



Department of
Parks and Wildlife




SWAN CANNING
RIVERPARK



Swan Canning River Protection Strategy





Swan Canning River Protection Strategy

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This document is available in alternative formats on request.

Front cover Balancing recreational use, development and ecosystem health is a complex management challenge. *Photo – Matt Kleczkowski*

This page Under water perspective, North Fremantle. *Photo – Matt Kleczkowski*

Chairman's preface

On behalf of the Swan River Trust, I have great pleasure in presenting the Minister for Environment with the *Swan Canning River Protection Strategy*.

This strategy and supporting management program are made in accordance with the *Swan and Canning Rivers Management Act 2006*.

It recognises the many special values placed on the rivers by Perth residents and visitors, and the importance of coordinating efforts across government, industry, research institutions and the community to help manage and protect our waterways.

The Trust acknowledges the many people from diverse spheres who have contributed to developing this strategy.

Importantly, it is an ongoing role of the Trust to work with partners to implement the strategy and report our progress to the Minister for Environment.



A handwritten signature in black ink, appearing to read 'Hamish Beck', with a long, sweeping underline.

Hamish Beck
Chairman

Below Pelican silhouette. *Photo – Matt Kleczkowski*



A photograph of a sunset over a body of water. The sky is filled with vibrant orange and red clouds. In the foreground, several people are kayaking on the water. The kayakers are silhouetted against the bright sunset. The water is dark with some ripples. In the background, there is a dark silhouette of a forested hillside.

Foreword

Western Australia's Swan Canning Riverpark is renowned for its natural beauty and cultural and recreational significance. An integral part of Perth's landscape and economy, the Riverpark comprises the Swan and Canning rivers and the public foreshore reserves surrounding them.

Ecologically significant, the Riverpark supports a wide variety of native animals including a resident population of 25 bottlenose dolphins – a rare delight on a capital city doorstep. Native plants thrive throughout the Riverpark including significant areas of remnant riparian and terrestrial native vegetation.

The Riverpark is widely used by the community for a variety of recreational pursuits including boating, swimming, walking, picnicking, fishing, canoeing, waterskiing and cycling. It hosts large community events including the annual Australia Day Skyworks, Avon Descent and an increasing variety of festivals, concerts and major sporting events.

The Swan River has been celebrated across art, literature, music, film and ancient Aboriginal storytelling and culture. It is culturally significant to Aboriginal and non-Aboriginal people and there is an expectation that it will be protected now and into the future.

Historically we have changed the natural river system; in the waterway itself, on the coastal plain for industry and suburban development, and in the broader landscape where the Wheatbelt was cleared to feed our growing population. These changes add to the complex web of ecological pressures that impact our rivers and increase their vulnerability to oxygen depletion, nutrient enrichment and other biodiversity threats.

River system management is challenging; it involves uncertainty and rapid changes. Understanding and addressing the issues goes beyond the capacity of any one organisation. It requires adaptive management, working across organisational boundaries and applying innovative, comprehensive solutions. A coordinated management approach is essential in protecting our rivers and ensuring community values for future generations.

The State Government has responded to these challenges by developing the comprehensive *Swan Canning River Protection Strategy*. This long-term strategy recognises Perth's rapid growth and priority river pressures by establishing a clear path to help conserve the Riverpark's natural, cultural and social amenity values.

This page Sea kayaking at sunset on the Como foreshore. This is a popular way to explore remote Riverpark bays. *Photo – Jane Hilton*



Arising from the *Swan and Canning Rivers Management Act 2006*, the strategy has been developed in partnership with 21 local government authorities, State Government agencies, natural resource management groups and through an extensive community consultation process.

The State Government is determined to achieve further positive on-ground changes and has already begun implementing many of the initiatives outlined in the strategy. Since 2008 the State Government has invested \$7 million to build six large scale nutrient stripping wetlands, \$11 million on 132 priority river foreshore restoration projects, \$4 million towards community-based natural resource management groups and more than \$10 million to build, upgrade and operate existing oxygenation plants on the Swan and Canning rivers. Ongoing funding will be provided for the strategy's key initiatives.

The *Swan Canning River Protection Strategy* is a long-term commitment by the State Government to recognise and protect our capital city rivers. It provides a collaborative management framework which outlines agreed actions for many partners in the community, industry, government and non government organisations. We invite you to participate in the conservation of the Riverpark.



A handwritten signature in white ink that reads "Albert Jacob". The signature is stylized and fluid.

Hon Albert Jacob MLA
**Minister for Environment;
Heritage**



Above Dolphins on our doorsteps are a regular and welcome sight in a capital city river. *Photo – Matt Kleczkowski*



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Part one: overview

The *Swan and Canning Rivers Management Act 2006* created the Swan Canning Riverpark encompassing the waters and foreshores of the Swan Canning river system. Under the Act, the Swan River Trust is vested with the care, control, and management of the River reserve with various responsibilities including developing policies, and preparing and reporting on strategic documents relating to the Riverpark. This includes the development of the *River Protection Strategy* and reporting on the strategy's implementation to the Minister. The Trust also provides independent, high-level strategic advice to the Minister for Environment on matters affecting the rivers.

The *River Protection Strategy* establishes coordinated management arrangements to protect and enhance the ecological and community benefits of the Riverpark. It provides the coordination essential to protect the values of the Riverpark and ensure that community values are protected for future generations. The *Swan and Canning Rivers Management Act 2006* requires agencies to work towards achieving agreed objectives through the *River Protection Strategy*. Part Two of this document outlines the organisations with responsibilities in the Riverpark.

Extensive consultation and collaboration among agencies, natural resource management groups, local governments and individuals has been undertaken to agree on a vision and values for the Riverpark to underpin management approaches outlined in this strategy. A Strategic Management Program to support implementation is also a requirement of the Act and is provided in Part Three of this document.

Above Prawning remains an integral part of river culture. *Photo – Stewart Allen*

Vision

A healthy river for all, to be enjoyed and shared, now and in the future.

The Swan River Trust is supported by the Department of Parks and Wildlife which has significant operational and management responsibilities within the Riverpark and Development Control Area as outlined under the Act. Parks and Wildlife has a key role in implementing the *River Protection Strategy*, along with other agencies, as well as supporting the Trust during the development of the strategy and supporting future reporting activities. The duties of Parks and Wildlife are outlined in more detail below.

The *River Protection Strategy* covers three management areas defined under the *Swan and Canning Rivers Management Act 2006*: *Swan Canning Riverpark (Riverpark)*, the Development Control Area and the Swan Canning Catchment (Map 1).

Swan Canning Riverpark

Parks and Wildlife is responsible for planning and managing the waterways and conservation reserves of the Riverpark. It has joint responsibility for the Riverpark's shoreline in conjunction with other foreshore land managers, including local government authorities and several State Government agencies in which the land is vested.

Development Control Area

Land use planning and development in the Development Control Area (DCA) is subject to the approval processes of Parks and Wildlife under Part 5 of the *Swan and Canning Rivers Management Act 2006* and the *Swan and Canning Rivers Management Regulations 2007*. This area includes the waterways of the Swan and Canning rivers and the adjoining parks and recreation reserves (extending upstream from the Fremantle Traffic Bridge to Moondyne Brook on the Avon River, to the Lower Diversion Dam on the Helena River, along the Southern River to the Allen Road crossing and the Canning River to its confluence with Stinton Creek). In some cases, the DCA includes private property. Electronic copies of the DCA maps are available via the Parks and Wildlife website.

Swan Canning Catchment

The Swan Canning Catchment covers 2,090km² of the total catchment area in the Swan Avon system of approximately 126,000 km². Groundwater and surface water flow into the Riverpark from tributaries and drains across the Swan Canning Catchment. The land and water management of the surrounding and outer catchments directly influences the water quality in the Swan and Canning rivers.

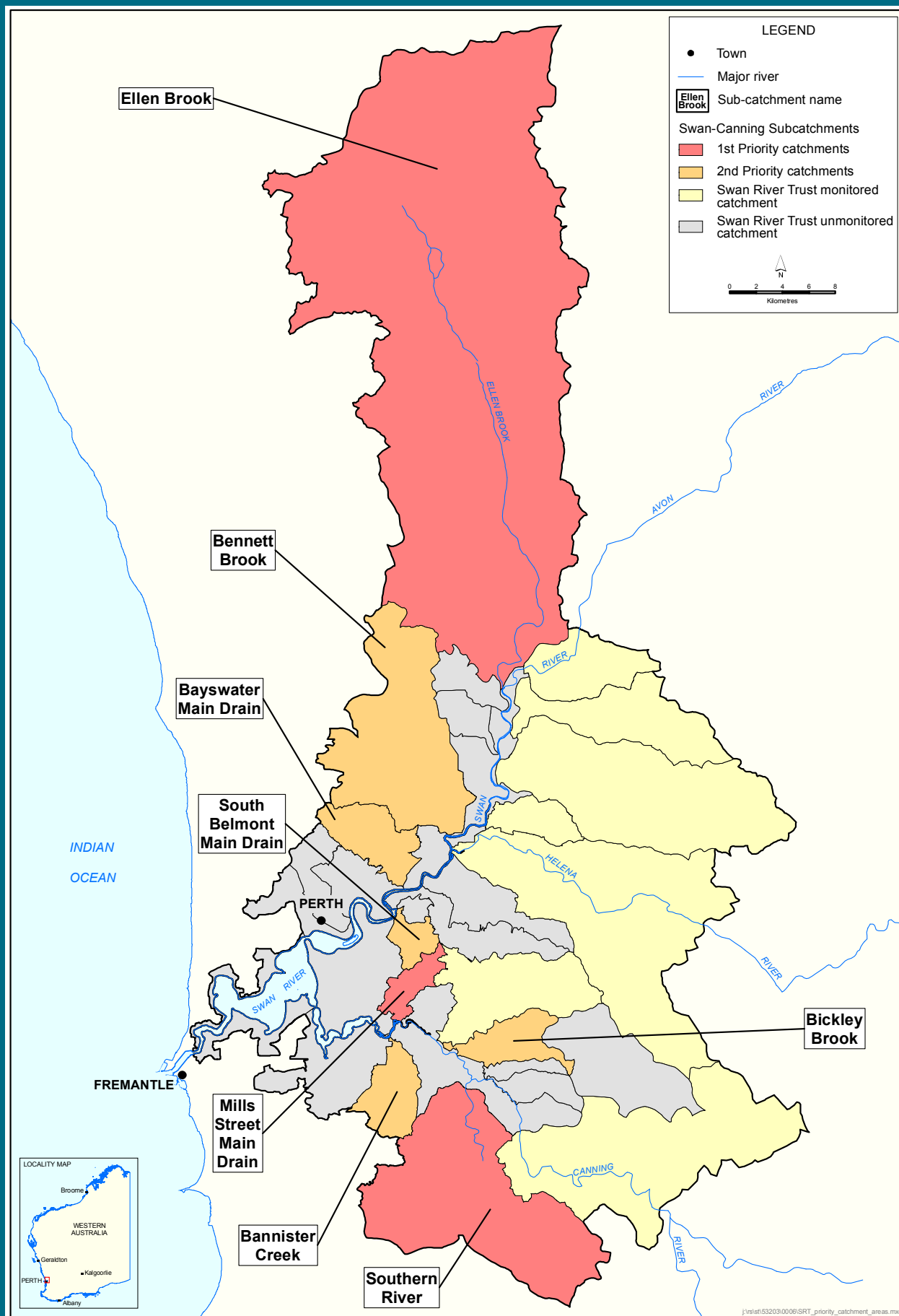
A catchment to coast approach is employed to manage the health of the Riverpark. The work undertaken by many organisations extends beyond the immediate boundaries of the Riverpark and into the broader catchment. Natural resource management groups and local governments play a particularly important role when undertaking these broader catchment activities, which support the ecosystem health of the Riverpark.

Although the Trust has coordinated the strategy's development, the strategy will be implemented by a wide variety of organisations whose roles are explained in Part Two of this document.

Right The rivers support abundant fish stocks. *Photo – Matt Kleczkowski*



Map 1 Swan Canning Catchment



The Riverpark's importance

The Swan Canning Riverpark – the land and waterways of the Swan, Canning, Helena and Southern rivers and public foreshore reserves surrounding them – is a focal feature of Perth's landscape. It is prized for its natural values, its recreational opportunities, and its cultural and social importance.

According to Noongar tradition, the rivers were formed by the mythological serpent the Wagyl and have continuing cultural importance related to past and contemporary Noongar culture. The Noongar people hold a deep sense of respect and kinship towards the rivers and adjacent country.

The Swan River was pivotal to European settlement in Western Australia, including establishment of the Swan River Colony and the locations of the cities of Perth and Fremantle. There is a strong community connection with the rivers and the Riverpark plays an important role in the lives of many Western Australians.

Community consultation has identified four key values:

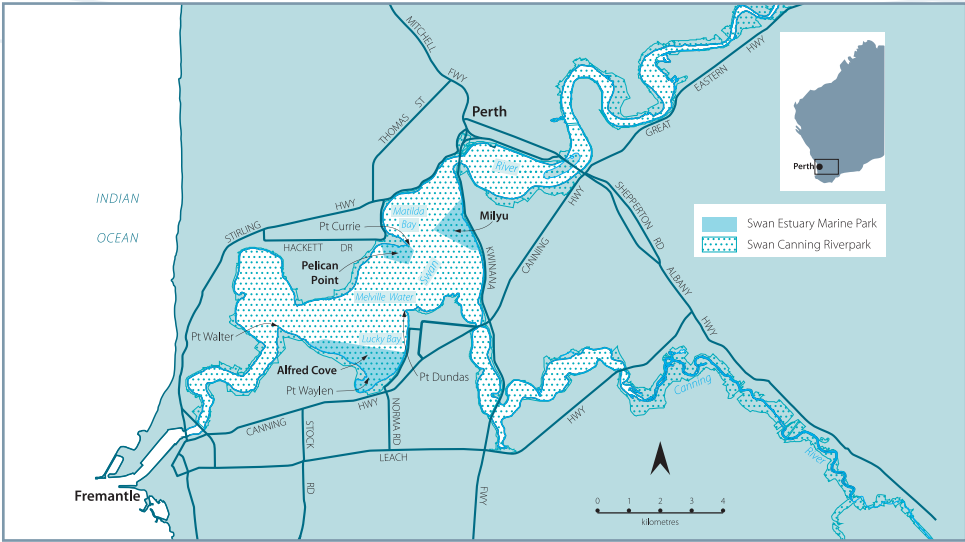
- **ecosystem health** - including water quality, environmental flow, biodiversity and foreshore condition, making it the basis of the other values
- **sense of place** - including the connection people have with the rivers, related to their beliefs, traditions, memories and commitment to looking after them
- **community benefit** - including aesthetics, providing opportunities and facilities for a broad range of activities, providing activities and events and maintaining public access and safety
- **economic benefit** - the additional financial benefit of commercial and residential development and tourism opportunities gained by their proximity to the Riverpark.

Below Foreshore fun for the whole family. *Photo – Megan Lewis*



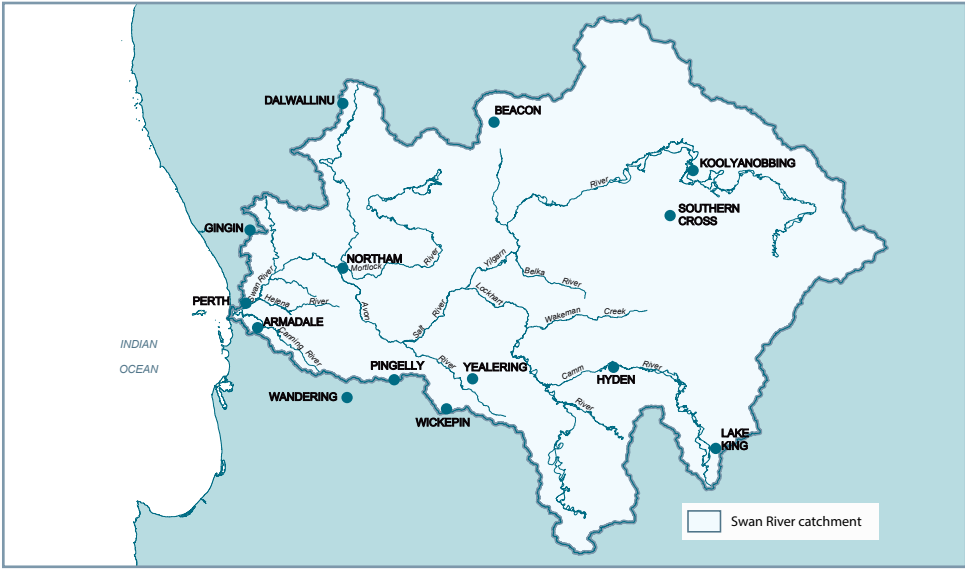


Above Planting and river restoration projects are vital to river health.



72.1km²
Riverpark size

2600ha
area of foreshore



182km
length of rivers

350km
length of foreshore

126,000km²
Swan Avon Catchment System

Known as **Derbal Yerrigan** to Noongar people, the Swan River was named Swarte Swaene Revier by Willem de Vlamingh in 1697 after the black swans he saw there. This was anglicised to Swan River by Captain James Stirling in 1829.

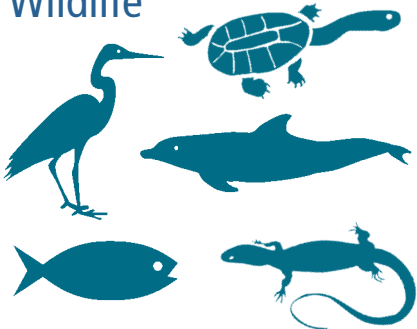
2090km²
Swan Canning Catchment

Known as **Djarlgarra/Dyarlgarro** to Noongar people, the Canning River was named by Captain Stirling in 1827 after George Canning, Britain's then Prime Minister.

Industries

The catchment supports: agriculture light industry, mining horticulture, forestry, recreation and tourism.

Wildlife



Recreation



The issues

Vast tracts of the Riverpark's catchment area have been cleared for agriculture and development, allowing sediment, nutrients, and other contaminants to enter the waterway. Many low-lying areas surrounding the Riverpark were historically used for waste landfill, resulting in contamination. Wetlands and creeks were filled, channelled and piped. The river mouth was widened and deepened, creating a change from a primarily fresh river system to an estuarine system. Groundwater and surface water systems were permanently altered, delivering higher surface water flows through artificial drainage systems. Groundwater levels have declined as groundwater use across the metropolitan area has increased to meet demand for water, and rainfall has decreased.

Added to the impacts of these changes, excess nutrients from urban and rural catchments drive nuisance and toxic algal blooms and accompanying fish deaths. Non-nutrient contaminants such as metals, pesticides, hydrocarbons and other industrial chemicals have also found their way into the system. The effects of a drying climate, such as reduced rainfall and stream flow, further increase the rivers' vulnerability to oxygen depletion, nutrient enrichment and other biodiversity threats.

Weeds and feral animals, especially introduced fish, displace endemic species and threaten biodiversity. Inadequate setbacks have resulted in infrastructure being placed on the shoreline, requiring natural shorelines to be replaced with engineered river walls. These walls offer protection, but require significant investment for ongoing maintenance and replacement.

Demand for river-based recreation and commercial and residential facilities continues to grow, and there are numerous agencies responsible for managing different aspects of the Riverpark.

The response

A coordinated management approach is essential to maintain, protect and enhance the ecological and community benefits of the Riverpark.

The strategy to address the issues facing the Riverpark is to focus on the on-ground actions to achieve four broad outcomes:

- Better coordination
- A healthy river ecosystem
- Improving community engagement and enjoyment
- Better management.

A management program of specific actions is listed in Part Three of this document.

Below Bells Rapids. *Photo – Dougal Topping*





Above An eastern great egret comes into land over healthy samphire beds. *Photo – Matt Kleczkowski*

Better coordination

Along with the Swan River Trust and Parks and Wildlife, another 19 organisations also have statutory management roles in the Riverpark, relating to issues including agriculture, transport, local government, health, cultural heritage, drainage and planning. These organisations and their responsibilities are listed in Part Two.

Improving coordination and collaboration will lead to management efficiencies and greater alignment of projects to support Riverpark values. Parks and Wildlife works closely with other statutory managers to coordinate joint projects, ensure consistency in decision-making and reduce regulatory overlap.

A River Protection Strategy Advisory Group will be formed to enable closer coordination on key management issues relating to the implementation of the Strategy. The Group will include agencies who have important roles in managing the rivers:

Department of Aboriginal Affairs

Department of Agriculture and Food

Department of Environment Regulation

Department of Fisheries

Department of Health

Department of Parks and Wildlife (chair)

Department of Planning

Department of Transport

Department of Water

Western Australian Local Government Association

Metropolitan Redevelopment Authority

Tourism WA

Water Corporation

Other agencies, groups and individuals will be consulted and/or asked to contribute as issues require.

A healthy river ecosystem

The Riverpark continues to face a range of water quality and ecosystem health challenges that can have a negative effect on the delicate ecological system and reduce the community's ability to enjoy the park. Water quality can be improved generally by:

- reducing nutrients, contaminants and sediments at their source before entering the Riverpark
- improving the quality of water flowing into the Riverpark by setting standards on new infrastructure and retrofitting structures to filter water inputs
- actively increasing dissolved oxygen levels
- monitoring and reviewing water quality data against targets.

Plants and animals survive in a delicate balance with the Riverpark's water regimes and any significant change to the flow rates of water levels in tributaries, streams, pools and wetlands can have negative effects. Environmental flow is the term used to describe the water regime required to maintain (with a low level of risk) the ecological values of water-dependent ecosystems.

The Riverpark is rich in biodiversity, being home to a wide range of terrestrial and aquatic plants and animals, including species of macro invertebrates, crustaceans, fish, frogs, reptiles, birds and dolphins.

Better understanding of the Riverpark – from ecological processes and functions to community requirements – will guide management actions. Several organisations are involved in research and monitoring in the Riverpark and the wider Swan Canning Catchment, ranging from monitoring water quality and fauna to social monitoring (such as visitor satisfaction). In many cases, this information is collected by organisations independently of each other, with little sharing of data or outcomes. Greater communication of research outcomes between management organisations will lead to wider sharing of data and improved financial efficiency.

Key actions will be programs to reduce the flow of excess nutrients, increase oxygen levels and support riverbank restoration.



Inset Crabbing in the Riverpark. *Photo – Matt Kleczkowski* **Above** Watersports are a great way to cool off during the balmy Perth summer. *Photo – Chelsea Bates.* **Below** Eastern ospreys live in the Riverpark. *Photo – Matt Kleczkowski*

Improving community engagement and enjoyment

The strategy promotes community appreciation, understanding and enjoyment of the Riverpark, which in turn fosters behaviour change to support positive environmental interactions. Increasing community connection, responsibility and stewardship will lead improvements in the Riverpark’s overall health.

Various programs inform the public of attractions, facilities and opportunities available in the Riverpark. Schools, groups and individuals have multiple opportunities to be involved in on-ground conservation activities including *River Guardians*, or by joining the *Dolphin Watch* and *Prawn Watch* citizen science programs.

The rivers are also an integral part of the Perth community’s sense of place. This can mean different things to different people, but fundamentally sense of place revolves around the importance of a natural area to simply exist and people knowing it is there, whether they use the area or not.

The Swan and Canning rivers are significant to Noongar people. Historical camp sites that were popular hunting and fishing areas along the rivers are registered sites of Noongar significance. The Riverpark also provides important links to early non-Indigenous history. The Swan River shaped the history of Western Australia and many heritage places line its banks.

The Riverpark supports a range of passive and active recreational activities. Facilities and infrastructure to support these activities need to be provided, including protecting and improving Riverpark aesthetics and enabling safe, easy access for the community.

Better management

The Riverpark is important to the economic wellbeing and lifestyle of the Perth community. Residential developments, businesses and tourism operators benefit from being located by the Riverpark, and this in turn provides considerable financial return to the Western Australian economy. The *River Protection Strategy* supports appropriate residential, commercial and tourism development.

Parks and Wildlife will be working closely with other organisations to support appropriate development. Continuous improvement of business and approval processes will provide more efficient outcomes for the organisation and better targeted results for the Riverpark.





Part two: agency roles

Numerous government agencies have a statutory role to manage specific aspects of the Riverpark. These include 21 local government authorities and 19 State Government organisations. An overview of the core responsibilities and the main objectives of these agencies are provided, along with the legislation they administer in relation to Riverpark management.

There are numerous other groups and organisations, such as regional and sub-regional natural resource management groups, community groups and professional organisations and associations that also provide a valuable contribution to Riverpark management.

It is acknowledged that the scope of all management programs undertaken by State Government agencies, local governments, natural resource management groups and other non-government organisations is broader than described in the strategy. The strategy describes only those key management actions that provide direct benefit to the Riverpark and facilitate cooperative efforts. Many of the described management actions also occur across the catchment, rather than solely in the Riverpark, and deliver a broad range of benefits.

Above Testing the waters at one of Parks and Wildlife's new oxygenations plants on the Canning River. *Photo – Stewart Allen*

Conservation Commission of Western Australia

The Conservation Commission of Western Australia is the vesting authority for the State's terrestrial reserves, including Pelican Point Nature Reserve, Matilda Bay Reserve, Canning River Regional Park and Walyunga National Park in the Riverpark. The Commission's key functions include developing policies to preserve natural environments of the State, providing facilities for the enjoyment of those environments by the community, promoting appreciation of plants and animals and natural environments, and providing advice to the Minister for Environment on these issues. The Commission also submits management plans for terrestrial parks and reserves to the Minister for Environment and develops guidelines for monitoring the implementation of management plans.

Legislation relevant to the Riverpark:

Conservation and Land Management Act 1984

Department of Aboriginal Affairs

The Department of Aboriginal Affairs engages with Aboriginal Western Australians and all levels of government to improve service delivery and facilitate developing policy and programs that deliver sustainable economic, environmental and social benefits to Aboriginal communities.

Aboriginal Affairs provides advice to the public and private sectors and the community about Aboriginal heritage management and maintains a Register of Aboriginal Sites. It also helps Aboriginal families and native title parties access information that may help them in reuniting families or demonstrating their connections to country. Aboriginal Affairs works with developers to ensure that Aboriginal heritage and engagement with Aboriginal people is built into development planning processes wherever required.

Legislation relevant to the Riverpark:

Aboriginal Heritage Act 1972 (WA)

Department of Agriculture and Food Western Australia

The Department of Agriculture and Food's primary function is to guide the sustainability and profitability of the State's agriculture, food and fibre sectors. The department plays an important role in encouraging appropriate land and irrigation, and fertiliser practices in the Swan Canning Catchment. The Department's Invasive Species Program manages biosecurity risks associated with serious noxious weeds in Western Australia, through declared plants policies and regulations and by providing research and technical advice on weed issues.

Legislation relevant to the Riverpark:

Agricultural Produce Commission Act 1988

Biosecurity and Agricultural Management Act 2007

Soil and Land Conservation Act 1945



Above The Swan and Canning Rivers are rich with Noongar history and contain significant Aboriginal sites. *Photo – Patria Lakasma*



Above Children playing on a Swan River jetty. *Photo – Gala Stella*



Above Parks and Wildlife officers check the Ellen Brook Wetland water levels prior to commissioning. *Photo – Jennifer Eliot*

Department of Environment Regulation

The Department of Environment Regulation (DER) administers Part V of the *Environmental Protection Act 1986* including regulating the clearing of native vegetation, emissions and discharges, prescribed premises through works approvals and licences, and responding to serious pollution incidents. DER also administers the *Contaminated Sites Act 2003* which regulates the identification, reporting, classification and management of contaminated sites, the *Waste Avoidance and Resource Recovery Act 2007* to reduce the generation of waste and divert waste from landfill for recycling and reuse, and provides technical advice to land use planning authorities to support the management of acid sulphate soils, noise, odour and separation distances. DER also administers the *Litter Act 1979* though enforcement is undertaken by the Keep Australia Beautiful Council and local government.

Legislation relevant to the Riverpark:

Environmental Protection Act 1986

Contaminated Sites Act 2003



Above Fishing is a popular activity on river foreshores, jetties and angling platforms. Photo – Megan Lewis

Department of Fisheries

The Department of Fisheries is responsible for the sustainable development of the State's fisheries. Its purpose is to conserve, sustainably develop, and share the use of the State's aquatic resources and their ecosystems for the benefit of present and future generations. Fisheries' authority applies across commercial and recreation fishing. Fisheries is involved with research, management, surveillance, enforcement and education across the State, including marine conservation areas established under the *Conservation and Land Management Act 1984*. Fisheries is also responsible for controlling invasive fish species.

Legislation relevant to the Riverpark:

Fish Resources Management Act 1994 (due to be repealed)

Aquatic Resources Management Act 2015 – being considered by Parliament

Department of Health

The Department of Health supports the management of the Riverpark for the health of the community by monitoring bacterial water quality and providing public health advice on issues potentially affecting water quality such as algal blooms, and contaminated sites, in conjunction with the departments of Environment Regulation, Parks and Wildlife, and Water. The Department of Health, in partnership with local government, monitors popular swimming locations throughout the Riverpark by collecting water samples and testing for faecal bacterial indicators and identifying faecal pollution sources, to ensure the water is safe for swimming and other whole-body contact activities. The Department also works on mosquito management in partnership with local government. The Department's activities in these areas are not covered under the *Health Act 1911*.

Legislation relevant to the Riverpark:

Health Act 1911



Above The Narrows Bridge. Photo – Robert Davis

Department of Mines and Petroleum

The Department of Mines and Petroleum (DMP) is the lead agency in attracting investment in resource exploitation, regulating extractive industries and managing an equitable and secure titles system for mining, petroleum and geothermal industries. A key role of the DMP is to promote best environmental management by delivering environmental regulatory and policy services. There are several exploration and mining tenements across land in the upper reaches of the Swan and Canning Rivers and geothermal resources underlying the Swan Coastal Plain.

Legislation relevant to the Riverpark:

Mining Act 1978

Department of Parks and Wildlife

The Department of Parks and Wildlife has primary responsibility for managing the State's national parks, marine parks, Swan Canning Riverpark, State forests and other reserves, for conserving and protecting native animals and plants, and for managing many aspects of the access to and use of the State's wildlife and natural areas.

Parks and Wildlife supports the Swan River Trust, the Marine Parks and Reserves Authority and the Conservation Commission of Western Australia.

Legislation relevant to the Riverpark:

Conservation and Land Management Act 1984

Wildlife Conservation Act 1950

Swan and Canning Rivers Management Act 2006

Department of Planning

The Department of Planning supports the functions of the Western Australian Planning Commission by providing professional and technical expertise, and administrative services and resources to support the Planning Commission and implement its decisions. The Department undertakes strategic planning for urban, rural and regional land use planning and land development matters. In particular, it supports integrated planning and coordinates the development and delivery of land supply; affordable housing and infrastructure to ensure well-planned and connected communities, particularly in the regional areas of the State.



The Department ensures that public and private land is used appropriately and consistently, including location of industry, commerce, residential services, community facilities and necessary infrastructure. The Department regulates the way in which communities can be built through developing and implementing policy and strategic plans on behalf of the WA Planning Commission. The Department also provides advice and approves subdivision and development applications on behalf of the WA Planning Commission.

Legislation relevant to the Riverpark:
Planning and Development Act 2005

Department of Sport and Recreation

The Department of Sport and Recreation's role is to enhance Western Australians' quality of life through their participation and achievement in sport and recreation. Sport and Recreation is committed to developing a comprehensive, strong, and diverse sporting and recreational system in Western Australia that is easily accessible, encourages maximum participation and develops talent.



Above The Department of Water and Parks and Wildlife conduct weekly water quality monitoring around the Riverpark.
Photo – Miranda Holker



Above Morning dew. *Photo – Matt Kleczkowski*



Above Parks and Wildlife works closely with local governments on foreshore projects. *Photo – Megan Lewis* **Right** Yachting is popular on the Riverpark. *Photo – Nicholas Woods*

Department of Transport

The Department of Transport's key focus is on operational transport functions and strategic transport planning and policy across the range of public and commercial systems that service Western Australia. This includes administering licences for jetties, ferries and mooring areas in the Riverpark, working as a hazard management agency to protect the Riverpark waterways from oil pollution, and responsibility for marine safety (in conjunction with the Australian Maritime Safety Authority), marine environment protection and coastal facilities. The Department also provides cycling facilities and services.

Legislation relevant to the Riverpark:

Jetties Act 1926

Marine and Harbours Act 1981

Port Authorities Act 1999

Western Australian Marine Act 1982

Shipping and Pilotage Act 1967

Pollution of Waters by Oil and Noxious Substances Act 1987



Department of Water

The Department of Water manages the State's groundwater and surface water resources and ensures there is an adequate supply to meet the needs of the community and the environment, now and in the future. The Department supports the implementation of the *State Planning Policy 2.10: Swan-Canning River System* (WAPC, 2006) and undertakes a range of activities that include measurement, allocation and regulation. The Department provides scientific advice and technical data to industry and government on the status of water, usage, conservation, technology and the viability of new source development. The Department is involved in measuring and allocating the State's water resources. It sets the rules for extracting water, managing waterways and for water service providers. It is the lead agency for providing expert scientific and technical advice and supporting management actions in rivers and estuaries outside the Swan Canning Riverpark. The Department also provides technical support to programs supporting the Swan and Canning Rivers based on annual funding provided by Parks and Wildlife.

Legislation relevant to the Riverpark:

Metropolitan Arterial Drainage Act 1982

Metropolitan Water Supply, Sewerage, and Drainage Act 1909

Rights in Water and Irrigation Act 1914

Water Services Act 2012

Water Agencies (Powers) Act 1984

Water Resources Legislation Amendment Act 2007

Water Corporations Act 1995

Waterways Conservation Act 1976

Environmental Protection Authority

The EPA has overarching responsibility for providing independent advice to Government on environmental matters, and develops statutory (Environmental Protection Policies) and non-statutory (State Environmental Protection Policies) policy. The Office of the Environment Protection Authority (OEPA) supports the Environmental Protection Authority (EPA) in conducting environmental impact assessments and developing policies to protect the environment. The OEPA also monitors compliance with Ministerial conditions related to approvals.

Legislation relevant to the Riverpark:

Environmental Protection Act 1986

Foreshore land managers

For the purposes of the strategy, the term 'foreshore land manager' refers to the group of organisations that have management responsibility for Riverpark foreshore land including local government authorities and five State Government agencies including Parks and Wildlife, Western Australian Planning Commission, Main Roads, State Land Service and Burswood Park Board.

Heritage Council

The Heritage Council is the State's advisory body on heritage matters. The Council provides for and encourages the conservation of places with cultural heritage significance to Western Australia. The Council also provides funding to help with conservation planning and conservation works on places that are significant examples of our cultural heritage.

Legislation relevant to the Riverpark:

Heritage of Western Australia Act 1990

Local government authorities

There are multiple local government authorities in the Development Control Area jointly responsible with Parks and Wildlife for managing sections of the Riverpark shoreline.

Local government responsibilities in the Riverpark typically include:

- work to provide protection and erosion control for river banks, including river walling and revegetation
- provide and maintain community facilities
- maintain public open spaces
- monitor for human health issues, such as noise pollution and water quality in swimming beaches
- manage commercial, residential and industrial premises
- management of drains and local water bodies



Above Colourful seahorses are just one of many creatures that delight scuba divers in the Swan River. *Photo – Matt Kleczkowski*



Above Sailing regatta in the Riverpark. *Photo – Matt Kleczkowski*
Right The Riverpark's beaches are a great resource for public recreation.
Photo – Megan Lewis



- mosquito management in partnership with the Department of Health
- assess planning and development approvals.

Legislation relevant to the Riverpark:

Local Government Act 1995

Planning and Development Act 2005

Health Act 1911

Main Roads Western Australia

Main Roads Western Australia is responsible for Western Australia's highways and main roads, including freeways and bridges. Main Roads WA is an important foreshore land manager in the Riverpark particularly supporting works abutting the Kwinana Freeway between the Narrows and Mt Henry bridges. Main Road's core objectives are to:

- ensure the road network safely links goods, people and places
- facilitate industrial, commercial and business development
- enable efficient access to other modes of transport.

Legislation relevant to the Riverpark:

Main Roads Act 1930

Marine Parks and Reserves Authority

The Marine Parks and Reserves Authority is the vesting authority for Western Australia's marine reserves, including the Swan Estuary Marine Park, which comprises three biologically important areas of the Swan River at Alfred Cove, Pelican Point and Milyu along the Como foreshore. The Authority's key functions include developing policies to preserve natural marine and estuarine environments of the State, providing facilities for the enjoyment of those environments by the community, promoting appreciation of marine and estuarine plants and animals, and natural environments and providing advice to the Minister for Environment on these issues. The Authority also submits management plans for marine parks and reserves to the Minister for Environment and develops guidelines for monitoring the implementation of management plans.

Legislation relevant to the Riverpark:

Conservation and Land Management Act 1984

Metropolitan Redevelopment Authority

The Metropolitan Redevelopment Authority undertakes redevelopment projects in suitable areas within the Perth metropolitan area. Key projects relevant to the Riverpark include the development of Elizabeth Quay, the Riverside Project Area, the East Perth Power Stations site and the Wungong Urban Water Project in Armadale.

Legislation relevant to the Riverpark:

Metropolitan Redevelopment Act 2011

Swan River Trust

The Swan River Trust is the vesting body for the Swan Canning Riverpark and an advisory body to the Minister for Environment that provides high level, independent advice on the protection of the river and related developments. The Trust prepares and submits the *River Protection Strategy* to the Minister for Environment for approval. The Trust is also responsible for reporting on the implementation of the strategy.

Legislation relevant to the Riverpark:

Swan and Canning Rivers Management Act 2006

Tourism Western Australia

Tourism Western Australia is the State Government agency responsible for promoting Western Australia as an extraordinary holiday and business event destination. The agency focuses on marketing the State; developing, attracting and promoting major sporting, arts, cultural and business events; and supporting the development of significant tourism infrastructure and projects. Tourism WA is a statutory authority under the Portfolio of the Minister for Tourism and is governed by a Board of Commissioners.

Legislation relevant to the Riverpark:

Western Australian Tourism Commission Act 1983

Right Family paddling fun. *Photo – Matt Kleczkowski* **Below** Picnicking at Matilda Bay. *Photo – Mark Thornley*



Water Corporation

The Water Corporation is the principal supplier of water, wastewater and drainage services to hundreds of thousands of homes, businesses and farms, as well as providing bulk water to farms for irrigation. The Water Corporation's core responsibility is to manage Western Australia's drinking water supplies to provide a safe, high-quality product that consistently meets Australian Drinking Water Guidelines and other consumer and regulatory standards.

The Water Corporation operates numerous wastewater treatment facilities throughout the Swan Canning Catchment. It also manages about 2250km of rural main drains and 828km of drains in the metropolitan area that divert water from more than 400,000ha of land and prevents approximately 260,000 properties from being flooded or waterlogged.

Local councils manage most of the smaller reticulation drains of Perth's urban drainage network, with some main drains managed by the Water Corporation.

Legislation relevant to the Riverpark:

Water Corporations Act 1995

Metropolitan Arterial Drainage Act 1982

Metropolitan Water Supply, Sewerage, and Drainage Act 1909

Water Agencies (Powers) Act 1984

Western Australian Planning Commission

The Western Australian Planning Commission is a statutory authority that coordinates planning for future land use, and is Western Australia's peak decision-making body for land use planning and development.

The Western Australian Planning Commission also has the power to coordinate the metropolitan development program, the country land development program and provide infrastructure for land development. The Planning Commission is responsible for developing and maintaining State policies, including the *State Planning Policy 2.10: Swan-Canning River System* that provides a policy framework to guide precinct development along the river and ensure that land use and development maintain and enhance the health, amenity and landscape values of the river. The Planning Commission also administers the Metropolitan Region Improvement Fund that can and is used to acquire land for public purposes, including foreshore reserves and parks, and *Bush Forever* sites. Land acquired through the fund may be vested with various management authorities depending on the purposes for which the land was acquired. The Department of Planning supports all Western Australian Planning Commission functions.

Legislation relevant to the Riverpark:

Planning and Development Act 2005

Below Wakeboarding has developed a large following throughout the rivers' designated waterskiing areas. *Photo – Luke Baker*





Part three: strategic management program

State agencies, local governments, and non-government organisations undertake a broad range of activities to support the Riverpark. This includes natural resource management groups, industry associations, sporting groups, and others who contribute in a support capacity or as foreshore land managers.

The actions in this management program are the responsibility of State Government agencies with statutory roles in the management of the Riverpark. For some issues, more than one lead organisation is listed. This reflects the different statutory management responsibilities of the organisations involved with managing the Riverpark. Priority actions are highlighted **P**.

The objectives, strategies and actions to be undertaken are set out in the following tables grouped under the headings:

- Better coordination
- A healthy river ecosystem
- Improving community engagement and enjoyment
- Better management.

Above Riverpark bliss at the end of a busy day. *Photo – Matt Kleczkowski*

Better coordination

Objective 1: Increase management coordination and collaboration between organisations with Riverpark responsibilities			
Strategy	Action	Responsibility	
		Lead	Support
1 Implement and review the strategy	1.1 Establish a RPS Advisory Group P	SRT, Parks and Wildlife	All partners
	1.2 Establish collaborative agreements between management organisations P	SRT	All partners
	1.3 Biennial and five-yearly reports to be delivered to the Minister for Environment, partners and the community P	SRT, Parks and Wildlife	All partners

A healthy river ecosystem

Objective 2: Improve water quality and manage environmental flow			
Strategy	Action	Responsibility	
		Lead	Support
2 Reduce nutrients, organic material and sediment entering the Swan and Canning rivers	2.1 Identify the levels and sources of nutrients, organic material and sediment entering the Swan and Canning rivers P	Parks and Wildlife, Water	Local governments, Water Corporation, Agriculture and Food, Metropolitan Redevelopment Authority
	2.2 Develop and implement Swan Canning and local Water Quality Improvement Plans to achieve nutrient load reduction targets P	Parks and Wildlife	Local governments, Water, Agriculture and Food, Metropolitan Redevelopment Authority
	2.3 Prescribe and apply intervention techniques to either trap nutrients, organic material and sediments in drains and tributaries, or to achieve source control of these contaminants	Local governments	Water, Water Corporation, Agriculture and Food, Main Roads, Metropolitan Redevelopment Authority
	2.4 Improve management of fertiliser use to reduce nutrient loss from urban and rural land in the Swan Canning catchment P	Parks and Wildlife	Agriculture and Food, Environment Regulation, Water, local governments
	2.5 Implement actions arising from the urban water drainage partnerships addressing strategic issues in the Swan Canning catchment	Parks and Wildlife	Local governments, Water Corporation, Water
	2.6 Improve planning schemes and policies to achieve a net decrease in nutrient inputs from future land development	Local governments	Parks and Wildlife, Water, WA Planning Commission, Agriculture and Food, Water Corporation, Metropolitan Redevelopment Authority

Objective 2: Improve water quality and manage environmental flow

Strategy	Action	Responsibility	
		Lead	Support
3 Reduce non-nutrient contaminants entering the Swan and Canning rivers	3.1 Regulate and manage pollution from contaminated sites, prescribed premises and other commercial activities with the potential to cause pollution P	Environment Regulation	Water, Parks and Wildlife
	3.2 Maintain inventory database of confirmed contaminated sites in the catchment, monitor appropriate remediation for sites and use the clean-up notice provisions of the <i>Contaminated Sites Act 2003</i> as required	Environment Regulation	Parks and Wildlife
	3.3 Maintain an inventory of sources of pollution incidents	Environment Regulation	Parks and Wildlife, Local governments
	3.4 Undertake action to address identified sources of pollution	Parks and Wildlife	Local governments, Environment Regulation, Water, Metropolitan Redevelopment Authority
4 Undertake intervention works and/or programs to improve or maintain water quality	4.1 Increase dissolved oxygen levels in the Swan and Canning rivers where required P	Parks and Wildlife, Water	
	4.2 Investigate approaches to moderate and reduce the prevalence of algal blooms P	Parks and Wildlife, Water	
	4.3 Adapt the use of oxygenation and other innovative technologies to manage future water quality issues as climate change science is updated	Parks and Wildlife, Water	
5 Maintain or improve environmental flows to rivers	5.1 Investigate, plan and manage environmental flows to the Swan and Canning rivers	Parks and Wildlife, Water	Water Corporation



Above Kitesurfing is one of the Riverpark’s fastest growing water sports. *Photo – Matt Kleczkowski*

Objective 3: Ensure management decisions are based on appropriate knowledge			
Strategy	Action	Responsibility	
		Lead	Support
6 Coordinate a water quality and ecological health monitoring and evaluation program	6.1 Undertake river and catchment-based water quality monitoring program to measure compliance against management targets P	Parks and Wildlife, Water	Local governments
	6.2 Establish a program to monitor non-nutrient contaminants entering, and in, the river system P	Parks and Wildlife	Health, Water, local governments, Main Roads
	6.3 Monitor and report on the extent and severity of algal blooms and other events affecting water quality	Parks and Wildlife, Water	Health
	6.4 Develop suite of ecological health indicators to support reporting	Parks and Wildlife, Water	

Objective 4: Protect, manage and enhance biodiversity

Strategy	Action	Responsibility	
		Lead	Support
7 Manage fish communities to maintain diversity and abundance	7.1 Manage aquatic resources in the Swan Canning River system using a risk-based management framework P	Fisheries	
	7.2 Protect and monitor the stock status of priority species in the Swan Canning river system according to risk P	Fisheries	
	7.3 Investigate fish re-stocking where appropriate	Fisheries	
	7.4 Involve recreational fishers and commercial tour operators with monitoring fish stocks	Fisheries	
	7.5 Promote responsible fishing behaviour (e.g. abiding by catch limits, protecting shoreline vegetation, using fishing platforms provided and using rubbish bins for unwanted tackle, bait packaging and other refuse)	Fisheries	Parks and Wildlife
8 Protect and rehabilitate foreshore	8.1 Provide protection for riparian and/or aquatic vegetation P	Parks and Wildlife	Local governments, Agriculture and Food
	8.2 Provide guidance on best management practices for shore stabilisation P	Parks and Wildlife	Local governments
9 Reduce the adverse impacts of introduced plants and animals in the Riverpark	9.1 Manage riparian and/or aquatic weeds	Foreshore land managers	Parks and Wildlife, Agriculture and Food
	9.2 Coordinate the management of declared plant species	Agriculture and Food	Local governments, Parks and Wildlife
	9.3 Where resources allow, investigate and map the extent of occurrence of feral fish and invasive species, and mitigate impacts by directing efforts into the early control of invasive species	Fisheries	Parks and Wildlife

Objective 4: Protect, manage and enhance biodiversity

Strategy	Action	Responsibility	
		Lead	Support
10 Maintain environmental values of the Riverpark with the community	10.1 Administer legislation to manage the Riverpark including the use of vessels and facilitate safe community use P	Parks and Wildlife	Transport, Fisheries, local governments, Environment Regulation, WA Police
	10.2 Maintain an incident response capability to ensure public safety and environment protection	Parks and Wildlife	Fisheries, Transport, Environment Regulation, Water
11 Improve understanding of Riverpark ecosystem through research	11.1 Investigate threats to ecosystem integrity and their processes	Parks and Wildlife	Fisheries, Water
	11.2 Improve understanding of the biophysical environment of the Riverpark	Parks and Wildlife	Fisheries, Water

Improving community engagement and enjoyment

Objective 5: Maintain and improve sense of place with the Riverpark

Strategy	Action	Responsibility	
		Lead	Support
12 Increase community understanding and engagement with natural and cultural heritage	12.1 Assess, recognise and protect sites with a high level of cultural heritage significance P	Aboriginal Affairs, Parks and Wildlife, Heritage Council	Local governments, Metropolitan Redevelopment Authority
	12.2 Develop interpretive and educational opportunities incorporating the cultural resources of the area	Parks and Wildlife	Local governments, Aboriginal Affairs, Heritage Council, Metropolitan Redevelopment Authority
	12.3 Provide publicly accessible information and maps detailing important cultural and natural sites and structures in the Riverpark	Parks and Wildlife	Local governments, Aboriginal Affairs, Heritage Council, Metropolitan Redevelopment Authority
	12.4 Work with relevant Noongar groups to manage the Riverpark P	Parks and Wildlife	Local governments, Aboriginal Affairs

Objective 6: Provide access and a safe environment for Riverpark visitors

Strategy	Action	Responsibility	
		Lead	Support
13 Maintain and improve safe access for Riverpark visitors	13.1 Promote public use and enjoyment of the Riverpark P	Parks and Wildlife	
	13.2 Maintain and improve the level of safe public access to and along foreshore areas in the Riverpark P	Parks and Wildlife, Planning	Foreshore land managers
	13.3 Improve access to public/ courtesy moorings and short-stay pens	Parks and Wildlife	Transport
	13.4 Implement a rational management system for dinghy storage on foreshore areas	Local governments	Parks and Wildlife
	13.5 Facilitate safe use of vessels on waterways – maintain navigation aids in the Swan and Canning rivers to facilitate safe passage through the navigation channels P	Transport	Parks and Wildlife, Water Police
	13.6 Coordinate primary contact water quality monitoring at popular swimming locations and report conditions to the community P	Health	Local governments
	13.7 Develop a Shared Asset Management System to link funding/assets/damage to enable forecasting and prioritising of foreshore improvement works	Parks and Wildlife	Foreshore land managers
	13.8 Implement works to stabilise the riverbank where valuable infrastructure or recreational amenity is threatened by erosion P	Parks and Wildlife	Foreshore land managers
14 Manage public use requirements to minimise conflicts	14.1 Implement Aquatic Use Review and Management Framework for the Riverpark P	Parks and Wildlife, Transport	Sport and Recreation, local governments, Tourism, Planning



Above An extensive network of cycling and pedestrian paths is available around the rivers. *Photo – Sue Harper*

Objective 6: Provide access and a safe environment for Riverpark visitors			
Strategy	Action	Responsibility	
		Lead	Support
15 Enhance the standard of Riverpark facilities	15.1 Improve quality of existing public facilities and infrastructure	Transport, Parks and Wildlife, local governments	Sport and Recreation, Tourism
	15.2 Establish a Swan Canning Riverpark Trails project including walking, cycling and kayaking trails P	Parks and Wildlife	Transport, local governments, Sport and Recreation, Tourism
	15.3 Improve walking and cycle ways including the implementation of the Recreational Shared Path Network along the rivers as set out in the Western Australian Bicycle Network Plan	Transport, Metropolitan Redevelopment Authority,	Tourism, local governments
16 Promote appropriate tourism activities	16.1 Support community events (e.g. Skyworks, Autumn River Festival and Blessing of the Rivers) and tourism opportunities on the river foreshore P	Local governments	Tourism, Parks and Wildlife



Above Swim Thru 2015 competitors enter the water at Matilda Bay. *Photo – Mark Thornley*

Objective 7: Improve public knowledge and understanding of the Riverpark			
Strategy	Action	Responsibility	
		Lead	Support
17 Facilitate opportunities for engagement with the Riverpark	17.1 Promote opportunities for community groups and individuals to be involved in on-ground conservation activities P	Parks and Wildlife	Local governments, Fisheries
	17.2 Facilitate opportunities for local community groups, agencies, educational institutions and volunteers to be involved in research, behavioural change and sustainable living programs/ projects	Parks and Wildlife	Local governments, Heritage Council, Fisheries
	17.3 Support local environmental groups to source additional funding P	Sport and Recreation	Agriculture and Food, local governments
	17.4 Promote active and healthy lifestyles that encourage the use of the Riverpark	Parks and Wildlife	Local governments
	17.5 Promote Riverpark identity through the media and major public and corporate events occurring in the Riverpark	Parks and Wildlife	Foreshore land managers

Better management

Objective 8: Improve the way we do business			
Strategy	Action	Responsibility	
		Lead	Support
18 Support appropriate development and businesses through planning and policy framework	18.1 Identify nodes for developing appropriate commercial opportunities in the Riverpark P	Parks and Wildlife	Planning, Metropolitan Redevelopment Authority, local governments
	18.2 Ensure all commercial operators in the Riverpark meet high standards through licensing P	Parks and Wildlife	Transport
	18.3 Ensure River Reserve leases are managed in line with policy to best practice standards P	Parks and Wildlife	Transport
19 Engage effectively in the statutory decision-making process	19.1 Provide clear guidance consistent with SPP 2.10 to developers of land adjacent to the foreshore P	WA Planning Commission, Parks and Wildlife	Local governments, Heritage Council, Swan River Trust
	19.2 Apply water sensitive urban design principles and other existing policies and guidelines	Local governments, Metropolitan Redevelopment Authority, WA Planning Commission	Planning, Parks and Wildlife, Water
	19.3 Continue to collaborate on the development of precinct plans to support riverside development	Parks and Wildlife	WA Planning Commission, local governments
20 Continually improve the statutory approval process	20.1 Review regulations and legislation to improve efficiency of the statutory assessment process P	Parks and Wildlife	
	20.2 Support implementation of streamlined processes under the South West Native Title Agreement to obtain <i>Aboriginal Heritage Act 1972</i> approvals for works in the Riverpark	Parks and Wildlife, Aboriginal Affairs	Local governments
	20.3 Monitor and enforce compliance with development approvals	Parks and Wildlife, local governments, Metropolitan Redevelopment Authority	Environment Regulation, WA Planning Commission

Objective 8: Improve the way we do business

Strategy	Action	Responsibility	
		Lead	Support
21 Identify and attract new sources of investment to achieve greater management outcomes	21.1 Develop mechanisms for attracting private sector financial support for conservation and community projects through corporate partnering and establishing a Swan Canning Rivers Foundation	Parks and Wildlife	
	21.2 Investigate opportunities to diversify and increase investment in the Riverpark	Parks and Wildlife	

Below Our rivers offer many tranquil spaces for relaxation and reflection. *Photo - Megan Lewis*



Measuring success

The strategy has been developed with the support and commitment of critical river management partners. All supporting partners will report annually to Swan River Trust on the progress made on agreed projects and actions contained in the strategy.

Parks and Wildlife will support the Trust in developing reports and work with partner organisations to gather necessary data. The *River Protection Strategy* Advisory Group will meet at least annually to review the performance of the RPS and identify any critical issues requiring coordinated management responses. This information will be included in the biennial reports to the Minister for Environment, partners and the community, and published in annual reports.

These reports will measure the strategy's success using the following performance indicators:

- 1 All priority actions listed in the strategy are undertaken within five years
- 2 75 per cent of monitored ecosystem health data meeting respective targets required for a healthy functioning ecosystem
- 3 The wider Perth community is actively involved with Riverpark management and participation rates are increasing
- 4 The average level of visitor satisfaction with their visit to the Riverpark facilities is 85 per cent or higher.

The strategy will be a rolling 10-year plan to be reviewed by the Swan River Trust with support from the RPS Advisory Group every five years. A recommendation from the Trust for the review or continuation without change of the strategy will be provided to the Minister for Environment for approval.

Below Spectacular vista of a sailing regatta on the Riverpark. *Photo – Tourism Western Australia*





Above Riverpark life. *Photo – Reanne Archer*



Above Perth's strong seabreezes attract windsurfers from around the world. *Photo - Matt Kleczkowski*

