and promenade; an arrival place with day/night activities;
- A gateway for the Mends Street precinct, with connecting stories and interpretation of heritage, zoo and the river;
- An integrated transport node utilising the river to connect with the Mends St Precinct and surrounding areas.

A project may be rolled out sequentially by its component strategies, either singularly, paired or in groups. For example, it is likely that for Node Strategy N1 Mends Street, that N1.1 and N1.2 will be paired as one project:

- **N1.1** Pedestrian friendly piazza and promenade:
  - Improved relationship between retail facades and streetscape;
  - Improved information/ signage from both Perth City and the Zoo;
  - Improved connection between jetty and Mends Street/Harper Terrace;
- **N1.2** Lighting;

For all of the Node Strategies, the development of a 'Node Plan' will be required, and is listed in the Actions to be undertaken in order to progress the strategy. These Node Plans will detail the development of the node in the form of a 'masterplan', with planning considering

each node in context with its neighbouring nodes for development of well-connected spaces.

Concurrently, one or any number of the WOF strategies may be implemented. For example, Strategy WOF 2 Infrastructure:



#### Strategy WOF 2 Infrastructure

Manage the operation, maintenance, renewal and upgrade of infrastructure assets in order to meet community needs in a sustainable, cost effective and holistic manner.

In some cases, particular WOF strategies' actions will need to be implemented in order to inform other WOF strategies and Node strategies. For example, the preparation of a Shade and Vista Analysis for the foreshore will be needed early in the sequencing of projects, as it will inform other projects such as the preparation of Node Plans listed in Project actions for the Node Strategies.

For example, the component strategy WOF 2.3 may be implemented first:

- **WOF 2.3** Increase shade and shelter.

For this strategy, the key action is to:

- Prepare a Shade and Vista Analysis and develop a plan for improved shade and shelter (whilst maintaining vistas).



## **FUTURE STAKEHOLDER ENGAGEMENT**

The City's policy P103 on Communication and Consultation will guide the level of stakeholder engagement required for the projects that are delivered from the listed strategies.

It is proposed to create a South Perth Foreshore Advisory Group which will play a role in advising on specific points related to future planning for the foreshore.

## **5.2 FUNDING, FEASIBILITY FRAMEWORK AND IMPLEMENTATION PLAN**

The time and cost that could be attributed to the entire list of strategies is above the capacity of the City of South Perth's current funding and staffing, which will necessitate a Feasibility Framework being devised to feasibly tackle this project.

The funding arrangements that have been set aside and are pending for management of the site include:

- An allocation provided each financial year for maintenance works;
- Funding allocated in the annual Infrastructure Capital Works program;
- Specific funding allocated in the City's Long Term Financial Plan; and
- The potential for grants from external bodies for particular strategies and projects.

Following adoption of the SPF Strategy and Management Plan, the SPF Feasibility Framework and Implementation Plan will be prepared based on the priorities identified in the SPF Strategy and Management Plan, and assessment of project feasibility and the funding arrangements available and anticipated.

Opportunities for low cost interim activation strategies and projects which could be used to test ideas without expending large amounts of money will also be developed.

The Implementation Plan will be developed with due consideration of the City's ability to fund projects through the Long Term Financial Plan and annual budgets and will also identify which projects could potentially receive external funding.

The Implementation Plan will be the basis for the City to progress more detailed planning based on specific Whole of Foreshore (WOF 1-4) and Node Strategies (N1 to N10).





# **SOUTH PERTH FORESHORE**

## STRATEGY AND MANAGEMENT PLAN

# **APPENDICES**



# APPENDIX 01 VEGETATION: FLORISTIC COMPLEXES, EXISTING VEGETATION AND WEEDS

## FLORISTIC COMPLEXES OF THE SOUTH PERTH FORESHORE

The original composition of these communities has been pieced together from historical documentation of the area and botanical surveys of other local riverine environments.

### VASSE COMPLEX

The flora of the Vasse Complex would have been the original vegetation at Point Belches and along a narrow line east of the Coode Street Jetty (DCE, 1980).

It consisted of a mixture of:

Closed Melaleuca scrub to Fringing woodland of:

- Flooded gum (*Eucalyptus rudis*) and
- Melaleuca species.

It would have also included an open forest of:

- Tuart (*Eucalyptus gomphocephala*);
- Jarrah (*Eucalyptus marginata*) and
- Marri (*Eucalyptus calophylla*), on the higher land.

Wetlands would have originally supported

- Swamp paperbark (*Melaleuca rhaphiophylla*);
- Stout paperbark (*Melaleuca preissiana*) and
- Saltwater paperbark (*Melaleuca cuticularis*),
- Salt sheoak (*Casuarina obesa*);
- Christmas tree (*Nuytsia floribunda*),
- Robin redbreast bush (*Melaleuca lateritia*) and
- Coojong (*Acacia saligna*).

### KARRAKATTA COMPLEX

A small section of Point Belches originally supported the flora identified as being the Karrakatta Complex.

This complex is predominantly:

- Tuart (*Eucalyptus gomphocephala*);
- Jarrah (*Eucalyptus marginata*) and
- Marri (*Eucalyptus calophylla*).

The understorey consisted of:

- Slender Banksia (*Banksia attenuata*);
- Firewood Banksia (*Banksia menziesii*); and
- Bull Banksia (*Banksia grandis*).

In addition the following species are found:

- Sheoak (*Allocasuarina fraseriana*) and
- Peppermint (*Agonis flexuosa*).

### BASSENDAN COMPLEX

The tip of Point Belches was predominantly part of the Bassendean Complex.

The vegetation ranges from woodland of:

- Jarrah (*Eucalyptus marginata*);
- Sheoak (*Allocasuarina fraseriana*), and
- Various banksia species (*Banksia* spp.) to
- Sedge lands on the moister and lower sites.

Sir Charles Fraser, who was a botanist on the 1827 Stirling exploratory party, described Point Belches as having '...banksias, eucalypts and the shrubs consisted of a 'beautiful Isopogon, a species of Acacia and a Jacksonia with crimson flowers'.

Early residents of South Perth recall that there were abundant swanberries (*Rhagodia baccata*), a native berry that was very sweet and popular with both locals and goannas. They also recall that between Mends Street and the Causeway there was a belt of river gum/ Flooded Gum (*Eucalyptus rudis*), Salt Sheoak (*Casuarina obesa*), Paperbark (*Melaleuca* spp.), reeds and rushes (Gothard, 1988). The hinterland was described as undulating with Jarrah (*Eucalyptus marginata*) and Banksia (*Banksia* spp.) (Crowley, 1962).

## EXISTING VEGETATION & RECOMMENDED PLANT SPECIES

### TURF AREAS

The foreshore along Sir James Mitchell Park, Point Belches and McCallum Park consist of turfed areas of:

- Couch (*Cynodon dactylon*), along with;
- Kikuyu (*Pennisetum clandestinum*).

### LAKES VEGETATION

The man-made lakes have:

Fringing vegetation of rushes and sedges:

- *Baumea juncea* (Bare Twig Sedge);
- *Cyperus gymnocaulos* (Spiny Flat Sedge);
- *Ficinia nodosa* (Nodding Club Rush);
- *Isolepis cernua* (Fibre Optic Grass);
- *Juncus kraussii* (Shore Rush);
- *Juncus pallidus* (Pale Rush);
- *Schoenoplectus validus* (River Club Rush);

And other vegetation:

- *Astartea fascicularis* (Dainty Astartea);
- *Bossiaea eriocarpa* (Common Brown Pea);

- *Centella cordifolia* (Pennywort);
- *Desmocladius flexuosus*;
- *Gastrolobium ebracteolatum*;
- *Hakea varia*;
- *Melaleuca preissiana* (Stout Paperbark);
- *Melaleuca raphiophylla* (Freshwater Paperbark);
- *Patersonia occidentalis* (Purple Flag);
- *Salix babylonica* (Weeping Willows); and
- *Washingtonia* spp. (Cotton Palms) on the islands.

### RIVER VEGETATION

Rushes and sedges planted along the river's edge were trialled in the Ellam Street vicinity, but were damaged during floods in the 2000s, and have not been replaced. Some *Baumea* and *Juncus* remain.

Species included:

- *Baumea* sp.; including
  - *B. juncea* (Bare Twig Sedge) and
  - *B. preissii* (Broad Twig Sedge);
- *Carex fascicularis* (Tassel Sedge);
- *Juncus kraussii* (Shore Rush);
- *Juncus pallidus* (Pale Rush);
- *Juncus pauciflorus* (Loose-flowered Rush).

### SHRUBS, GRASSES AND GROUNDCOVERS

Dryland shrubs, grasses and groundcovers include, in addition to those already listed under Lakes Vegetation:

- *Acacia cyclops* (Red-eyed Wattle/ Western Coastal Wattle);
- *Anigozanthos* sp. (Kangaroo Paws);
- *Astartea scoparia* (Common Astartea);
- *Calothamnus quadrifidus* (One Sided Bottlebrush);
- *Grevillea* sp. (various *Grevillea* species including hybrids), particularly:
  - *G. preissii*;
  - *G. thelemanniana* 'Gingin Gem';
  - *G. thelemanniana* 'Seaspray';
- *Hypocalymma angustifolium* (Pink flowered Myrtle);
- *Hypocalymma robustum* (Swan River Myrtle);
- *Melaleuca lateritia* (Robin Red Breast Bush);
- *Melaleuca preissiana* (Moonah/ Stout Paperbark);
- *Taxandria linearifolia* (Swamp Peppermint) [syn. *Agonis linearifolia*].



# APPENDIX 01 VEGETATION: FLORISTIC COMPLEXES, EXISTING VEGETATION AND WEEDS

## SCENTED GARDENS PLANTS

Plants, in addition to those found elsewhere on the foreshore include:

- *Acacia* ssp. (*Acacia* species)
- *Astartea fascicularis* (False Baeckea)
- *Banksia blechnifolia* (*Banksia Blechnifolia*)
- *Chamelaucium ciliatum* (Albany Wax)
- *Chorizima cordatum* (Heart Leaf Flame Pea)
- *Correa* ssp. (*Correa* species eg. 'Dusky Bells')
- *Darwinia citriodora* (Lemon Scented Darwinia)
- *Dryandra* (*Banksia*) *nivea* (Couch Honeypot)
- *Eremophila nivea* (Silky Eremophila)
- *Grevillea* ssp. (*Grevillea* species eg. Coconut Ice *Grevillea*)
- *Hypocalymma angustifolium* (White Myrtle)
- *Hoya Australis* (Common Waxflower)
- *Isopogon* 'Candy Cones' (Candy Cones Cone Flower)
- *Lavandula* ssp. (Lavender, various subspecies)
- *Leptospermum* Cardwell (Cardwell Teatree)

- *Leptospermum* Pink Cascade (Pink Cascade Teatree)
- *Lomandra longifolia* 'Tanika' (Tanika Lomandra)
- *Pimelea ferruginea* Bonne Petite (Bonne Petite Rice Flower)
- *Rosmarinus* ssp. (Rosemary, prostrate & compact forms)
- *Senna artemisioides* (Silver Cassia)
- *Thryptomene saxicola* (Payne's Hybrid Thryptomene)
- *Westringia fruticosa* 'Mundi' (Native Rosemary Compact form))
- *Westringia* White Rambler (Native Rosemary white flowering groundcover)
- *Michelia figo* (Port Wine Magnolia)

## BEACH HEADLANDS VEGETATION

Plant species of the constructed beach headlands including near the Viewing Deck include the following species:

- *Acacia lasiocarpa* (Dune Moses/ Panjang);
- *Acanthocarpus preissii* (Prickle Lily);
- *Astartea scoparia* (Common Astartea);

- *Atriplex cinerea* (Grey Saltbush);
- *Conostylis candicans* (Grey Cottonhead);
- *Dampiera linearis* (Common Dampiera);
- *Dianella revoluta* (*Dianella*), including dwarf variety *Dianella* 'Little Rev';
- *Eremophila glabra* 'Kalbarri Carpet';
- *Ficinia nodosa* (Nodding Club Rush);
- *Juncus kraussii*
- *Leucophyta brownii* (Cushion Bush);
- *Melaleuca cuticularis* (Saltwater Paperbark);
- *Melaleuca seriata*;
- *Myoporum insulare* (Blueberry Bush);
- *Olearia axillaris* (Coastal Daisy);
- *Phyllanthus calycinus* (False Boronia);
- *Rhagodia baccata* (Sea Berry Saltbush);
- *Scaevola crassifolia* (Fanflower);
- *Spinifex longifolius* (Beach Spinifex);
- *Spyridium globulosum* (Basket Bush);
- *Templetonia retusa* (Cockies Tongue);

## RECOMMENDED ADDITIONAL PLANT SPECIES

Other species recommended for planting along the foreshore include:

### RUSHES & SEDGES:

- *Baumea arthropyla*/la (Sparse Twig Rush);
- *Carex appressa* (Tall Sedge);
- *Carex inversa* (Knob Sedge);
- *Cyperus gymnocaulos* (Spiny Flat Sedge);
- *Gahnia trifida* (Coast Saw Sedge);
- *Juncus holoschoenus* (Jointleaf Rush);
- *Juncus subsecundus* (Finger Rush);
- *Schoenoplectus validus* (Lake Club Rush).

### SHRUBS AND HERBS:

- *Isotropis cuneifolia* (Granny Bonnets);
- *Lyginia imberbis*;
- *Samphire* sp.; such as:
  - *Sarcocornia quinqueflora* (Beaded Samphire); and
  - *Tecticornia* ssp.;
- *Suaeda australis* (Austral Seablite);

## TREES

**EXOTIC TREES**, from other parts of Australia and other countries, mostly large mature specimens include:

- *Araucaria* sp. (Pines);
- *Casuarina* sp. (e.g. *Casuarina cunninghamiana*);
- Fig/ *Ficus* sp., including:
  - *Ficus rubiginosa* (Port Jackson Fig);
- Gums and *Eucalypts*, including:
  - Lemon Scented Gum (*Corymbia citriodora*);
  - Blue Gum (*Eucalyptus globulus*);
- Palm Trees (*Washingtonia* spp.);
- Willows (*Salix babylonica*).

**NATIVE TREES** (local and south-west Western Australian species):

- *Agonis flexuosa* (Native Peppermint);
- *Allocasuarina fraseriana* (Common Sheoak/ Western Sheoak)
- *Eucalyptus* sp. (*Eucalypt* Trees of various species), particularly:
  - *E. camaldulensis* (Red River Gum);
  - *E. gomphocephala* (Tuart);
  - *E. marginata* (Jarrah);
  - *E. rudis* (Flooded Gum);
- *Melaleuca* sp. (Paperbarks), particularly:
  - *M. cuticularis* (Saltwater Paperbark);
  - *M. raphiophylla* (Freshwater Paperbark); and
  - *M. preissiana* (Stout Paperbark);
- *Casuarina obesa* (Swamp Sheoak);
- *Corymbia* sp.; including
  - *C. ficifolia* (Red Flowering Gum);
  - *C. macrocarpa* (Marri);

# APPENDIX 01 VEGETATION: FLORISTIC COMPLEXES, EXISTING VEGETATION AND WEEDS

## SIGNIFICANT TREES

11 trees of the foreshore trees have been deemed by the City as 'Significant Trees' and are listed on the Significant Tree Register with a Tree Preservation Order, and a calculated Amenity Value. These are:

- *Ficus rubiginosa* (Port Jackson Fig) x 2 near Ranelagh Street;
- *Eucalyptus rudis* (Flooded Gum) x 5 near the Hurlingham carpark; and  
x 1 near the Esplanade car park, amongst a large stand of trees; and  
x 1 south of the Scented Gardens;
- *Casuarina obesa* (Swamp Sheoak) x 1 east of the Coode Street carpark in the barbecue area;
- *Eucalyptus camaldulensis* (Red River Gum) x1; and another large *Eucalypt* x1 on the edge of Millers Pool at Mill Point.

## AQUATIC VEGETATION

Seagrasses do not occur in Perth Water, however there are numerous species of algae, the occurrence and distribution of which is determined by the seasonal hydrology. Populations are most dense in autumn when waters are most saline (Thurlow et al. 1986, Allendale, 1981). While the macro algae are considered to play a relatively minor part in the estuarine food web, phytoplankton are clearly very important (Hillman, 1984). Aquatic vegetation is a vital part of the estuarine ecology and its survival depends on maintenance of the water quality of the estuary.

## WEEDS AND WEED MANAGEMENT

Environmental weeds are introduced plants that result in modification to the natural assemblage of plants and animals within an area. They include some plants from different parts of Australia. Weeds are a serious threat to native plants and animals for a number of reasons including:

- Weeds compete with our native plants for water, light and nutrients leading to a reduction in biological diversity and abundance; and
- Weeds change the structural diversity of plant communities resulting in less favourable habitats for native wildlife.

Environmental weeds have been identified, mapped and prioritised for selected areas of the foreshore, including the Melaleuca Grove which is underway early 2014. This work needs to be extended to the remainder of the foreshore.

Management includes using a combination of different techniques including herbicide application (spot spraying and wiping), hand weeding, brush cutting, excavation and revegetation.

The City undertakes the majority of its priority weed control during winter and spring. When herbicides are being applied, warning signs and information are provided to notify the public of treatment areas. Both selective and non-selective herbicides are used depending on the type of area, target weed and level of infestation.

The City's contractors, parks and natural areas staff are trained in herbicide application to ensure target areas are treated effectively according to the Health (Pesticides) Regulations and Guidelines for the safe use of pesticides in non-agricultural workplaces.



Weeds include the following (common name in brackets):

- *Aster subulatus* (Bushy starwort);
- *Asteraceae* sp. (Thistle);
- *Caltrop* (*Tribulus terrestris*);
- *Conzys* sp. (Fleabane)
- *Cotula turbinata* (Funnel weed);
- Couch (*Cynodon dactylon*);
- *Cynodon dactylon* (Couch),
- *Ehrharta longiflora* (Annual and Perennial veldtgrass);
- *Fumaria carpeolata* (White flower fumitory);
- *Hypochaeris glabra* (Flatweed);
- *Lactuca saligna* (Lettuce);
- *Malva parviflora* (Marshmallow);
- *Oxalis pes-caprae* (Soursob);
- *Poa annua* (Wintergrass);
- *Solanum nigrum* (Blackberry nightshade);
- *Trifolium* sp. (Clover);
- *Typha orientalis* (Bulrush);

View looking east from 160 Mill Point Road summer 1985



## APPENDIX 02 FAUNA OF THE SOUTH PERTH FORESHORE AND AQUATIC ENVIRONMENT OF PERTH WATERS

### BIRDS

The artificial lakes located on the foreshore attract a wide variety of birds, many of which have had their normal habitat reduced. These include:

- White Faced Heron (*Egretta novaehollandiae*);
- Little Egret (*Egretta garzetta*);
- Dusky Moorhen (*Gallinula tenegrosa*);
- Purple Swamphen (*Porphyrio porphyrio*);
- Australian White Ibis (*Threskiornis molucca*);
- Black Pacific Duck (*Anas superciliosa*);
- Black Swan (*Cygnus atratus*); and
- Eurasian Coot (*Fulica atra*)

Waterbirds feed on invertebrate fauna, algae and other aquatic plants in the artificial lakes.

Some bird species are also known to nest in the fringing vegetation.

Bird movement has been documented between the lakes on the foreshore and those in the nearby Perth Zoo.

In Perth Water, the most common birds noted are the following, all of which forage for fish:

- Pied Cormorant (*Phalacrocorax varius*);
- Darter (*Aninga melanogaster*), Australian Pelican (*Pelecanus conspicillatus*);
- Caspian Tern (*Sterna caspia*);
- Silver Gulls (*Larus novaehollandiae*).

The latter are very common around the lakes and throughout the foreshore. These scavenger feeders are nuisance birds when fed by humans.

Woodland birds familiar to the Park include:

- Willie Wagtail (*Rhipidura leucophrys*);
- Red Wattlebird (*Anthochaera carunculata*);
- Australian Magpie (*Gymnorhina tibicen*); and
- Singing Honeyeater (*Meliphaga lunata*).

Introduced species such as the Spotted and Laughing Turtle Doves (*Streptopelia* species), Eastern Long-billed Corella (*Cacatua tenuirostris*), Little White Corellas (*Cacatua sanguinea*) and Rainbow lorikeets (*Trichoglossus haematodus*) are also commonly seen, often in large flocks.

Corellas are medium-sized white cockatoos. The Little Corella is from the north- and mid-west of Western Australia. The Eastern Long-billed Corella is from the Eastern States.

The Western Long-billed Corella (*Cacatua pastinator*) is our local Perth bird, but unfortunately is now rarely found in Perth, where it once occurred fairly abundantly.

Introduced species are a major threat to our endemic birds, including corellas and black cockatoos. The Eastern Long-billed Corella poses an environmental threat to our endemic black cockatoos by out-competing for nest sites, their ability to remove eggs from the nest hollow and to kill and maim advanced nestlings.

### REPTILES, AMPHIBIANS AND MAMMALS

A detailed fauna survey was not undertaken for this Plan; however the following information is based on the City's current records, reports and recent experiences.

Frogs likely to occur within the study area include *Crinia georgiana*, *Litoria moorii* and *Heleioporus eyrei*. Lizards such as the Bobtail (*Tiliqua rugosa*), and Grey's Skink (*Menetia greyii*) have been reported by locals. It is likely that the Common Brush-tail Possum (*Trichosurus vulpecula*) and the Lesser Long-eared Bat (*Nyctophilus geoffroyi*) may be still present, although there is little remaining remnant vegetation onsite able to provide sufficient habitat to support a significant population. The long-necked Oblong Turtle (*Chelodina oblonga*) is found in the lakes areas of the foreshore.

### INVERTEBRATES

No formal invertebrate study has been undertaken in the study area.

Estuaries are known for their high biological productivity with aquatic fauna abundant in areas supporting aquatic vegetation; that is where complex food webs are established. The sandy, shallow riverbed alongside the foreshore provides a favourable habitat for invertebrate fauna. Planktonic invertebrate fauna generally feed on phytoplankton or smaller zooplankton, while benthic species are often detritivores. These invertebrates in turn are an important food source for estuarine fish and wading birds. Some of the larger crustaceans such as

the King prawns (*Penaeus latisulcatus*), school prawns (*Melapenaeus dalli*) and the blue manna crabs are particularly abundant in the Swan River during summer. Another notable invertebrate is the gastropod *Coxiella striatula* that has a high conservation value.

## MACROINVERTEBRATES

Macroinvertebrate form an important part of the food chain and are present in all the lakes. They are highly sensitive to pollution and change in temperature and habitat.

## FISH

The majority of fish in Perth Water are carnivorous and live in the water column, for example Herring, Mullet and Whiting, as opposed to being bottom feeding such as Cobbler and Bream. The greatest population and diversity of estuarine fish usually occurs when salinity is high. The following are all common the river:

- Yellow-eyed Mullet (*Aldrichella forsteri*);
  - Sea mullet (*Mugil cephalus*);
  - Herring (*Nematolosa vlaminghi*);
  - Common Blowfish (*Torquigener pleurogramma*); and
  - Cobbler (*Cnigoglonis macrocephalus*).
- Millers Pool has:
- Black Bream (*Acanthopagrus butcheri*).

## FERAL ANIMALS AND DOMESTIC PETS

Feral animals such as the following may occur along the foreshore:

- House mouse (*Mus domesticus*);
- Black rat (*Rattus rattus*);
- Feral cat (*Felis catus* *Felis silvestris catus*);
- Fox (*Vulpes vulpes*);
- Rabbit (*Oryctolagus cuniculus*)

The fox and cat (feral and domestic) pose a major threat to native wildlife due to their predatory behaviour.

## DOGS

Dogs can disturb nesting birds and other fauna if not controlled on a leash.

The City publishes a map of Dog Exercise Areas, available on the City's website and in print from City offices.

Other than the areas listed as 'off leash' dog exercise areas on the City's map, dogs must be on a leash at all times in a public place. This is a requirement by law of the Dog Act 1976.

There are some areas set aside exclusively for the enjoyment of people and the native wildlife.

The conditions that apply in public places are:

- When a dog is off its leash, stay in close proximity at all times so you can control it;
- Your dog must not disturb or annoy other people sharing the reserve;
- Remove any excreta left by the dog;
- Under the Western Australian Dog Act 1976, you must stay clear of any area occupied by an organised event which has a permit from the City; and
- Carry a leash so your dog can be quickly attached if needed.

Refer to the City of South Perth Dog Exercise Areas map for more information on the areas designated along the South Perth Foreshore, and the City's website for up-to date information.



## APPENDIX 03 POST-EUROPEAN SETTLEMENT HISTORY – HISTORICAL DEVELOPMENT & LAND USE

### 17TH TO 19TH CENTURY

In 1697, the Dutch explorer Willem de Vlamingh first sighted the area.

In 1801, the French exploratory party lead by Francois Heirisson was stranded at the muddy flats now known as the Causeway and the islands were named 'Iles Heirisson'. Stirling's exploratory party mapped the Swan and named Point Belches after Peter Belches, 3rd Lieut. of HMS Success.

From 1829, the early Swan River colony was planned and the South Perth peninsula was identified for suburban extension of Perth. In the early years there was little need for a suburb extending from Perth and as a consequence the area was quite slow to grow due to its inaccessibility and lack of land suitable for productive agriculture.

### SHENTON'S MILL

In 1833, the first land grant in the "Suburb of Perth" was allocated to William Kernot Shenton and the following year he opened his mill. Later in 1834, the mill was attacked by Aborigines of the Murray River people who took the flour and equipment. In a second incident, the mill was burnt down and needed to be rebuilt. The second oldest mill in Australia, its current stone incarnation was built in 1835. It ceased operation in 1854. The Old Mill on Mill Point is one of Perth's landmarks.

### RAILWAY LINE

Early plans for a railway from Fremantle to Guildford through South Perth were never implemented.

### LAND USE

South Perth suburban lots were offered for sale in 1834, with subdivision of the area right to the river's edge. These lots were bought by a number of families and by 1859 a total of 65 people lived in the area.

Part of the present parkland was once the vineyard of the Tondut family, the first to be issued with a licence to sell wine in the Swan River Colony in 1851.

John Daniel (Senior) and Mary Manning arrived in Western Australia in 1852. They owned a considerable amount of property along Mounts Bay Rd and established a dairy on the Perth side of Jacob's ladder. With the fencing in of Kings Park and subsequent loss of grazing land, John Manning (Junior) moved some of the Mounts Bay herd to South Perth and began a dairying business circa 1877.

John purchased 100 acres of property known as Location 38b on the South Perth foreshore which came to be known as Southbourne. The Southbourne house was located on the corner of Hurlingham Rd and Manning Terrace. John cleared and cultivated the foreshore between Southbourne and Ellam St, being ideal land for growing crops, pasture and vegetables.

### RIVER TRANSPORT, THE CAUSEWAY, FERRIES AND JETTIES

#### QUEEN STREET

A steam ferry called Constance was in service in 1888. Commencing sometime after 1897 were the two small side paddle steamers Princess and Empress run by the South Perth Ferry Company. These transported passengers between William Street Jetty, Perth, and Queen Street.

#### THE CAUSEWAY

In the 1840s the problem of accessing South Perth was overcome by the construction of the first Causeway over Heirisson Island, which was opened in 1843. In 1862 floods almost destroyed the Causeway Bridge and it was rebuilt, to be officially reopened in 1867. The current Causeway bridges date back to 1947 to 1952. At the same time, the singular Heirisson Island was formed from the original islands, and river dredging created much wider navigation channels.

#### SOUTH PERTH FORESHORE JETTIES

The Mends Street and Coode Street Jetties were built in 1894 and 1896 respectively. By 1902 there were 3 jetties on the south side of Perth Water, Mends, Coode and Queen Street, with jetties at each of these locations remaining to the present day.

## MENDS STREET JETTY

The first Mends St Jetty completed in 1894 was 220 feet long, 3 feet 6 inches wide and cost £125. Nearby was Frank Brigatti's boatbuilding and repair shed, from which boats could be hired. Ferries from Barrack St Jetty to Mends St Jetty included the Duchess, Perth, Foam and Mayflower.

## COODE STREET JETTY

Even before the Coode Street Jetty was built in 1896, the Coode Street foreshore was used as a landing point for local South Perth people. It was the scene of arrival for visiting pastors and teachers to the Wesley Chapel and Church which was built in Coode Street. There are references of visiting clergy arriving by boat as the roads were very poor.

Local residents Rowland Pennington and Fred Bailey formed a public company, the River Ferry Company, to try and bring some regularity to the then irregular ferry system run by W.F. Tubbs. They put two sailing boats into action, the Mary Queen and the Gladys, but the venture was a failure. Rowland Pennington struggled to run the ferry service alongside his successful dairy and farm and it soon closed.

More successful was Pennington's kiosk, on their property on the corner of Coode Street and Suburban Road (now Mill Point Road). Commuters using the Coode Street ferry service in the early 1900s were provided with refreshments from the iron-clad kiosk.

## REGULAR FERRY SERVICE

From 1904 to 1935, regular ferries ran from Coode Street to Perth, with the thriving ferry business of Jack Olsen and Claes (Harry) Sutton, and later their families. Their 'Val' boats, named for their Scandinavian links, included Valfreda, Valthera, Valdemar and Valkyrie I and II. The Valkyrie II was a double-decked vessel capable of carrying 245 passengers. On sale in 1935 to Nat Lappin who formed the Swan River Ferries Company, the Coode Street ferry service continued for over three decades.

Owing to the fall in numbers of passengers, the private ferry service to Coode Street eventually passed into the State transport system; and since the 1960s has been a controversial topic of debate as to whether the service should be run.

The ferry service between Barrack Street and Coode Street (via Mends Street) was suspended, and despite the rebuild of the Coode Street jetty in 1990, services were not reinstated.

A limited weekday's only ferry service to Coode Street was run by Captain Cook Cruises from around 1997 to this mid-2000s, but has not run since.

The Mends Street ferries have continued to run, with a night trial during the summer of 2012-2013 undertaken to determine likely patronage.

The Public Transport Authority (PTA) have jurisdiction over the operation of the ferries and maintenance of the jetties.

## 1900 TO 1970

### LAND DEVELOPMENT

In 1905, subdivision and estate developments began in Como; and within less than ten years, the adjoining area including South Perth had begun to be developed.

### TRAMS

A tram service was in place between 1922 and 1952, linking the ferry ports to the growing suburbs.

### RECLAMATION WORKS – RIVER INTO LAND

Reclamation work began in 1935 and was subsequently completed in 1966, with approximately 40 acres of foreshore land formed in this way. Filling was also undertaken in response to ratepayers' complaints concerning bulrush fluff, mosquitoes and rodents. The area of wetlands with paperbarks (known today as the Melaleuca Grove) was retained despite this filling.

## APPENDIX 03

# POST-EUROPEAN SETTLEMENT HISTORY – HISTORICAL DEVELOPMENT & LAND USE

### MILL POINT AND MILLERS POOL

In the 1900s, Miller's Pool at the tip of Point Belches was a popular boating, crabbing, prawning and picnic spot. Mosquitoes and flooding were a constant problem though. In July 1926 floods submerged the Mends Street jetty, Mill Point and Mill Point Road.

The South Perth Roads Board started reclamation work in 1935 to prevent foreshore erosion and winter flooding. In 1938 the pool was filled in. This was done to stop foreshore erosion, reduce river flooding, improve transport and fill in the algae collecting bays between Richardson Street and Mends Street. There was great opposition to the project; however it was justified by the Road Board due to the plan to bridge Perth Water by islands or a punt ferry.

### CHINESE MARKET GARDENING – 1888 TO 1952

All along the South Perth foreshore between the Causeway and Point Belches were Chinese market gardens, recorded from 1888 (Crowley, 1962).

The land on the foreshore was then owned by a number of European families who allowed the market gardeners to cultivate the rich loam and the area became known as 'Yellow Hill'. The area had springs and the gardeners built several drains to water the gardens, which were filled with minnows and goldfish.

As the government refused to grant miners leases to the Chinese population and they were not allowed citizenship, many of the Chinese migrants settled in South Perth. In 1903, conditions became so crowded that bubonic plague broke out.

However the market gardens were a popular feature of South Perth and the local people boasted that the produce was the best in the state. The Chinese market gardeners grew fine fruit and vegetables, which they carted around for sale in South Perth.

A group of Chinese gardeners cultivated an area of 11 acres on the foreshore, living in an old building, once part of the W.F. Mends estate. In the 1920s the number of gardeners had increased to approximately 11, living and working an area later called Clydesdale Park.

The Chinese market gardener's produce was taken to the James Street Markets in Perth once a week on carts across the Causeway.

The Chinese market gardeners remained until the 1950s when the South Perth Road Board (now named City of South Perth) took over the foreshore. By 1952 the Chinese gardeners had been served eviction notices - a move which was opposed by many who had welcomed their contribution to the area.

### HORSE RACING, POLO, SPORT & RESIDENTIAL USE

Kensington Park Racecourse was opened by Alexander McAllister Clydesdale. The racecourse occupied much of the land now bound by Hurlingham Road, Mill Point Road, Meadowvale Avenue and the Swan River. It was one of the first non-agricultural developments on the foreshore.

At the entrance to the racecourse was the Tea Gardens Hotel, a popular hotel especially on race days. The stables for the racecourse were once located in nearby Clydesdale Park.

In 1913 the racecourse closed and was reopened in 1925 as the Hurlingham Polo Ground.

During the 1940s the ground was used by football, hockey, soccer, and rugby clubs in the area.

Towards the end of World War II the State Government resumed the land for residential purposes and a large number of houses built in the area were for returned soldiers.





## NARROWS BRIDGE

In 1954, a plan to construct a bridge across the Narrows water began and involved taking 60 metres off Point Belches and reclaiming a significant part of Perth Water.

The Narrows Bridge was opened in 1959 and the Kwinana Freeway built.

## HIGH-RISE DEVELOPMENT

In the 1960s, high-rise development began along the foreshore, associated with a dramatic population boom in Perth. In 1960, Key West Pty Ltd wanted to build high rise apartments and a hotel on the foreshore land. This was rejected. John and Ray Oldham, landscape architects proposed botanic gardens, but the council felt the cost was too high.

## RESUMPTION OF LAND AND DEVELOPMENT OF RESERVES/ PUBLIC OPEN SPACE AND OTHER FORESHORE USES

In 1939, a 10.3 acre property adjoining Douglas Avenue and north of Jubilee Street, formerly owned by Arthur Douglas, was sold to the South Perth Road Board, which resolved at that time that the land was purchased 'for the purpose of a reserve'. This was formalised in the South Perth Town Planning Scheme No. 1 as 'Special Zone A' in 1961. The zoning was continued in 1972 in the No. 2 Town Planning Scheme, and in 1986 in the No. 5 Town Planning Scheme; but was discontinued in the No. 6 Town Planning Scheme in 2003 because no

'special' use had ever been identified for the land, other than its current reserve use, with Lake Douglas being a significant part of it since the 1980s.

In 1940, a portion of foreshore land was resumed by the Perth Road Board for the purpose of "Swan River Improvements and Foreshore Recreation Grounds at South Perth". A portion of the land was also resumed for drainage.

The Sir James Mitchell Park was named by the Board in August 1950, when the board decided to redevelop the foreshore area. Sir James Mitchell, the 13th Premier of Western Australia, was born in 1866 and died on 26 July 1951. He did not 'bequeath' the land for the park, but was honoured by the board in the naming of the Sir James Mitchell Park, as Premier of Western Australia from 1919-24, and 1930-33.

Around 1950 the South Perth Road Board entered negotiations with some sporting clubs with a view to redeveloping the area as playing fields for sporting groups.

In 1955 Professor Gordon Stephenson, Perth town planner, in the Plan for the Metropolitan Region recommended that

"The Regional Open Space proposed along the foreshore, and already generally in public ownership, should be developed as conditions permit to provide valuable recreation space as well as fine landscape. Perhaps, better placed than any other potential public open space, the former 'Chinese Gardens' area along the Foreshore should be preserved and designed..."

In 1958, landscape architect John Oldham spoke to the council about his ideas for a major botanical gardens on the foreshore. He believed that the South Perth location would be far preferable to Kings Park for botanical gardens because 'This site had the best soil in the metropolitan area. The area had once been a Chinese Market garden, and for centuries the Chinese had been known to choose the best soil available.' Oldham's plans did not gain council support because of concerns about the financial commitment needed.

Plans for the redevelopment of the foreshore area did not, however, materialise, and for the following decades the area reverted to swampland. In 1960, plans by Key West developers for a huge open air theatre and other developments on the foreshore were vehemently opposed by many residents who wanted the foreshore to be developed as public open space.

Minimum maintenance was undertaken by the City of South Perth, with grass mowing being the main undertaking, this having an annual cost of approximately \$10,000 in 1976.

The land previously zoned 'Special Zone A' was used as a golf driving range up until the late 1980s when it was re-landscaped into a general recreation area, including Lake Douglas, one of three artificial lakes built in low lying land in this area of the foreshore and used for stormwater management.

Refer to 'River's Edge – History, Walls and Beaches' in this document for information on the changing shoreline of the river and 'Hydrology' for more information on the formation of the lakes.

## APPENDIX 03

# POST-EUROPEAN SETTLEMENT HISTORY – HISTORICAL DEVELOPMENT & LAND USE

### 1970S THROUGH 1990S

In 1975, the City of South Perth commissioned Tooby Landscape Architects to prepare a landscaping plan for Sir James Mitchell Park in order to rehabilitate the foreshore area, which had become a local waste dump. However, due to public concern in relation to tree planting issues (and the potential loss of river and city views) the plan was not implemented. Funding was also not forthcoming.

A decade later in 1985, firm undertakings for funding for park development were given by both State and Federal Governments, and the development and landscaping of the foreshore area began. In 1987, the Tooby Plan was revised, reducing the number of proposed tree plantings to approximately one third of the original. Attempts to implement the revised plan met with vandalism of the plantings and continued public concern, which halted the project. Initially there was to be no commercial development, but a restaurant and kiosk facility was approved and built at Coode Street, which have proved to continue to be very popular.

During 1985 to 1986 the three man-made lakes, Hurlingham, Douglas, and Tondut Lakes, were constructed for stormwater management, utilising low lying foreshore land to beautify the existing stormwater and drainage system.

Removal of bamboo remaining from the earlier Chinese market garden plants which were grown for stakes was undertaken in 1988, as they had naturalised and become weeds.

The gardens around the Mends Street area, including the Scented Gardens, and others in the reserve were implemented during the 1980s, including those around the Mends St Jetty Pavilion which was constructed in 1989.

Between 1994 and 1996 several draft plans were prepared for the foreshore, released for public comment and revised. A survey of park users and local residents was also conducted. However, due to differing opinions on landscaping and other uses, the development of the foreshore remained unresolved.

Despite conflicting desires for the foreshore, South Perth's premier public open space, the City is proud of its ongoing commitment and management of Sir James Mitchell Park and the entire South Perth Foreshore. The City managed to implement a range of improvements and better management practices for the foreshore throughout the latter part of the previous century.

Refer back to the 'Path to Date' section of this document for more recent developments of the South Perth Foreshore from the beginning of the twenty first century (2000) on.



Mends Street 1928



1926







## APPENDIX 04 STAKEHOLDER ENGAGEMENT

### ENGAGEMENT PROCESS

In order to ensure the highest levels of transparency and robustness for the South Perth Foreshore Vision – 2013 and beyond, a series of workshops were held with the community and key stakeholders between December 2012 and February 2013. It was considered that early stakeholder engagement was required primarily to obtain a level of local knowledge and aspiration, prior to the production of the first drafts of the document.

The first round of the consultation process 'Start the Conversation' was completed on 22 February 2013, with a total of 377 comments received. From this initial 'ideas gathering' stage of the project, it was clear that the foreshore is considered an iconic and well-loved place in South Perth, but the community believed it is tired and in need of revitalisation, including some new activities and attractions to bring it back to life.

These ideas were developed into the draft South Perth Foreshore 2013 and Beyond documents Part 01 and Part 02.

*At the May 2013 meeting, Council resolved the following in respect to this project: That*

*(a) Council endorse the draft South Perth Foreshore 2013 and Beyond document for the purpose of conducting community consultation for a period of 6 weeks; and*

*(b) At the completion of the consultation period, the Council consider a further report containing an analysis of the comments received and the resultant review of the South Perth Foreshore 2013 and Beyond document for formal adoption.*

The second round of consultation for the project was titled 'My Foreshore Our Future' to reflect the desire to gather individual views on the foreshore in order to plan for a collective future. A communications plan for the formal consultation period was developed, as well as a process to receive, consider and collate feedback.

### STAKEHOLDERS

The reference groups and committees involved with the foreshore precinct include:

- Sir James Mitchell Park Community Advisory Group - consists of local residents and a Swan River Trust representative;
- South Perth Foreshore Internal Reference Group - consists of a cross-section of staff from the respective City of South Perth's internal departments;
- Sustainability Advisory Group - consists of local residents, with a sustainability and climate change focus;
- Moorditj Keila Aboriginal Community Group - consists of Aboriginal members with an interest in the foreshore precinct;
- Millennium Kids - is a not-for-profit organisation made up of people from the age of 10 to 25 years who are committed to improving the environment through constructive action;

**My foreshore. Our future.**

Have your say on the **South Perth Foreshore 2013 and Beyond** project.

**Feedback Period**  
1 July - 12 August 2013

**Info Session**  
6-8pm, Wednesday 17 July 2013  
City of South Perth Community Hall  
Cnr Sandgate St & South Tce, South Perth

For more information or to access the survey and project documents:  
Phone: 9474 6777 Visit: Civic Centre - Cnr Sandgate St & South Tce, South Perth  
[www.southperth.wa.gov.au](http://www.southperth.wa.gov.au)

**Veronica**  
South Perth  
Walk, Relax.  
Have a coffee  
at a nearby cafe.

**Tullio**  
Balajura  
Mends Street  
business owner.

**Jenny**  
South Perth  
Daily walks.  
Enjoy the playgrounds  
with grandchildren.

**Simon**  
East Victoria Park  
Boating.

My Foreshore our Future banner advertising the feedback period

The other Stakeholders engaged include:

- Swan River Trust;
- Perth Zoo;
- Mends Street Traders;
- South Perth Foreshore Traders;
- Public Transport Authority;
- Local residents of the City of South Perth;
- General public and community;
- City of South Perth councillors;
- State Heritage Office.

## THE SOUTH PERTH FORESHORE SURVEY

### FEEDBACK PERIOD – MY FORESHORE OUR FUTURE

The survey was developed and workshopped with Council. It was then created into a paper copy and an online survey (via Survey Monkey) The survey was available for submission from 1 July to 30 August 2013. Both Part 01 and Part 02 of the draft South Perth Foreshore 2013 and beyond and the survey were available from the City's website, and in paper format at the South Perth Civic Centre, George Burnett Leisure Centre, and South Perth and Manning libraries. The feedback period was widely advertised, initially available until 18 August, and then extended until 30 August 2013.

In order to communicate this intention, a graphic postcard sized notice was mailed to every resident / ratepayer of the City advising the document was available for comment and how they could access the survey. The feedback process was also available to non-residents of the City, through media advertising and information along the foreshore, including posters and banners

### SURVEY AIM

The aim of the survey was to gauge opinions about the Objectives, Nodes and Opportunities listed in the draft Part 01 South Perth Foreshore document (developed from previous engagement undertaken during the earlier stages of this project, which commenced late 2012); and to prioritise which Objectives, Nodes and Opportunities should be considered in what order, for further more detailed planning. The Part 02 document provided Background and Context to the project. The aim was also to finalise the documents from that draft (1 July 2013 Revision C) to the final South Perth Foreshore Strategy and Management Plan (The SPF Plan, this document).



## APPENDIX 04 STAKEHOLDER ENGAGEMENT

### FEEDBACK AND RESPONDENTS

2632 people visited the South Perth Foreshore page on the City of South Perth's website during the feedback period 1 July – 30 August 2013. 978 People provided feedback. 934 Surveys were completed (online & paper), with two thirds of people completing the entire survey, and one third of respondents opting out after Part A (as Part B with more detail on the Foreshore Nodes, was optional).

Over 75% of respondents were from the City of South Perth, with the remainder from metropolitan Perth, other than 3 people from country Western Australia and 1 from New South Wales. 53% of respondents were female, and 47% male; with almost half in the 35-59 age category, 28.3% over 60 years, 17.7% aged 25-34, and 4% under the age of 25.

### COMMENTS

578 comments were provided with a survey response, with many lengthy, insightful and constructive comments received. The survey report and the full comments were provided in a public document, available from the City's libraries and on the City's website.

Of the 978 responses almost 10% may have been influenced by a separate local residents' campaign that ensued during the feedback period, with comments regarding sale and/or lease of public open space and the South Perth Foreshore, as advertised on flyers that were distributed, and rumours that circulated. The Mayor made a public statement at the August 2013 council meeting,

"A public debate has erroneously generated some fear that the City of South Perth might consider selling some or all of its landholdings along South Perth Foreshore, or leasing for a period of 99 years. The City has publicly stated that it has no intention of selling land along the foreshore and that statement stands. We do not intend to sell land along the foreshore, nor will we enter into 99 year lease agreements for any part of it."

### ELECTED MEMBERS CONCEPT BRIEFING

The Survey Results and SPF project information was the subject of an Elected Members Concept Briefing held on 30 October 2013.

### OBJECTIVES

All of the South Perth Foreshore 2013 and beyond project's eight objectives, other than 'Facilitate economic development' rated highly with an average rating of over 3.5. This demonstrates strong support for the objectives. The top 3 rated objectives were Encourage healthy lifestyles, Maintain vistas; and Develop and enhance existing parkland, flora and fauna.

### OPPORTUNITIES FOR THE FORESHORE

Opportunities for both Whole of Foreshore considerations and Node specific opportunities were listed, having been developed from the earlier stages of the project since late 2012, which included engagement with stakeholders and local residents and park users.



## WHOLE OF FORESHORE OPPORTUNITIES

Of the 19 Whole of Foreshore opportunities, 17 rated over 3.0, indicating support, except for commercial activities, for which 367 people (over 1/3) placed low/very low importance; and Interpretive art, with a rating of 2.79.

The following 8 Whole of Foreshore opportunities received ratings over 3.50:

2.1.2 Improve the paths for cyclists and pedestrians

2.2.2 Improve safety and lighting

2.4.5 Environmental Improvements

2.2.1 Improve park facilities – signage, toilets, bins etc.

2.2.3 Increase shade and shelter

2.1.6 Improve access for all

2.1.1 Develop and integrated public transport network

2.3.5 Outdoor activities and facilities

## NODE OPPORTUNITIES

People were asked to rank the Nodes from 1 to 10 in order of how important they felt it was to revitalise each of the 10 nodes of the foreshore. 879 people provided rankings of the 10 nodes of the South Perth foreshore.

Ranked in order of 'how important it is to revitalise', with 1 being the most important, and 10 being the least important:

01. Mends St
02. Coode St
03. Mends St Beach
04. Coode St Beach
05. Mill Point
06. Deck/ Melaleuca Grove/ Scented Garden
07. The Lakes
08. Esplanade West
09. Flag Pole
10. Ellam Street

Mends Street, as the foreshore node ranked the most important to revitalise, had all of its opportunities rated highly. The highest importance was placed on creating a pedestrian friendly piazza and promenade; followed by lighting, jetty improvements, integrated transport and creating an entry and gateway for South Perth at Mends Street, and also increased activation along the Mends Street retail strip. Improving shade and shelter at Mends Street Beach also had high to very high importance placed on it.

The Coode Street area, which was ranked of second importance, had all of the opportunities listed rated positively; with upgrading family recreation facilities, including playground facilities and improving transport options and connectivity considered to be the three most important of the opportunities presented.

The highest rated opportunity for the Coode St nodes was for improved shade and shelter at the Coode Street Beaches, which ranked as the fourth node in order of importance to revitalise.

Specific opportunities for each of the ten nodes, ratings and comments are provided in the Feedback Survey Results report, which were provided to Councillors, including the comments in full at the 30 October briefing. This information was available on the City's website as two separate documents, the Feedback Survey Results and the Feedback Survey Comments.

## SURVEY CONCLUSION

The survey results provided valuable information on the Objectives, Nodes and Opportunities listed in the draft Part 01 South Perth Foreshore document to assist with prioritising future planning and revitalisation. This information, along with other recommendations provided during the feedback period, has been incorporated into this final South Perth Foreshore 2013 and beyond Strategy and Management Plan.

Refer the South Perth Foreshore 2013 and Beyond 'My Foreshore Our Future' Feedback Survey Results 1 July to 30 August 2013' Report for further information on the survey results, including the comments provided in full.

## APPENDIX 04 STAKEHOLDER ENGAGEMENT

### CORRESPONDENCE

The City also received many other items of correspondence relating to this project including detailed submissions and a petition.

All survey results and correspondence have been carefully considered together in the development of the South Perth Foreshore Strategy and Management Plan.

### COUNCIL DECISION

At the 26 November 2013 council meeting, Council Decision 10.2.1 South Perth Foreshore 2013 and Beyond was made, and has been incorporated into this document. Refer Appendix 05 for details.

### FINALISING THE SPF PLAN

The SPF Plan has utilised the feedback received from the survey plus all correspondence and other information such as the administrative and legislative framework, physical, environmental and historical information. This document contains all of the necessary information required to manage the foreshore, as per the 2001 Foreshore Management Plan, plus a refinement of the draft opportunities for rejuvenating the foreshore as per the feedback received.

The document will be presented to Council for consideration early in the 2014/2015 financial year.

### SOUTH PERTH FORESHORE ADVISORY GROUP

In order to assist the implementation of the SPF Plan and to ensure it retains a good balance of all the community's aspirations, the City proposes to enhance the Sir James Mitchell Park Community Advisory Group. A report will be presented to Council with this proposal in more detail.





Historical Aerial 1953





## APPENDIX 05 COUNCIL DECISION 10.2.1 SOUTH PERTH FORESHORE 2013 AND BEYOND PROJECT STATUS 26 NOVEMBER 2013 AND ACTIONS TAKEN IN RESPONSE TO THE MOTION

At the 26 November 2013 City of South Perth Council meeting, the following decision was made regarding the South Perth Foreshore 2013 and Beyond Project (at Item 10.2.1):

That based on the community and stakeholder feedback received for the South Perth Foreshore 2013 and Beyond project, Council approves the development of a Strategy Document and Management Plan for the South Perth foreshore (incorporating Sir James Mitchell Park), which includes the following:

- a. No freehold and/or resumed land on the South Perth foreshore be sold;
- b. No freehold and/or resumed land on the South Perth foreshore be subject of a lease exceeding 21 years (including options) for the purpose of development;
- c. Existing land titles be reviewed to ensure they reflect their original intention of foreshore recreation and to be designated for that purpose only (excluding the area zoned local reserve);
- d. Items rated greater than 3 (neutral) in the Survey will be considered and Items rated less than 3 will be excluded;
- e. Additional information presented during the feedback period, and during public presentations made to Council on 19 November 2013, that corrects or enhances the draft document be incorporated; and
- f. All steps be taken to ensure:
  - i. amenity of the South Perth foreshore is retained; and
  - ii. longevity of the South Perth Foreshore as recreational parkland for future generations.
- g. Any policy arising from the Management Plan or

Strategy Document be referred to a future Council Meeting for approval; and

- h. Ensure that all existing policy documentation be altered to reflect the aforementioned issues and referred to a future Council meeting for approval.

### ACTIONS WITHIN THIS DOCUMENT IN RESPONSE TO THE MOTION

#### Regarding item a)

The Mayor made a public statement at the 27 August 2013 council meeting,

*"The City has publicly stated that it has no intention of selling land along the foreshore and that statement stands. We do not intend to sell land along the foreshore, nor will we enter into 99 year lease agreements for any part of it.*

*What is apparent from the hundreds of responses to date is that we all – wherever we live - consider South Perth Foreshore to be a very special public place. South Perth Foreshore is a tremendous asset to the City.*

*It is an asset which will be held by the City for future generations to enjoy."*

There will be no sale of SPF land zoned parks and reserves.

#### Regarding item b)

No land on the South Perth foreshore will be subject of a lease exceeding 21 years (including options).

The City has a 21 year lease on the Boatshed Café. This practice has worked well for the City providing a revenue stream and also providing the South Perth Community with a vibrant dining option. The 21 year lease model could potentially be applied to other identified areas of the SPF.

#### Regarding item c)

A review of land titles has been undertaken and information included in a map and tables in the Appendices of this document.

#### Regarding item d)

The following changes were made to this document from the draft SPF01:

For the Objectives, removal of what was Objective 7, as it scored below 3.0 in the survey ratings:

#### 1. Facilitate economic development

Provide opportunities for commercial development. Support initiatives that encourage the long term economic sustainability of the park.

The objective previously numbered Objective 8 in the draft document to 'maintain vistas' was then renumbered as objective 7.

For the opportunities listed in the draft SPF01, only those with an average rating greater than 3.0 have been incorporated into this final document, and included as the Strategies for the foreshore, as listed in the Strategies section of the document. For all Strategies, the sub strategies were reordered in order of survey rating.

### For the **WHOLE OF FORESHORE STRATEGIES:**

- Opportunity 2.3.3  
Commercial activities and facilities
  - Coffee, cafés in the park
  - Paella/Pizza Ovens 'Pop Up' bars, foods vans, drinks, icecreams
  - Night food markets
  - Festivals, flea markets, fairs, fiestas
  - Markets – night markets, craft markets, weekend stalls, and weekend entertainment

was removed from the list of Activation WOF Strategies as it scored 2.79.

Note that some of these activities are already undertaken along the SPF with existing cafés/ restaurants, and icecream and takeaway food/ drink vans and the like; the South Perth Fiesta and other fairs and events including markets and entertainment. Where such commercial activities and facilities were opportunities for particular Nodes – Mill Point, Mends St, Coode St, The Lakes, Ellam St that scored greater than 3.0, they have been retained as node- specific activities and facilities.

Similarly, the following draft opportunity was removed from the Whole of Foreshore - Culture Environment & Heritage as it scored 2.79:

- Opportunity 2.4.3.  
Interpretive art
  - o interpretation of history in landscape
  - o sound art and stories;

### **FOR THE NODE STRATEGIES:**

### **MENDS STREET BEACH**

2 of the four draft opportunities were removed:

- Opportunity 3.2 scored 2.99:  
Introduce beach art/sculptures
  - temporary or permanent;
- Opportunity 3.3 scored 2.89:  
Introduce beach activities
  - sand play and deckchairs;
  - volleyball facilities/ pontoon/swimming.

### **MILL POINT**

The following draft opportunities were removed:

- Opportunity 1.1 scored 2.66:  
Increased development
  - Commercial
  - Residential; and also:
- Opportunity 1.3 scored 2.82:  
Introduce boating and fishing facilities
  - fish cleaning areas
  - boat mooring locations.

### **ESPLANADE WEST**

The following draft opportunities were removed:

- Opportunity 2.2 scored 2.99:  
Low impact or temporary activities - such as 'pop up' facilities
- Opportunity 2.6 scored 2.71:  
Introduce boating and water activities
  - Jetties (existing as well as opportunities for new ones)

- Boat moorings.

- Opportunity 2.7 scored 2.35:  
Limousine, tour bus and charter boat provision.

### **ELLAM STREET**

For the Ellam Street node, the following draft opportunities were removed, with scores less than 3.0:

- Opportunity 10.3 scored 2.95:  
Introduce a designated dog beach.
- Opportunity 10.7 scored 2.22:  
Increased residential density;

Refer the Appendix 04 for more information on the Survey results.

### **Regarding item e)**

All additional information presented to date has been considered and incorporated where relevant and necessary.

### **Regarding item f)**

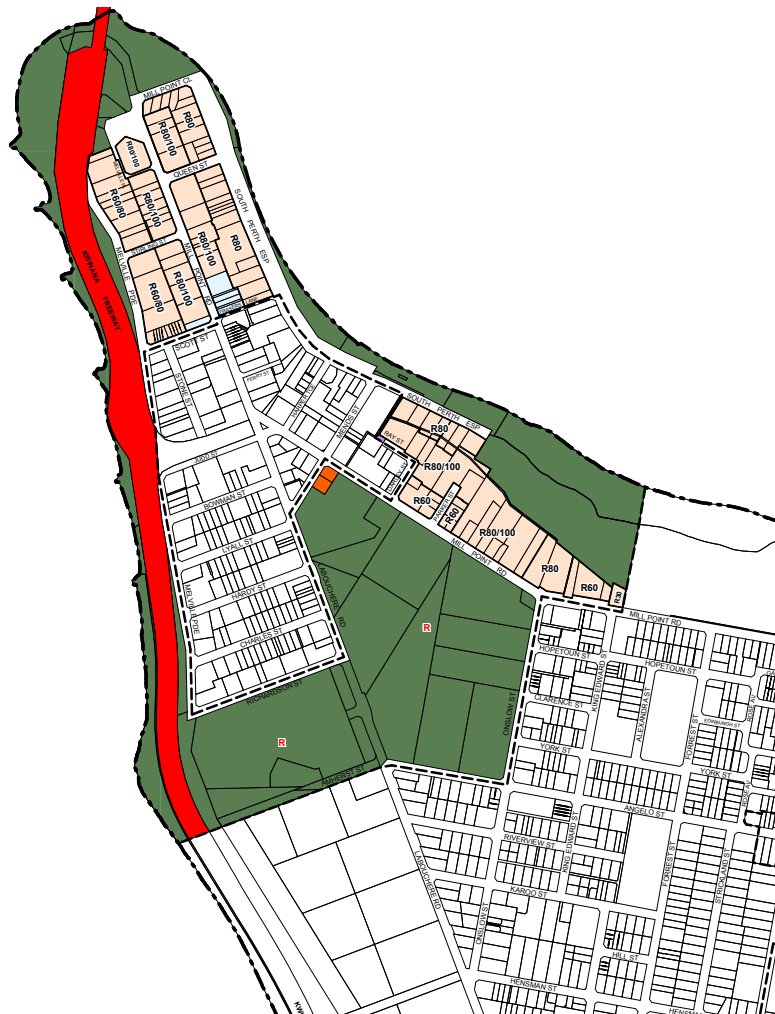
All steps have been taken to ensure both points.

### **Regarding items g) and h)**

Policies are always referred to Council and are subject to regular reviews as is deemed necessary.

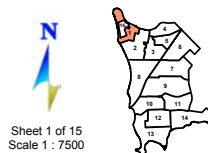
# APPENDIX 06 SCHEME MAPS

REFER LEGEND ON PAGE 89



## City of South Perth Town Planning Scheme No.6 Scheme Maps

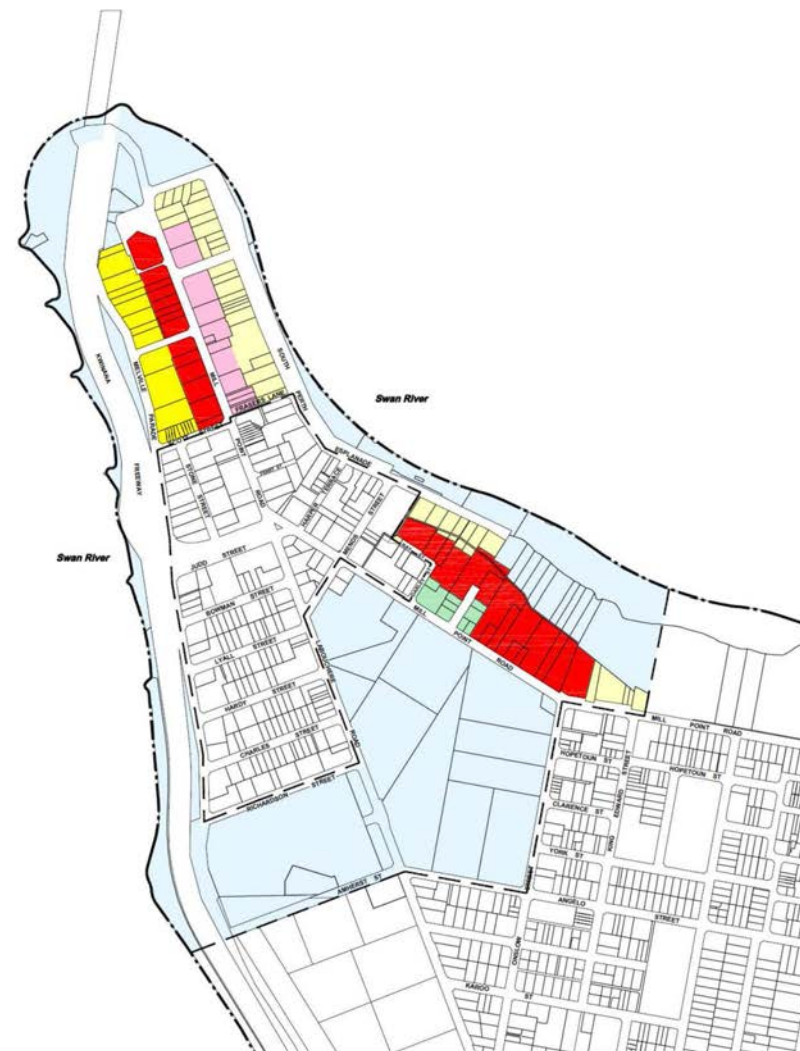
Scheme Maps - Zoning  
Precinct 1 - Mill Point



Sheet 1 of 15  
Scale 1 : 7500

**PLEASE NOTE:**  
These Scheme Maps form part of the City of South Perth Town Planning Scheme No. 6, and should be read in conjunction with the Scheme Text.  
The No. 6 Town Planning Scheme will be amended from time to time. Please check with the City to ensure that you are referring the latest version of the Scheme.  
Digital Cadastral Data supplied by the Department of Land Administration, WA, P295

**APPROVED SCHEME AMENDMENTS:**  
Amendment No. 25 - Government Gazette 18.1.2013



## City of South Perth Town Planning Scheme No.6 Scheme Maps

Scheme Maps - Building Height Limits  
Precinct 1 - Mill Point



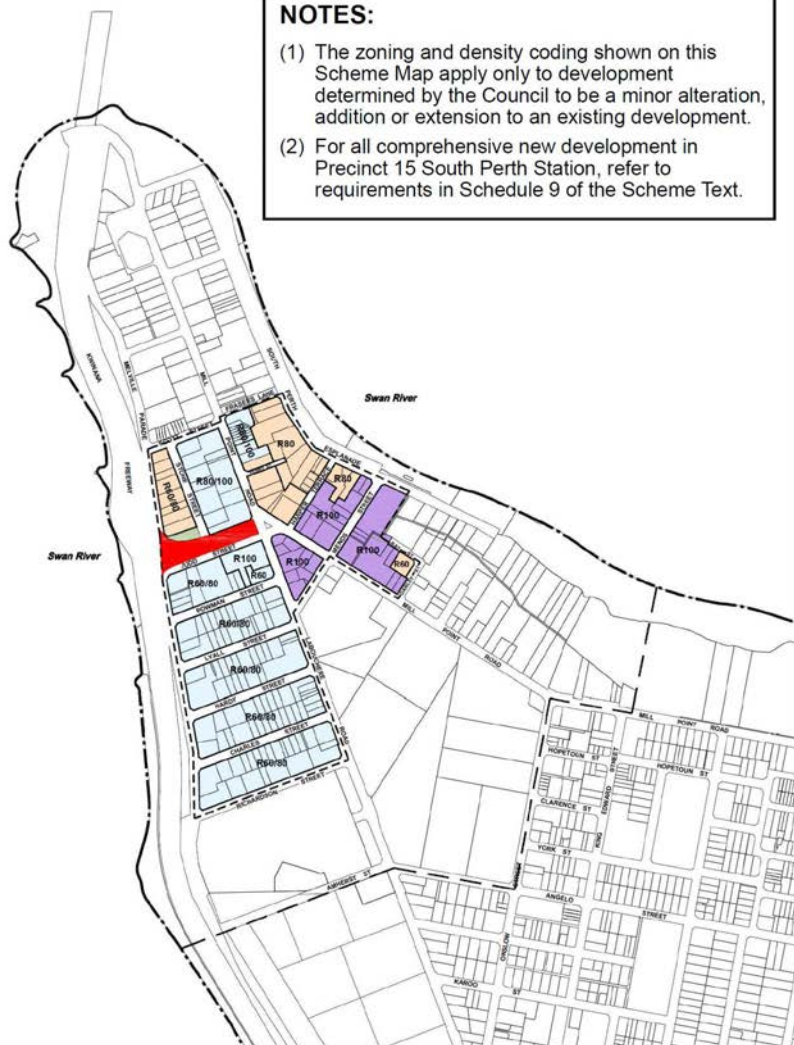
Sheet 1 of 15  
Scale 1 : 7500

**PLEASE NOTE:**  
These Scheme Maps form part of the City of South Perth Town Planning Scheme No. 6 and should be read in conjunction with the Scheme Text.  
The No. 6 Town Planning Scheme will be amended from time to time. Please check with the City to ensure that you are referring the latest version of the Scheme.  
Digital Cadastral Data supplied by the Department of Land Administration, WA, P295

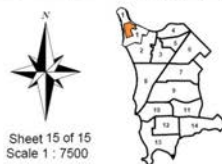
**APPROVED SCHEME AMENDMENTS:**  
Amendment No. 9 - Government Gazette 20.7.2007  
Amendment No. 25 - Government Gazette 18.1.2013



- (1) The zoning and density coding shown on this Scheme Map apply only to development determined by the Council to be a minor alteration, addition or extension to an existing development.
- (2) For all comprehensive new development in Precinct 15 South Perth Station, refer to requirements in Schedule 9 of the Scheme Text.



**Scheme Maps - Zoning**  
**Precinct 15 - South Perth Station**



**PLEASE NOTE:**

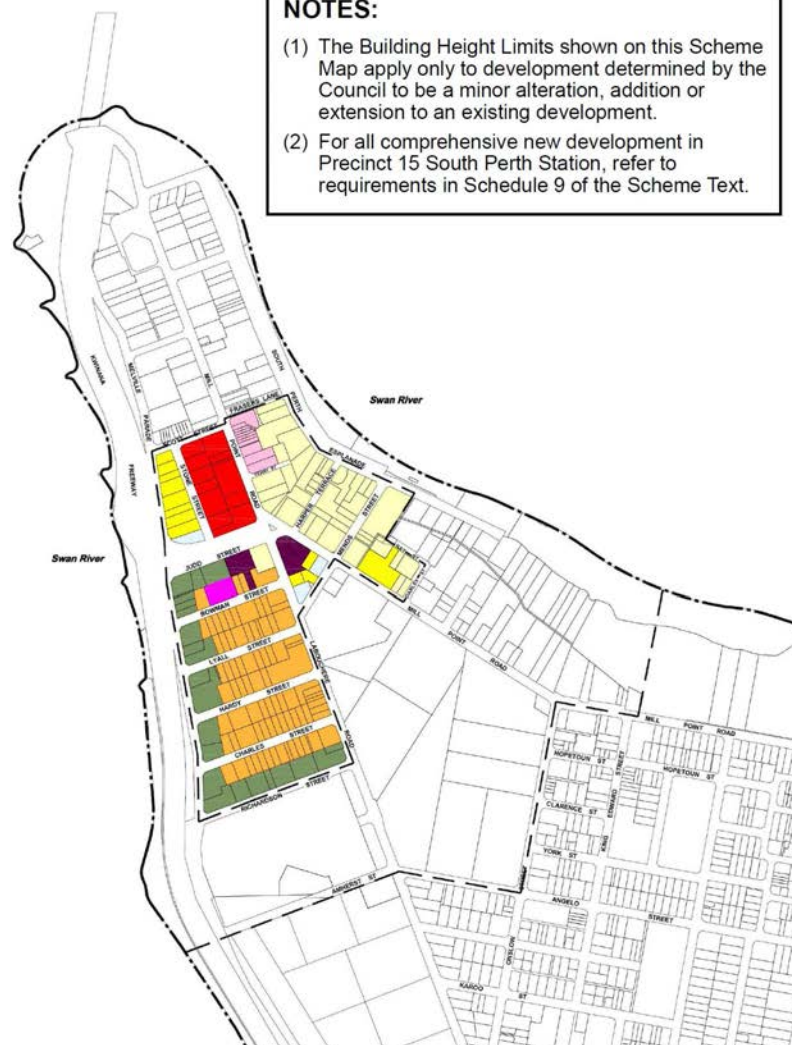
These Scheme Maps form part of the City of South Perth Town Planning Scheme No. 6 and should be read in conjunction with the Scheme Text.

The No. 6 Town Planning Scheme will be amended from time to time. Please check with the City to ensure that you are referring to the latest version of the Scheme.

Digital Cadastral Data supplied by the Department of Land Administration, WA, P295.

**APPROVED SCHEME AMENDMENTS:**  
Amendment No. 25 – Government Gazette 18.1.2013

- (1) The Building Height Limits shown on this Scheme Map apply only to development determined by the Council to be a minor alteration, addition or extension to an existing development.
- (2) For all comprehensive new development in Precinct 15 South Perth Station, refer to requirements in Schedule 9 of the Scheme Text.



**Scheme Maps - Building Height Limits**  
**Precinct 15 - South Perth Station**



**PLEASE NOTE:**

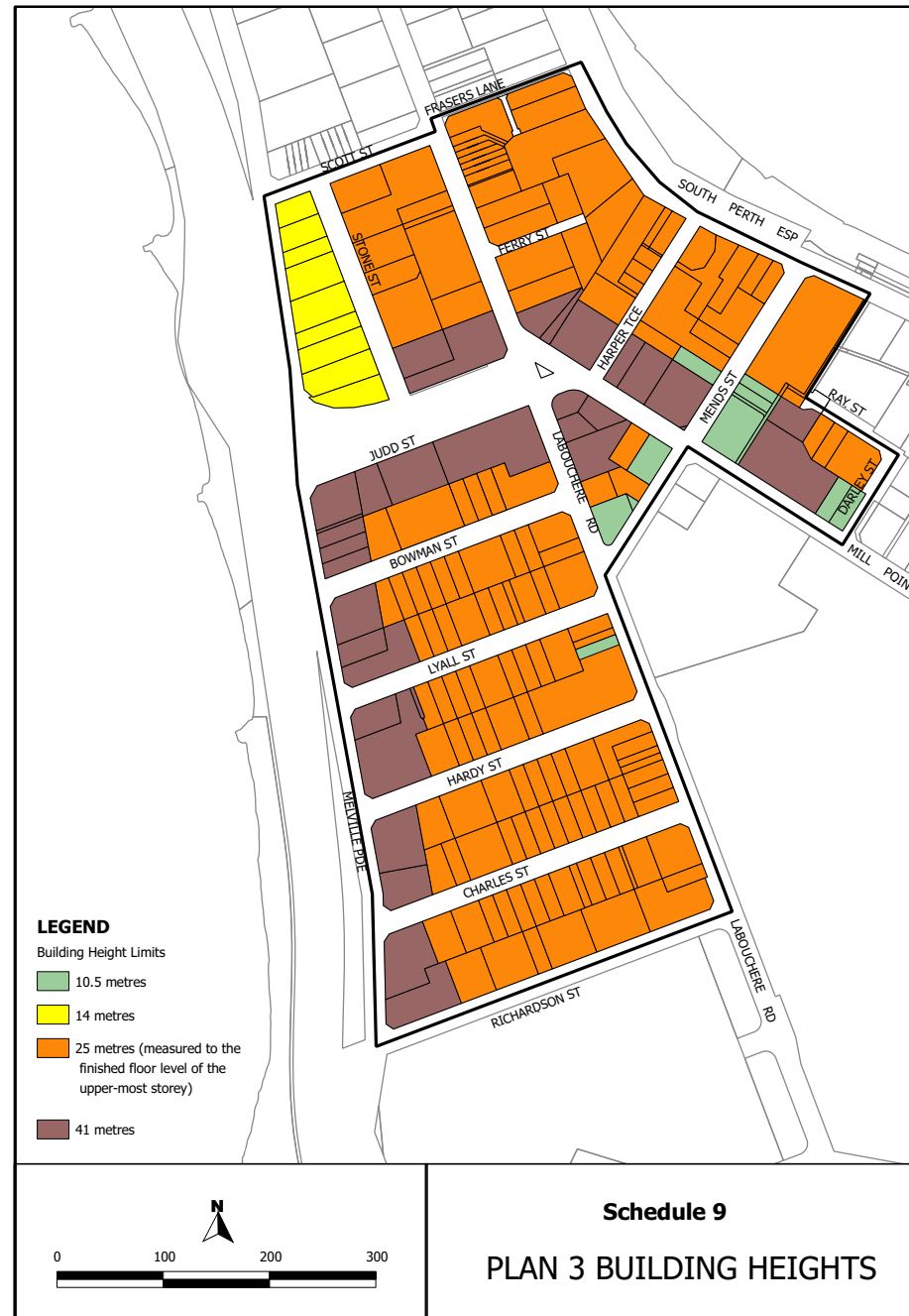
These Scheme Maps form part of the City of South Perth Town Planning Scheme No. 6 and should be read in conjunction with the Scheme Text.

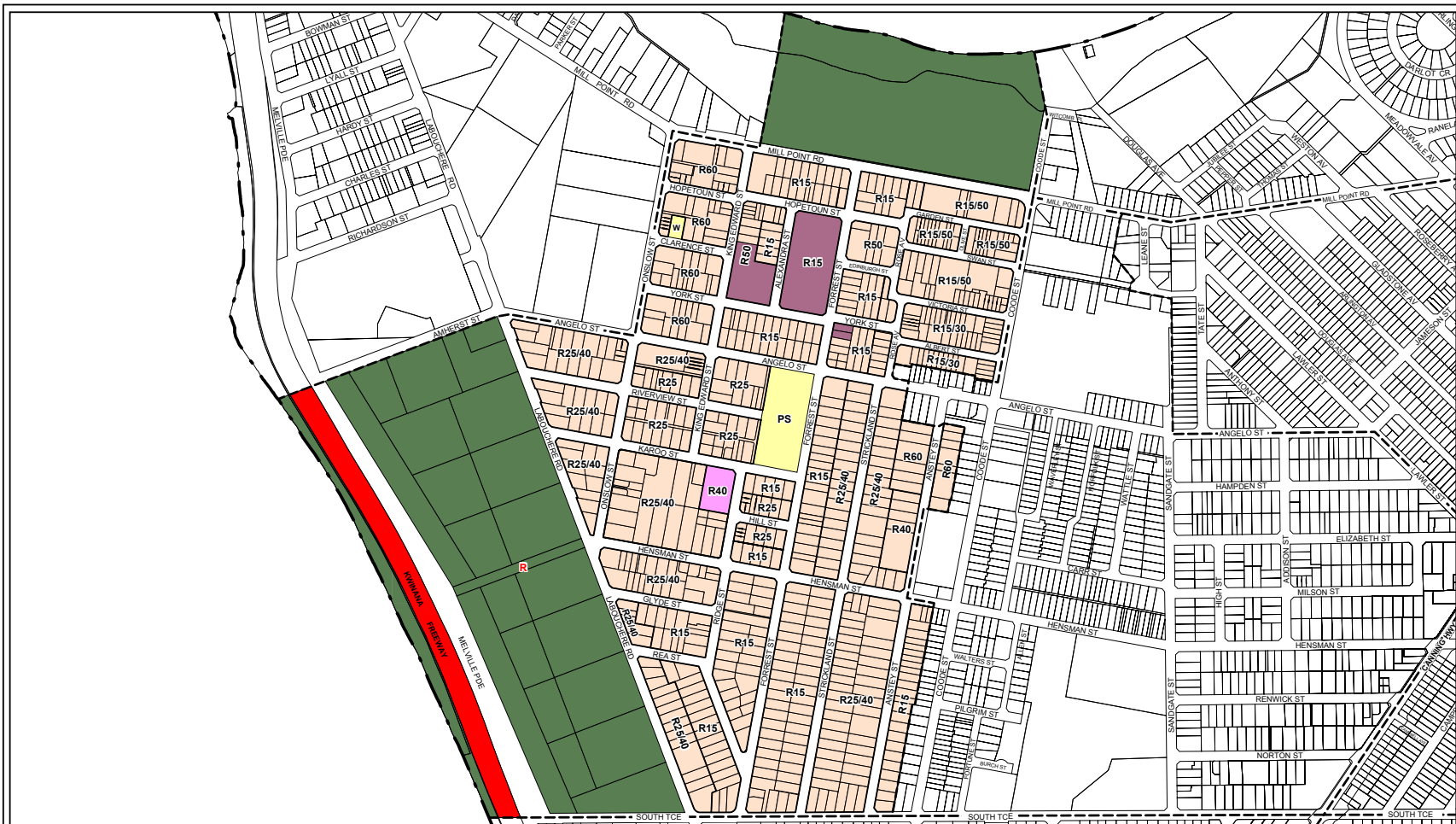
The No. 6 Town Planning Scheme will be amended from time to time. Please check with the City to ensure that you are referring to the latest version of the Scheme.

Digital Cadastral Data supplied by the Department of Land Administration WA

**APPROVED SCHEME AMENDMENTS:**  
Amendment No. 25 – Government Gazette 18.1.2013

# APPENDIX 06 SCHEME MAPS



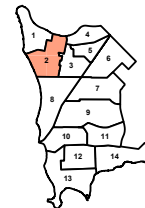


## City of South Perth Town Planning Scheme No.6

**Scheme Maps - Zoning  
Precinct 2 - South Perth Central**



Sheet 2 of 14  
Scale 1 : 7500



### PLEASE NOTE:

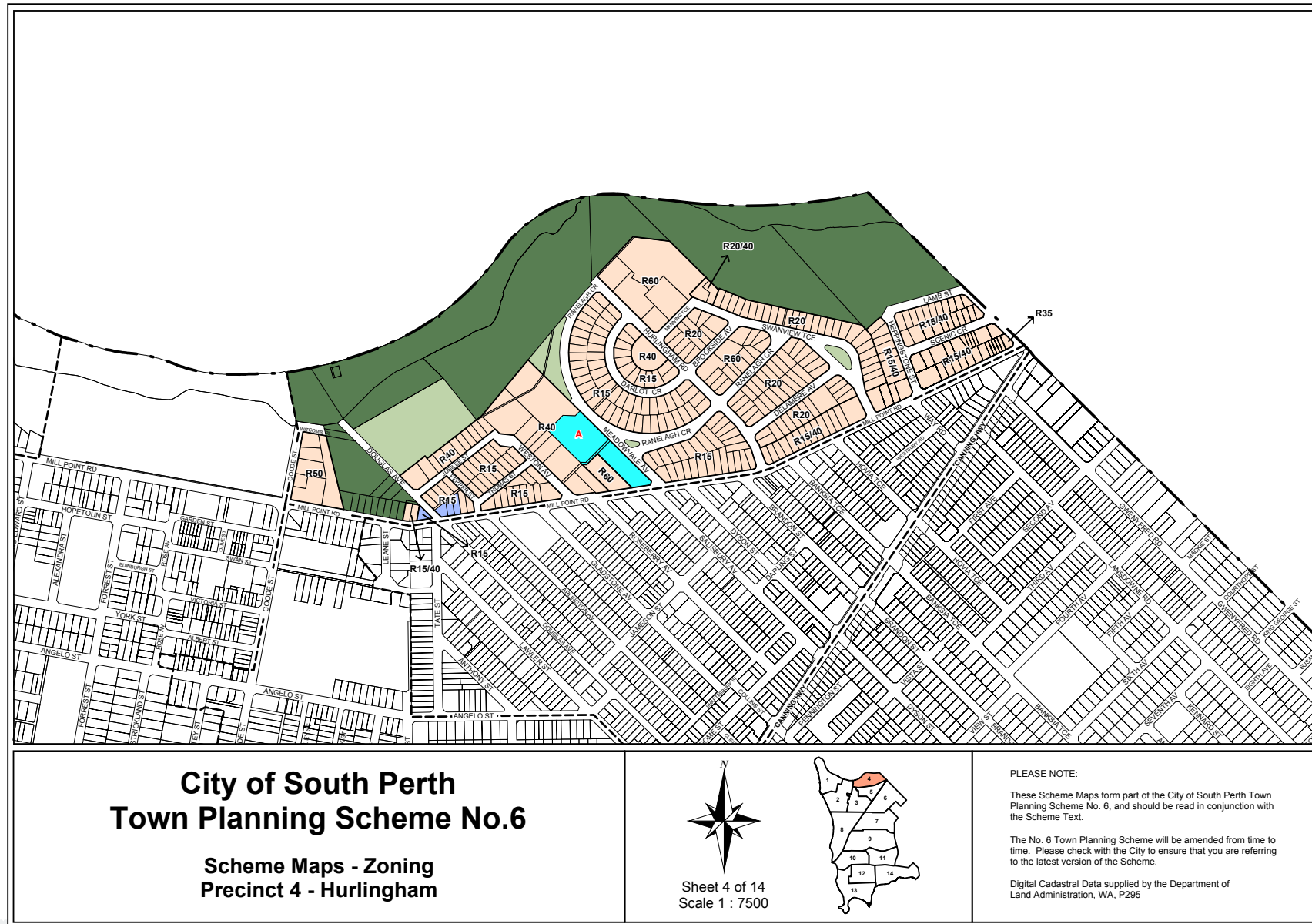
These Scheme Maps form part of the City of South Perth Town Planning Scheme No. 6, and should be read in conjunction with the Scheme Text.

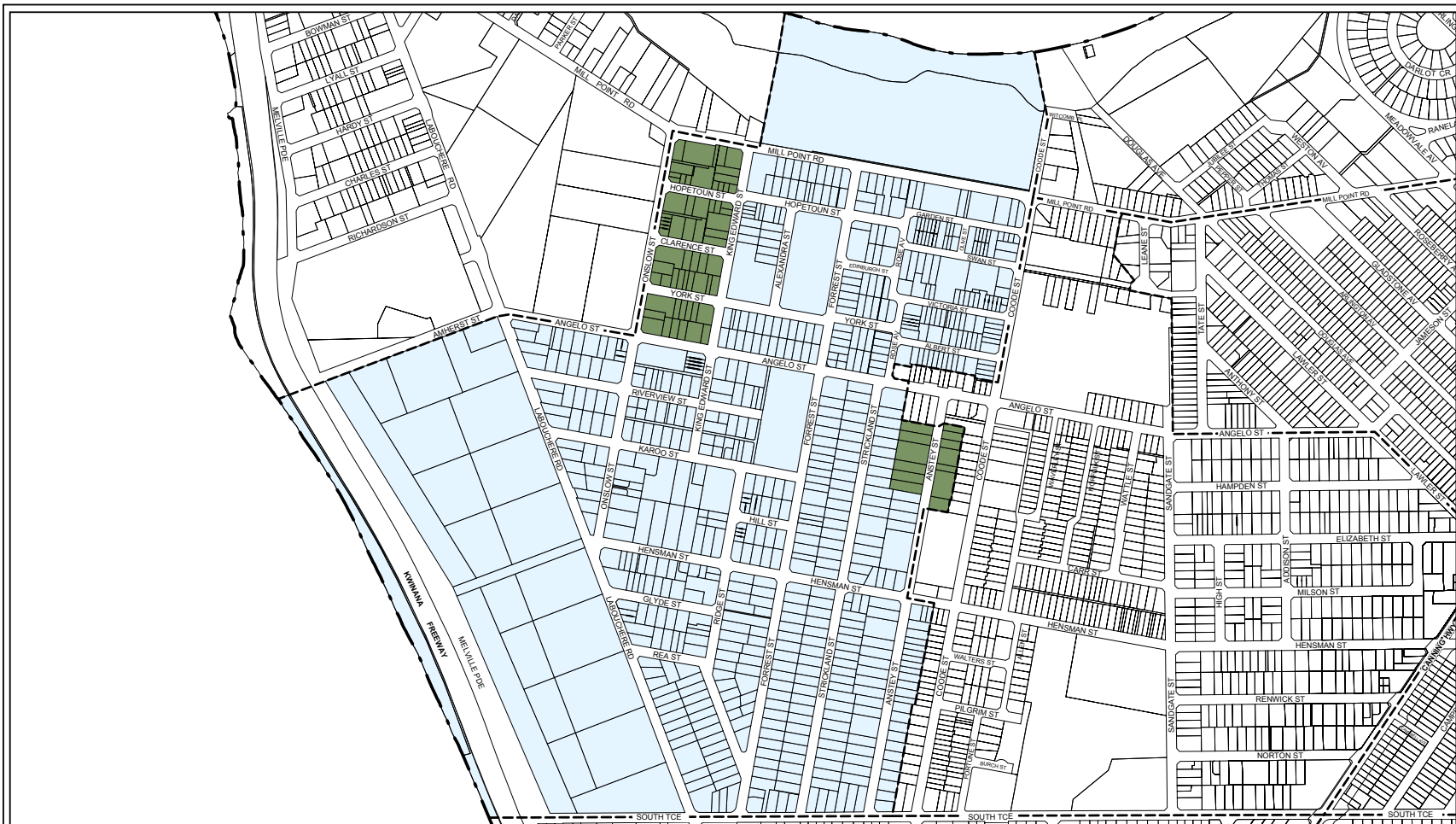
The No. 6 Town Planning Scheme will be amended from time to time. Please check with the City to ensure that you are referring to the latest version of the Scheme.

Digital Cadastral Data supplied by the Department of Land Administration, WA, P295



# APPENDIX 06 SCHEME MAPS



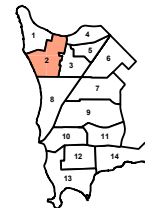


## City of South Perth Town Planning Scheme No.6

**Scheme Maps - Building Height Limits  
Precinct 2 - South Perth Central**



Sheet 2 of 14  
Scale 1 : 7500



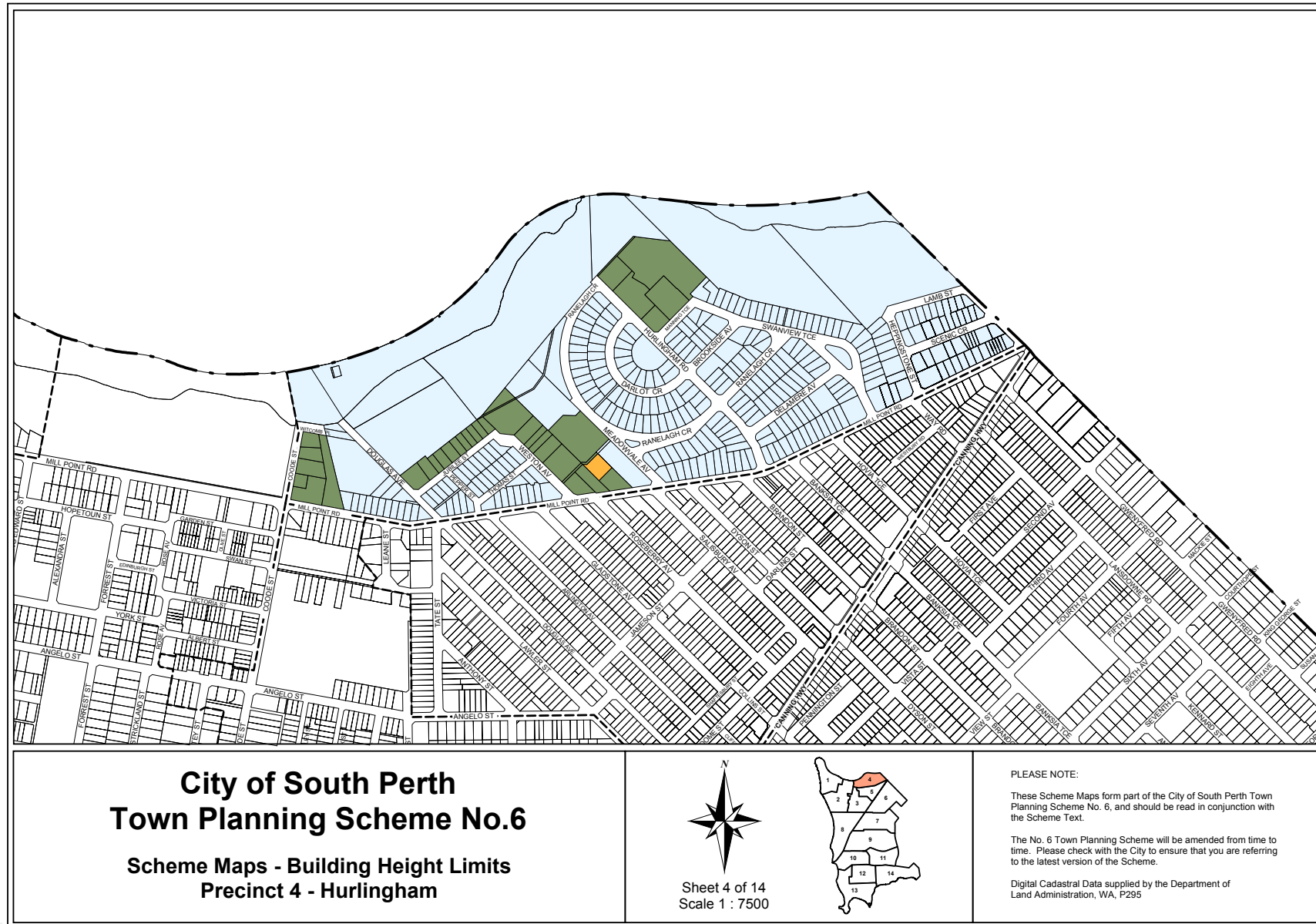
### PLEASE NOTE:

These Scheme Maps form part of the City of South Perth Town Planning Scheme No. 6, and should be read in conjunction with the Scheme Text.

The No. 6 Town Planning Scheme will be amended from time to time. Please check with the City to ensure that you are referring to the latest version of the Scheme.

Digital Cadastral Data supplied by the Department of Land Administration, WA, P295

# APPENDIX 06 SCHEME MAPS










## Scheme (Amendment) Map - City of South Perth Town Planning Scheme No.6 - Legend

### NOTES:






APPROVED SCHEME AMENDMENTS:  
Modified by Amendment No. 25 - Government Gazette 18.1.2013

### Zoning




#### Metropolitan Region Scheme Reserves

	Parks and Recreation
<b>R</b>	Restricted Public Access
	Civic and Cultural
	Primary Regional Roads
	Other Regional Roads
	Public Purposes
Denoted as follows:	
<b>HS</b>	High School
<b>SU</b>	Special Uses











#### Other

<b>A</b>	Additional Use
	R-Code density boundary
	Precinct boundary
	Scheme boundary
	Special Control Area SCA1 (refer Schedule 9)
	Development Contribution Area (refer Schedule 10)


#### Local Scheme Reserves

	Local Roads
	Parks and Recreation
	Public Purposes
Denoted as follows:	
<b>C</b>	Clinic
<b>CC</b>	Civic Centre
<b>CP</b>	Car Park
<b>K</b>	Kindergarten
<b>PS</b>	Primary School
<b>T</b>	Telstra
<b>W</b>	Western Power

#### Zones

	District Centre Commercial
	Mends Street Centre Commercial
	Neighbourhood Centre Commercial
	Highway Commercial
	Mixed Use Commercial
	Local Commercial
	Residential
	Public Assembly
	Private Institution
	Technology Park

### Building Height Limits <sup>(1)</sup>

	41.0 metres
	36.0 metres
	29.0 metres
	28.0 metres
	25.0 metres <sup>(2)</sup>
	24.5 metres
	17.5 metres
	14.0 metres
	13.0 metres
	10.5 metres
	9.75 metres
	7.0 metres
	6.5 metres
	3.5 metres
	3.0 metres

### NOTES:

(1) Refer to Schedule 9 for Plan 3 Building Heights applicable to comprehensive new development within Precinct 15 South Perth Station.

(2) The 25.0 metres height is measured from the highest point at ground level on the land under the building to the highest finished floor level of the building

Please don't rely on these maps for any legal purpose relating to the development of land, the Scheme Maps are amended from time to time. Check with the City for the latest zoning and building height information before using these maps in any way.

## APPENDIX 07 SOUTH PERTH FORESHORE AERIAL PHOTO FEBRUARY 2014





# APPENDIX 08 MAP & TABLES OF LAND DETAILS AND OWNERSHIP

## MAP: SOUTH PERTH FORESHORE LAND DETAILS AND OWNERSHIP

The following map of the South Perth Foreshore depicts the land ownership of the foreshore, being of two types:

1. Crown Reserve, shown in red; and
2. Freehold land, owned by the City of South Perth (previously called the South Perth Road Board), shown in blue.

'Crown Land' is all land except 'alienated land' (that is, land held in 'freehold'); and includes reserved and leased Crown land, tidal waters, reclaimed land, river beds and lakes. The SPF crown land is reserved for various purposes, so is termed 'Crown Reserve', with each reserve designated by a reserve number (eg. 12345). The foreshore reserve's purpose is predominantly public recreation, with smaller reserves for car parking, sewerage and a boatshed. Each is indicated on the Crown Reserve table.

'Freehold' (also known as 'Fee Simple') is the greatest estate that can be held by a person without being the absolute owner, which is the Crown. About 17.7 million hectares or 7% of the State of Western Australia is freehold land.

For identification purposes only, the Crown Reserve land is indicated on the map by letters A to F, each letter indicating a separate Reserve; and each separate Lot within each reserve indicated by i.,ii.,iii., etcetera. These details are shown in the Crown Reserve table.

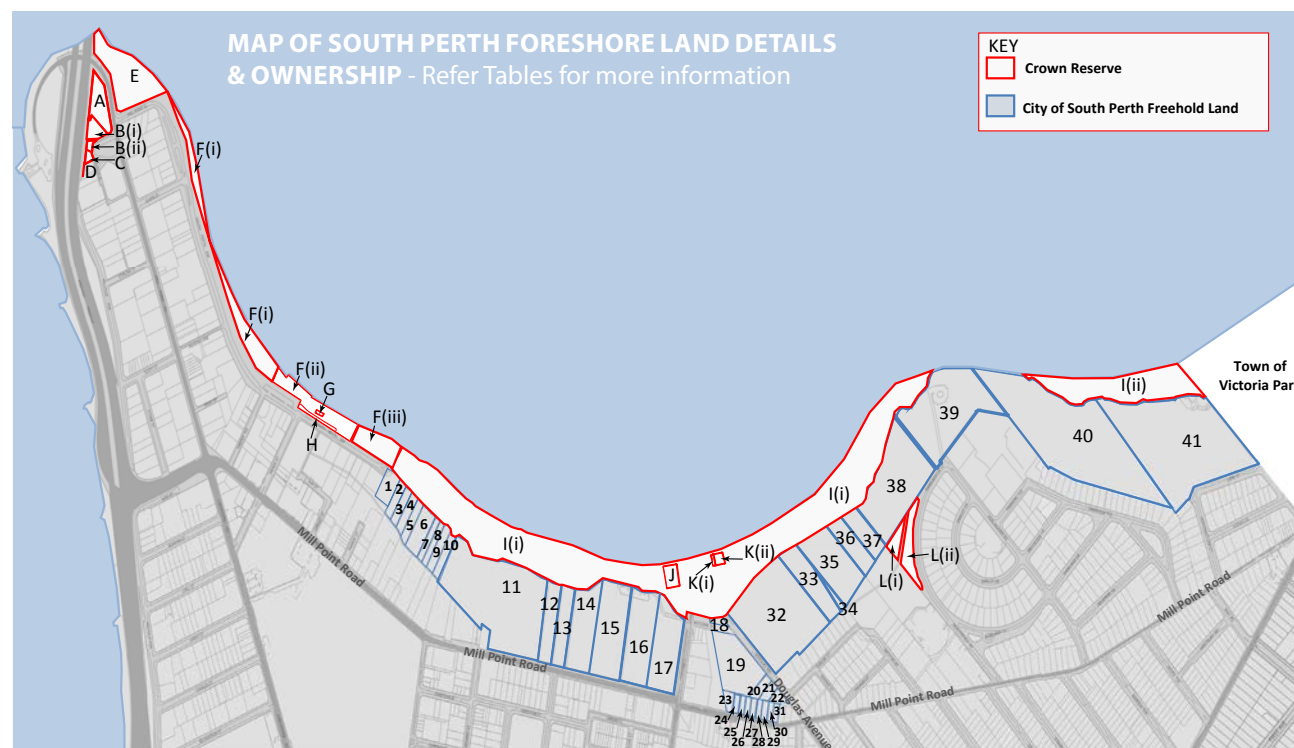
The Freehold Land is indicated by the numbers 1 to 39, each number representing a specific 'Lot' of land, with the Lot Number and Deposited Plan listed for each on the corresponding table.

### TABLES – CROWN RESERVE LAND AND FREEHOLD LAND

The tables on the following pages provide information on the above, in two separate tables:

1. Table 1 of the Crown Reserve land of the foreshore; and
2. Table 2 of the Freehold Land of the foreshore.

Additional information on the Volume/ Folio of the land (being the recording system used by Landgate) is included; and the area in hectares (1 hectare = 10000 square metres) for each, with the total hectares provided.





## APPENDIX 08 MAP & TABLES OF LAND DETAILS AND OWNERSHIP

**TABLE 1 SOUTH PERTH FORESHORE – CROWN RESERVE**

Map Identification		Reserve number	Lot Number/Deposited Plan	Volume/Folio	Purpose	Area (ha)	Vesting Body
A		37594	Lot 921 / Plan 214831	LR3043 / 251	Park and Recreation	0.5079	City of South Perth
B	i	20804	Lot 818 / Plan 209789	LR3127 / 182	Public Recreation	0.2008	City of South Perth
	ii		Lot 833 / Plan 34516	LR 3127 / 183		0.0452	
C		37593	Lot 922 / Plan 214831	LR3043 / 252	Park and Recreation	0.1592	City of South Perth
D		37595	Lot 923 / Plan 214831	LR3063 / 14	Pedestrian Access Way	0.0120	City of South Perth
E		33804	Lot 920 / Plan 214831	LR3119 / 157	Recreation	1.7062388	City of South Perth
F	i	28779	Lot 843 / Plan 243171	LR3144 / 756	Public Recreation	0.9229069	City of South Perth
	ii		Lot 840 / Plan 243171	LR3144 / 755	Public Recreation	0.8443059	City of South Perth
	iii		Lot 844 / Plan 243171	LR3144 / 757	Public Recreation	0.6476415	City of South Perth
G		39297	Lot 962 / Plan 187062	LR3063 / 114	Sewage Disposal	0.0114	Water Corporation
H		28778	Lot 841 / Plan 92270	LR3062 / 776	Parking	0.0582	City of South Perth
I	i	34565	Lot 11835 / Plan 240379	LR3141 / 191	Recreation	12.6529225	City of South Perth
	ii		Lot 10157 / Plan 240379	LR3141 / 190	Recreation	2.2006758	City of South Perth
J			Lot 1203 / Plan 28824	LR3159 / 245		0.1574	City of South Perth
K	i	24112	Lot 780 / Plan 91394	LR3013 / 894	Boatshed, Recreation	0.0115	City of South Perth
	ii		Lot 778 / Plan 163503	LR3013 / 893	Boatshed, Recreation	0.0348	City of South Perth
L	i	38732	Lot 10542 / 63980	LR3148 / 619	Public Recreation	0.1991	City of South Perth
	li					0.4506	
TOTAL:						20.82279	

Source: City of South Perth Governance team, utilising data from Landgate, May to August 2014.

Note: Portions of Reserve 33804 are located outside the study area, as they are west of the Narrows Bridge, so are considered in the Kwinana Freeway Foreshore Management Plan (KFFMP).

**TABLE 2 SOUTH PERTH FORESHORE – FREEHOLD LAND**

Map Identification	Lot Number/ Deposited Plan	Volume / Folio	Zoning	Area (ha)
1	200/5950	1049/802	Parks and Recreation	0.3011
2	201/5950	674/31	Parks and Recreation	0.816
3	202/5950	838/67	Parks and Recreation	0.849
4	203/5950	838/68	Parks and Recreation	0.1940
5	204/5950	838/69	Parks and Recreation	0.2071
6	205/5950	1009/495	Parks and Recreation	0.4235
7	206/5950	967/45	Parks and Recreation	0.1599
8	207/5950	925/70	Parks and Recreation	0.1624
9	208/5950	674/32	Parks and Recreation	0.2317
10	209/5950	295/47	Parks and Recreation	0.2317
11	210/5950	2820/808	Parks and Recreation	4.9255
12	211/5950	2820/805	Parks and Recreation	0.6867
13	212/5950	2820/800	Parks and Recreation	0.6827
14	213/5950	2820/806	Parks and Recreation	1.4422
15	214/5950	2820/807	Parks and Recreation	1.6370
16	215/5950	2819/645	Parks and Recreation	1.6344
17	216/5950	2819/645	Parks and Recreation	1.4523
18	17/3285	618/138	Parks and Recreation	0.0568
19	16/3285	1871/585	Parks and Recreation	1.1487
20	15/3285	1871/585	Parks and Recreation	0.1166
21	14/3285	1871/585	Parks and Recreation	0.0890

Map Identification	Lot Number/ Deposited Plan	Volume / Folio	Zoning	Area (ha)
22	13/3285	1871/585	Parks and Recreation	0.0878
23	1/3285	1871/585	Parks and Recreation	0.0963
24	2/3285	1871/585	Parks and Recreation	0.0607
25	3/3285	1871/585	Parks and Recreation	0.0606
26	4/3285	1871/585	Parks and Recreation	0.0608
27	5/3285	1871/585	Parks and Recreation	0.0606
28	6/3285	1871/585	Parks and Recreation	0.0606
29	7/3285	1871/585	Parks and Recreation	0.0607
30	8/3285	1871/585	Parks and Recreation	0.0617
31	9/3285	1871/585	Parks and Recreation	0.0606
32	198/1620	1012/281	Parks and Recreation	3.3860
33	199/1620	1012/281	Parks and Recreation	0.8786
34	105/5947	1026/30	Parks and Recreation	0.0915
35	104/5947	668/38	Parks and Recreation	1.3620
36	103/5947	602/82	Parks and Recreation	0.5782
37	102/5947	188/81	Parks and Recreation	0.5039
38	101/5947	1018/299	Parks and Recreation	2.5060
39	100/5947	1031/443	Parks and Recreation	2.9840
40	51/9634	1907/357	Parks and Recreation	5.6844
41	52/9633	1907/357	Parks and Recreation	5.2576
TOTAL				41.3509 ha

Source: City of South Perth Governance team, utilising data from Landgate, May to August 2014.

## REFERENCES

- Allender, G.M. 1981. *The distribution of benthic microflora in the Swan River Estuary, Western Australia*. M.Sc. Thesis, Botany Department, University of Western Australia.
- Balla, S.A. 1994. *Wetlands of the Swan Coastal Plain, Volume 1: Their nature and management*, Department of Environmental Protection, Perth, WA.
- Baranowski / Rayment Landscape Architecture. 1995. *Swan River, South Perth Foreshore: A Vision for Sir James Mitchell Park*. Prepared on behalf of the South Perth Foreshore Assessment Group.
- Bates, D (1992) *Aboriginal Perth and Bibbulman biographies and legends*, Ed. PJ Bridge, Hesperian Press, Victoria Park, WA.
- Birds Australia. 1997. *Birds Australia Tracking Database*. Park Sightings Report Alfred Cove N.R. 12/09/97.
- Botanic Gardens & Parks Authority website regarding Kings Park <http://www.bgpa.wa.gov.au/kings-park>
- CATALYSE Pty Ltd and City of South Perth. 2012. *Community Perspectives 2012 Survey Results*.
- CATALYSE Pty Ltd and City of South Perth. 2014. *Community Perspectives 2014 Survey Results*.
- Conservation and Land Management, NPNCA. 1996. *Swan River Estuary Marine Park & Adjacent nature Reserves Draft Management Plan*.
- Chubb, C. F., Hutchins, J. B., Lenanton, R. C. J., and Potter, I. C. 1979. *An annotated checklist of the fishes of the Swan-Avon River System, Western Australia*. *Rec. West. Aust. Mus* 8 (1) pp 1-55.
- City of South Perth Aboriginal Engagement Strategy 2013.
- City of South Perth Asset Management Plan 2013-2017. 2013.
- City of South Perth, M P Rogers & Associates and Ecoscape, 2014. *Kwinana Freeway Foreshore Management Plan (Draft)*.
- City of South Perth. 1996. *Tree Planting Review Sir James Mitchell Park* (Special Report of the Executive Manager, Works Division of City of South Perth). Presented to the City City of South Perth.
- City of South Perth. 2006. *Municipal Heritage Inventory: Precinct 2 – South Perth*
- City of South Perth. 2013. *Policy P103 Communication and Consultation*.
- City of South Perth. 2013. *Policy P211 Water Sensitive Urban Design*.
- City of South Perth. 2013. *Management Practice: M354 Stormwater Drainage for Proposed Buildings*.
- City of South Perth, *Town Planning Scheme Number 6 (TPS No. 6)*.
- Collard, L., Henderson, I., and Collard, L. 1996. *De Vlamingh Tricentennial: A project to map his Explorations of Wedjemup or Rottnest Island and Darbal Yaragan Beeloo or the Swan River Area of WA and Translations of Salient Nyungar Aboriginal Names*. Aboriginal and Islander Studies Programme, Murdoch University.
- Crowley, F. K. 1962. *The History of South Perth, WA*. City of South Perth, Perth, Western Australia.
- Department of Environment and Conservation (DEC). 1980. *Atlas of Natural Resources Darling System, Western Australia*. Department of Conservation and Environment, Perth, Western Australia.
- Department of Environment and Conservation (DEC). <http://www.dec.wa.gov.au/ass> for Acid Sulfate Soils Fact Sheet and (ASS) Risk Maps
- Department of Sport and Recreation (DSR), 2012. *Classification framework for public open space*. Department of Sport and Recreation, Perth, Western Australia.
- Fenton, M. 1992. *Sport and Recreation Need Study*, Environment and Behaviour, Perth WA.
- Florey, C. 1995. *Peninsular City A Social History of the City of South Perth*. City of South Perth.
- Gothard, J. S. 1988. *Across Perth Water: Reminiscences of South Perth*. City of South Perth, Perth, Western Australia.



Government of Western Australia. 2014. *Public Parkland Planning and Design Guide WA*. Perth, Western Australia, Department of Sport and Recreation (DSR).

Government of Western Australia. 1988. *Swan River Management Strategy*. Perth, Western Australia.

Government of Western Australia website, particularly <http://wa.gov.au/information-about/recreation/parks-reserves> 2014.

Hillman, K. 1984. *Anticipated effects of site development on aquatic flora with particular emphasis on seagrasses (Appendix A)*. In Point Dundas Proposed Mooring Area ERMP Volume II Appendices Ed. Kinhill Sterns for Bond Corporation Pty Ltd.

Healthy Active by Design website: <http://www.healthyactivebydesign.com.au/design-features/public-open-space>;

JDA Consultant Hydrologists and Ecoscape. 2004. *City of South Perth Integrated Catchment Management Plan September 2004*.

Landgate Glossary <http://www.landgate.wa.gov.au/corporate.nsf/web/Glossary#R>

McArthur & Bettenay. 1974. *Development and Distribution of Soils of the Swan Coastal Plain, WA*, Soil Publication No. 16, Commonwealth Scientific and Industrial Research Organisation.

MDW Environmental Services, 2012. *Acid Sulfate Soil Investigation, Groundwater Investigation and Waste Classification – Miller's Pool, South Perth*. Prepared for the City of South Perth.

Natural Area Consulting. 2010. *City of South Perth Sir James Mitchell Park Riverwall Planting Design Report June 2010*.

Oldham Boas Ednie Brown. 1988. *Mends Street and Perth Zoo Precinct Study*.

Perth Museum website <http://museum.wa.gov.au/explore/online-exhibitions/cockatoo-care/western-long-billed-corella> regarding corellas and introduced birds.

Powell, R. and Emberson, J. 1996. *Growing Locals*. Western Australian Naturalist Club.

P & M Tooby Pty Ltd Landscape Architects. 1975. *Sir James Mitchell Park Report on Site Planning and Landscape Design*.

P & M Tooby Pty Ltd Landscape Architect. 1987. *Sir James Mitchell Park Landscape Plan*.

Riggert, T. L. 1978. *The Swan River Estuary Development, Management and Preservation*. Western Australia.

Swan River Trust and City of South Perth. 2001. *Sir James Mitchell Park Foreshore Management Plan, Swan River Trust Report No 32, April 2001*.

Swan River Trust. 2012. *Guidelines for developing foreshore management plans in the Swan Canning Riverpark*.

Swan River Trust & Department of Transport. 2013. *Sharing the Rivers Swan Canning Riverpark Aquatic Use Review and Management Framework*.

Swan River Trust. 1997. *Swan River System Landscape Description Report No. 28*.

Thurlow, B. H., Chambers, J., and Klemm, V. V. 1986. *Swan Canning Estuarine System – Environment Use and the Future*. Waterways Commission Report No. 9, Waterways Commission, Perth, Western Australia.

Tract Consultants. 1990. *Mends Street Precinct Streetscape Plan*.

Vinnicombe, P. 1989. *Gooninup: A site complex on the southern side of Mt. Eliza: an historical perspective of land use and associations in the old Swan Brewery Area, WA* Museum, Perth, WA.

Wiltshire, E. 2013. *Sir James Mitchell Park, South Perth – Endorsement of Purpose of Resumption Under Public Works Act 1902 on New Certificates of Title, Correspondence to City of South Perth 27 November 2013*.

Winmar, Kerry-Ann. 2013. *Colours of Bunuru : Second Summer – visual recording of Kerry Ann's tour of the South Perth Foreshore*, recorded by WJE (John) Bannister.





# SOUTH PERTH FORESHORE STRATEGY AND MANAGEMENT PLAN

MAY 2015