# Ashfield Flats Master Plan Part 1

Prepared for the Department of Biodiversity, Conservation and Attractions

by Urbaqua, MP Rogers & Associates, PGV Environmental,

Shape Urban and South West Kinships.

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This document has been prepared by Urbaqua together with PGV Environmental, MP Rogers & Associates, South West Kinships and Shape Urban.



Department of **Biodiversity**, **Conservation and Attractions** Department of **Water and Environmental Regulation** 







We acknowledge the Whadjuk and Nyungah people as the Traditional Owners of the lands, waters and skies of the Country of Boorloo.

We acknowledge and respect their enduring culture, their custodianship of Country and continuing connections, their contribution to the life of the Perth, Swan Coastal Plain area, and Elders, past and present.

#### PART 1: MASTER PLAN



#### CONTENTS

1	Introductio	2
	1.1 Visio	2
	1.2 Obje	ectives2
	1.3 Mas	ter Plan area2
	1.4 Mas	ter Plan inputs4
2	Master Pla Objective Objective Objective Objective	an
3	Implemen 3.1 Fund 3.2 Doc	tation
4	Reference	s

#### Figures

Figure 1: Ashfield Flats Master Plan area	3
Figure 2: Most valued place as voted in the community survey	6
Figure 3: Environmental values	9
Figure 4: Master Plan	11

#### Tables

Table 1: Preliminary recommendations for timing of implementation ....20



#### 1 INTRODUCTION

The Ashfield Flats Master Plan has been prepared for the Department of Biodiversity, Conservation and Attractions (DBCA), together with the Department of Planning, Lands and Heritage (DPLH), the Department of Water and Environmental Regulation (DWER), Water Corporation and the Town of Bassendean to provide guidance for the management of Ashfield Flats in Bassendean (Figure 1).

The Master Plan aims to achieve the objectives and principles of the *Swan and Canning Rivers Management Act 2006*, relevant Swan Canning Planning and Development Policies, Plans and Procedures, the draft Lower Swan Locality Plan, draft State Planning Policy 2.9: Planning for Water, and the Swan Canning River Protection Strategy.

Part 1 of the Master Plan outlines strategies and processes to be implemented over the next 20 or so years, to provide a foundation for the longer term management of ecological systems, community, recreational and cultural uses, infrastructural requirements, and other issues, constraints and opportunities including in response to climate change. Part 2 provides a summary of the key considerations that informed development of the Master Plan which include policy context, ownership and management, environmental conditions and social context, as well as considerations for future approvals and implementation.

#### 1.1 Vision

Ashfield Flats is the largest remaining river flat in the Perth metropolitan area, and is the home to significant and threatened flora, fauna and natural processes.

These qualities are protected and valued, creating a space where the community connects to nature and each other.

#### 1.2 Objectives

The objectives of the Master Plan are to:

- Allow for the protection and adaptation of unique environmental qualities.
- Connect people with nature and support community wellbeing.
- Provide opportunities for knowledge sharing.
- Deliver sustainable and coordinated management.

#### 1.3 Master Plan area

Ashfield Flats (the study area) is the largest remaining river flat in the Perth Metropolitan area in the suburbs of Ashfield and Bassendean, covering approximately 64 hectares. It lies on the banks of the Swan River (Derbarl Yerrigan), 33km upriver from the coast as shown in Figure 1.

The Ashfield Flats Master Plan area is roughly bound by West Road, Reid Street, Hardy Road and the Swan River (Derbarl Yerrigan). On the north-west boundary is a steep rise to housing and parkland.



Figure 1: Ashfield Flats Master Plan area

The area is predominantly open wetland with some mature trees and shrubs. The land is divided by a drainage channel which crosses the land in a direction approximately north-east to south-west. During winter the land is inundated with water creating a rare wetland in the metropolitan area. The reserve is accessible to the public for passive recreation (Heritage Council of WA, 2019).

The Ashfield Flats Master Plan area contains extensive areas of public open space including the Sandy Beach Reserve and areas of remnant vegetation. It contains a range of built and natural features, including a jetty, boardwalk, lookout, large playground, dog beach, a Bush Forever site and the largest remaining occurrence of a Subtropical and Temperate Coastal Saltmarsh community in the Swan and Canning River Estuary.

The site falls under the management of three bodies — the majority is vested with the Western Australian Planning Commission (WAPC)(and managed by DPLH); the two main drains found within the site are managed by the Water Corporation; and the remainder is vested with the Town of Bassendean.

#### 1.4 Master Plan inputs

A collaborative process was employed to prepare the Master Plan, founded on a strong partnership approach between DBCA, DPLH, DWER, Water Corporation and the Town of Bassendean. It also included active engagement with the community, including Whadjuk and Nyungah representatives, to consider and discuss current and future cultural, social and recreational values and uses, and obtain comment on the draft Master Plan during public advertising.

The engagement process was underpinned by a thorough analysis of policy and technical inputs together with the environmental, social, economic and cultural context, described in Part 2 of this Master Plan. This included the analysis and consideration of key technical reports, site visits and expert opinion. Notable references include:

- Ashfield Flats Hydrological Study (DBCA, 2021)
- Ashfield Flats Flora and Vegetation Report (DBCA, 2019).
- Ashfield Flats Master Plan: Context Analysis Report (Urbaqua, 2022)
- Ashfield Flats Master Plan: Engagement Outcomes Report (Shape Urban, 2023)

#### 1.4.1 Agency collaboration

Development of the Master Plan was guided by input from a Project Steering Group comprising representatives of DBCA, DPLH, DWER, Water Corporation and the Town of Bassendean. This included providing feedback on the opportunities and constraints in the Context Analysis, input into the community engagement program and attendance at the community BBQ events, and attendance at a Cultural Immersion workshop led by Sharon Wood-Kenney.



The recommendations of this Master Plan were generated from a Key Stakeholder Collaborative workshop in August 2023, and revised in response to agency and community input and comments on the draft Master Plan.

The agencies are committed to maintaining a collaborative arrangement to ensure implementation of the Master Plan.

#### 1.4.2 Aboriginal engagement

A key intention of the Master Plan was that it was informed by meaningful consultation with Traditional Custodians to understand the importance and context of the site within Whadjuk and Nyungah country with an aim to recognise this in a culturally sensitive manner. To achieve this outcome, two Aboriginal Cultural values workshops were held in December 2022 and July 2023 to seek to better understand the local values. Additional conversations were held with individual Whadjuk and Nyungah Aboriginal people to further this understanding.

The engagement did not identify any known Aboriginal artifacts or mythological stories directly associated with Ashfield Flats, although its location on the edge of the Derbarl Yerrigan suggests that the story of the River Serpent, the Warkle is likely to be important. It is also likely that the area has been used for fishing and gathering reeds for weaving and accordingly the lack of identification of artifacts does not mean that none exist. It is also possible that the area contained bush medicine, but it is not clear whether any remains within the landscape. The Whadjuk and Nyungah representatives recognised the potential conflicts between uncontrolled access and particularly dogs off-lead running through the flats and generally supported the idea of fencing the important areas of vegetation and areas that flood, with appropriate signage to tell people why. There was also a desire for the sharing of Whadjuk and Nyungah knowledge more broadly with a focus on the Swan River (Derbarl Yerrigan), through a range of opportunities including signage.

There was support to investigate the opportunity for joint management of the area, particularly to allow Aboriginal land management practices to be passed onto younger generations. This could include cultural burning provided this was supported by the Whadjuk and Nyungah people and the Department of Fire and Emergency Services.

The draft Master Plan was reviewed by the Whadjuk and Nyungah representatives who provided their support for the recommendations.



#### 1.4.3 Community engagement

In order for the Master Plan to deliver on the strategic objectives of the project, it was essential that meaningful input was provided by the community and key stakeholders through an active program of engagement. This ensured the consideration of community aspirations together with the critical site context and knowledge to inform preparation of concepts and strategies for the long term management of Ashfield Flats.

Comment was also sought on the draft Master Plan, which was advertised for public comment from 10 November to 8 December 2023.

The Bassendean and wider community were provided with a number of opportunities to share thoughts about their use, values and future of Ashfield Flats. These included:

- Two (2) community breakfast BBQs on 11 February and 11 November 2023 at Ashfield Flats, attended by over 60 community members.
- Two (2) online surveys: from 30 January 28 February with 131 responses and from 10 November to 8 December 2023 with 53 responses.

- Online interactive map open from 30 January – 28 February with 73 comments.
- Individual stakeholder meetings with the Bassendean Preservation Group, SUPtonic and the Ashfield Community Action Network.
- Two Aboriginal Cultural values workshops in December 2022 and July 2023 and individual discussions with Whadjuk and Nyungah representatives.
- Eight (8) drop-in sessions at the Bassendean Library and ten (10) at Ashfield Flats attended by 17 and 51 people respectively.
- Review of the draft Master Plan by Whadjuk and Nyungah representatives, as well as the broader community through public advertising.

The engagement process and outcomes are contained in the Engagement Outcomes Report (Shape Urban, 2023). Key outcomes include:

• Recognition across the community that this area is unique and highly valued for the role it plays both environmentally and as a community space (Figure 2).

#### 100 responses 80 Number of survey 60 40 20 Open Walking Tho Open Sandy Swan Lookout grassland 1 grassland Beach River loop trail 2 Reserve foreshore (walking or cycling)

### Figure 2: Most valued places as voted in the first community survey.

• The community desires access to Ashfield Flats and the adjacent river but also supports protection of the important environmental asset and the wildlife it supports, including fencing the wetland.

- The community enjoys walking along and around the Ashfield Flats – expressed as a desire to maintain footpaths close to the river as well as a circuit around the Flats. The community supported maintaining access to the west and construction of boardwalks in areas most affected by flooding.
- Opportunities to view the river and the wetland environment are important, so the natural values of Ashfield Flats can be appreciated.
- Fencing to stablise the foreshore was supported if undertaken in pockets, was visually permeable and able to be removed when the vegetation was sufficiently established.
- The current level of amenities is sufficient for the types of activities preferred at Ashfield Flats but additional educational signage and shady spots to pause were supported.
- There were mixed views amongst the community regarding dog access to the Ashfield Flats, particularly in relation to on/off-lead areas, but there was general support for the creation of fenced areas.
- The community agreed with the recommendation to focus beach access close to the Sandy Beach area.



#### 1.4.4 Environmental values

The Ashfield Flats Master Plan area contains recognised significant environmental values. Native vegetation occurs on about 22.5ha of the 60ha site. The other 37.5ha consists of informal parkland with scattered trees and grassland.

The river edge section forms part of the Perth Regional Ecological linkages (Perth Biodiversity Project 2003) and most of the site is classified as an Environmentally Sensitive Area (ESA) under the Environmental Protection (Environmentally Sensitive Areas) Notice 55 (2005), largely due to the presence of the Swan River (Derbarl Yerrigan) and a Threatened Ecological Community (TEC).

The majority of the native vegetation on the site contains the vegetation types considered by DBCA to be the Subtropical and Temperate Coastal Saltmarsh Community. This Community is listed as Priority Ecological Community (P3) under the *Biodiversity Conservation Act 2016* and a Threatened Ecological Community (TEC) (Vulnerable) under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. The vegetation communities provide habitat for a wide variety of native fauna, including large numbers of water birds. The site is also listed as a potential Carnaby's Black Cockatoo feeding area and a possible breeding area (DPAW, 2013).

Additional information on the environmental conditions is provided in Part 2 of this Master Plan, with key environmental values shown in Figure 3.





Figure 3: Environmental values

#### 2 MASTER PLAN

The following recommendations seek to address the key environmental and social challenges facing the site to achieve the Vision for Ashfield Flats. They seek to achieve the Master Plan's objectives which are to:

- Allow for the protection and adaptation of unique environmental qualities.
- Connect people with nature and support community wellbeing.
- Provide opportunities for knowledge sharing.
- Deliver sustainable & coordinated management.

Some of the recommended management actions are shown on the Master Plan in Figure 4.



#### Ashfield Flats Master Plan



Figure 4: Master Plan

#### Objective 1: Allow for the protection and adaptation of unique environmental qualities.

#### **Current conditions**

The unique environmental values of Ashfield Flats are under threat from the impacts of climate change, altering hydrology from the drainage system and sea level rise, access by off-lead dogs and weed invasion. The freshening of the salt marsh is resulting in a change in species composition within the TEC. However, an opportunity exists to allow the vegetation community to migrate eastward onto higher ground, where the species are being observed to establish. This will also provide continued habitat for native wildlife.

Historical aerial photography indicates that erosion of much of the riverbank at Ashfield Flats has occurred since 2003. Accordingly, the foreshore is likely to be subject to ongoing erosive pressures from waves and river currents which will be exacerbated from the effects of climate change and continued or increased boat traffic on the Swan River (Derbarl Yerrigan). The small, fenced vegetated pocket of vegetation recently established along the eastern foreshore has assisted with mitigating some of the erosive pressures and so will be replicated in sections where necessary. Additional works are also likely to occur within the Sandy Beach area, as this is recognised as providing many recreational functions including access to the water.

The stormwater drainage system is known to contribute contaminants and fresh water into the salt marsh wetland (DBCA, 2021). The creation of living streams or larger areas of vegetation through which the stormwater can pass upstream of the TEC may result in improved water quality and reduced velocities for smaller rainfall events, minimising damage to the existing drains. Any works will need to consider the potential to mobilise acid sulfate soils and/or monosulphidic black oozes, which should be avoided.



#### **Recommendations**

#### Strategy 1.1: Protect significant vegetation and wildlife habitat.

- 1.1.1 Protect the TEC from uncontrolled access through fencing including areas to the east of the TEC.
- 1.1.2 Monitor and record the eastward movement of the Coastal Saltmarsh vegetation complexes.
- 1.1.3 Monitor changes in hydrology affecting the TEC and undertake remedial works if possible to reduce this change.
- 1.1.4 Undertake appropriate weed management including removal of East Coast casuarina species. \*

#### Strategy 1.2: Address erosion risks along the foreshore.

- 1.2.1 Implement the Town of Bassendean Sandy Beach Reserve foreshore works.
- 1.2.2 Undertake staged works to stabilise the foreshore through bioengineering, and pockets of fenced revegetation at least 30m wide, as indicated on the Master Plan. Fencing to be visually permeable and able to be removed when vegetation is sufficiently established. Vegetation selection to favour ground covers, sedges and tall trees to facilitate views to the river from the foreshore paths.
- 1.2.3 Acknowledge the failing condition of the revetment west of Kitchener drain through signage that indicates the area will increasingly be subject to flooding and encourage access to Hardy Rd along the Kitchener St drain.
- 1.2.4 Monitor sea level rise and implement responsive management actions based on these experiences where required to protect agreed social or environmental values.

#### Strategy 1.3: Improve water quality associated with stormwater drainage.

- 1.3.1 Investigate feasibility and develop a concept to modify the western bank of the Chapman St drain north of the TEC (in Hamilton St parkland, Chapman North), minimising the impact on existing trees, to reduce the steepness of the bank and revegetate with appropriate local native species to provide additional area for water quality treatment and reduce flow velocities.
- 1.3.2 Explore the opportunity to construct an additional "low flow" pathway through the parkland into the existing wetland area just south of the Kitchener St drain to provide an opportunity for water quality treatment of the frequent events while the larger (and cleaner) events can bypass and continue to discharge into the Swan River (Derbarl Yerrigan).
- 1.3.3 Ensure any drainage upgrade works are undertaken in collaboration with DBCA and consistent with the intent of this Master Plan.



\* Action already commenced

#### Objective 2: Connect people with nature and support community wellbeing.

#### **Current conditions**

Sea level rise will ultimately lead to increased water levels in the Swan River (Derbarl Yerrigan), increased erosive pressures on the Ashfield Flats foreshore and increased flooding of Ashfield Flats. The current path along the foreshore is not accessible at all times of the year, with large parts of the path along the western foreshore between the boardwalk and the Roy Hookway platform inaccessible for most of winter. The current low points in the path are near the Roy Hookway fishing platform, just west of the boardwalk, just east of the boardwalk and west of the bend in the path where it heads north/south (in the central part of the Master Plan area).

There is a desire by the community for a path network that is trafficable at most times of the year. While this can be established in many parts of the Master Plan area, there is some difficulty associated with providing an improved route from the Kitchener Drain outlet to the Roy Hookway Platform. This, combined with consideration of the steepness and ability to upgrade the stairs from Ashfield Parade will require further discussion. Amenity for pedestrians will be provided along the path through planting of shade trees and seating where appropriate.

The importance of the Master Plan area for recreation is noted, however, there is some benefit in prioritising potentially competing uses. Due to the significant and sensitive environmental values associated with the salt marsh wetland and TEC, environmental conservation is to be prioritised for the western portion of the Master Plan area, while the more community-based recreational needs will be provided for in the eastern portion. Accordingly, beach access between the Kitchener St and Chapman St drain outlets will not be maintained into the

future, as this area is likely to be first affected by sea level rise and is important for the hydrological processes affecting the TEC. These areas will remain as unmodified foreshore. Beach access will be maintained in a number of locations along the eastern foreshore (see Figure 3).

The ability for the Master Plan area to connect people with nature is recognised and will be reflected in the establishment of places for people to pause and view the wetland and river. This includes from The Lookout, from the boardwalk sections and at places along the foreshore path.



#### Recommendations

#### Strategy 2.1: Provide appropriate access for recreational needs.

- 2.1.1 Identify and establish a future pedestrian path located along the foreshore at approximately 0.8m AHD to provide access in most weather conditions.
- 2.1.2 Extend the boardwalk to allow for tidal movements into and out of the wetland while providing an accessible path in most weather conditions.
- 2.1.3 Provide a new path connection from the Sandy Beach jetty to the car park and create an informal track through the southern fenced area at Sandy Beach to encourage better connection between the jetty and carpark.
- 2.1.4 Consider additional signage or improved access at an appropriate grade along the Kitchener Drain to Hardy Road to facilitate a better connection for cyclists to the surrounding road network.
- 2.1.5 Explore solutions for low intervention access to the Roy Hookway Platform from the current westernmost boardwalk extent when seasonal access is no longer viable.
- 2.1.6 Consider need for access by Aboriginal people for bush tucker or traditional medicines.
- 2.1.7 Consider the need for universal access as part of any upgrade.
- 2.1.8 Plan to remove the existing path material prior to failure, so it does not contribute to erosion or become a safety hazard. Information on path condition to be provided to the community through the Town's annual report. Revegetate the area.

\* Action already commenced

#### Strategy 2.2: Improve park amenity.

- 2.2.1 Plant canopy trees on both sides of the new path to provide shade and install appropriate seating. Choose tree species that provide ability for views through the foliage on maturity (but still provide canopy coverage). \*
- 2.2.2 Expand urban forest coverage within Hamilton Reserve with a focus to improve local biodiversity and complement the parkland setting, while minimising bushfire risk.
- 2.2.3 Formalise the circuit around Ashfield Flats through improved wayfinding including signage that indicates some of the paths may not be useable in certain weather conditions.
- 2.2.4 Explore the opportunity for a bird hide near Kitchener North.
- 2.2.5 Construct a pedestrian bridge over the Chapman St drain that also provides a place to view the wetland habitats. Consider widening the boardwalk in a few locations and the inclusion of seating.
- 2.2.6 Allow overflow parking at Sandy Beach adjacent to the formal car park (on DPLH-managed lands) in an area unaffected by future inundation.

#### Strategy 2.3: Provide opportunities to connect with nature.

- 2.3.1 Retain access to the water in defined areas where a sandy foreshore already exists (see Master Plan).\*
- 2.3.2 Retain views to the river and wetland in agreed locations through active management of vegetation and/or establishment of viewing platforms/boardwalks.
- 2.3.3 Remove some trees at the base of the Lookout to assist with retaining the views from the public realm across the wetland. Any vegetation removal should not impact the stability of the bank. \*

#### Objective 3: Provide opportunities for knowledge sharing.

#### **Current conditions**

There is generally limited awareness within the community of the importance of the area both environmentally and culturally. As the Master Plan area contains a significant length of the Swan River (Derbarl Yerrigan) foreshore, which has enormous cultural significance to Nyungah people, it is likely that the area was previously used by Whadjuk and Nyungah people for fishing and gathering reeds for weaving. It is also possible that the area contains bush medicine, however this has not been confirmed.

While some information on the cultural and environmental values is contained within The Lookout, this could be extended to the remainder of the Master Plan area, combined with improved wayfinding and other activities to create an educational experience for visitors and the community.



#### Recommendations

Strategy 3.1: Acknowledge and respect Aboriginal cultural connections to Derbarl Yerrigan (Swan River) and of the site.

- 3.1.1 Partner with Whadjuk and Nyungah people to better understand local cultural knowledge and values and develop a framework for sharing this knowledge in a culturally safe manner.
- 3.1.2 Investigate dual naming of Ashfield Flats.
- 3.1.3 Establish ongoing relationships/partnerships with Whadjuk and Nyungah groups, including youth, to assist with ongoing management of the Master Plan area.

### Strategy 3.2: Share information with the community on the cultural, historical and environmental considerations and values of Ashfield Flats.

- 3.2.1 Investigate opportunities for interpretation walking trails including artwork, text and illustrative signage that is non-intrusive in scale and character.
- 3.2.2 Provide information to visitors about pressures on and changes in the local environment to promote understanding, support for coordinated action and stewardship.
- 3.2.3 Develop online and physical information signage to improve awareness and education of the Ashfield Flats natural assets and processes including flooding and sea level rise.
- 3.2.4 Facilitate walking tours for locals and visitors to learn and appreciate the heritage and cultural values of the Master Plan area.

#### Objective 4: Deliver sustainable & coordinated management.

#### **Current conditions**

The Master Plan area is currently separately managed by the Town of Bassendean, DPLH and the Water Corporation according to the management vesting of individual lots, with limited coordination of activities. All agencies recognise the benefits that would be achieved through a more collaborative approach, particularly to the protection of environmental values and management of key issues including foreshore erosion, bushfire risk and mosquitoes.

Development of a strategic framework for ongoing management will also assist in optimising the use of scarce resources and applying for grant funding for implementation, as well as working more collaboratively with the community.

#### Recommendations

Strategy 4.1 Apply an integrated management approach that considers the needs of the natural environment, cultural heritage and local community in a balanced way.

- 4.1.1 Key stakeholder agencies to continue to collaborate and agree on an integrated approach to the long term management of Ashfield Flats.
- 4.1.2 Work together to develop an implementation plan that is supported by the key stakeholder agencies.
- 4.1.3 Monitor the delivery of actions and share progress periodically with the community.

4.1.4 Work with the Department of Transport to seek a solution that better manages speeding boats in this section of the river.

### Strategy 4.2: Reduce damage to sensitive environments caused by uncontrolled dog access.

- 4.2.1 Dogs are to be on-lead in all areas, apart from the TEC (dogs prohibited) and the designated off-lead area.
- 4.2.2 Designate and sign post the dog off-lead areas.

#### Strategy 4.3: Appropriately manage risk of wildfires.

- 4.3.1 Ensure fire access tracks are managed to ensure they are continuous, and provide safe access/egress for emergency services personnel and appliances.
- 4.3.2 Explore the opportunity to incorporate Whadjuk and Nyungah Aboriginal Cultural values into the future wildfire management regime.

### Strategy 4.4: Employ an integrated approach to minimise the interaction between mosquitoes and the public.

- 4.4.1 Work with SERCUL to develop a revegetation strategy to reduce mosquito numbers while minimising impacts on the TEC.
- 4.4.2 Maintain appropriate access to areas requiring mosquito control to enable agreed management activities to be undertaken.

#### 3 IMPLEMENTATION

The key stakeholder agencies (of DBCA, DPLH, DWER, Water Corporation and the Town of Bassendean) will continue to work together to develop an implementation plan which will include specific recommendations for the delivery of actions and ongoing management requirements. It is suggested that this is implemented via a collaborative approach to optimise use of resources and maximise delivery outcomes.

It is also recognised that implementation of the Master Plan recommendations will be staged and that the staging of the delivery is subject to many different factors and interdependencies. In some instances, sequencing of works may be required to ensure safe and economic delivery of the recommended outcome. This will also enable an adaptive management response to the delivery of actions that is able to monitor and respond to results and conditions and can also respond to budget and resource constraints and opportunities.

Preliminary recommendations for staging and timing of actions is provided in Table 1.

The explanation of timing and funding indications is:

Timing:

- Short: 0-4 years
- Medium: 5-10 years
- Longer: 10-20 years

Funding requirement:

- Low: under \$10,000
- Medium: \$10,000 \$100,000
- High: over \$100,000

Where the action is anticipated to be delivered through an existing agency budget (as it is similar to current operational activities), this has been indicated. The denoting of "low, medium or high", indicates the action is unfunded (please see below).

It is also noted that a number of approvals are likely to be required to enable realisation of the management recommendations. These are summarised in Part 2.

#### 3.1 Funding

While some activities consistent with the current management actions occurring in the Master Plan area may be able to be continued, additional funding will need to be obtained to deliver the outcomes of this Master Plan.

The stakeholder agencies will continue to work together to access available funding to assist in the delivery of the Master Plan actions. Current opportunities for funding include:

- Riverbank Grants
- Swan Canning Riverpark Urban Forest Funding
- Recreational Boating Facilities Scheme (RBFS) grants
- Lotterywest
- Waterwise Greening Scheme
- Urban Rivers and Catchments Program (Commonwealth)
- Disaster Ready Fund (Commonwealth)
- Sport and Recreation Events Funding
- Connecting to Country program for Aboriginal people and organisations
- Community Rivercare Program Funding (for community groups)

- Perth NRM Community Grants (for environmental volunteer groups)
- Community Stewardship Grants (for community-based projects)
- Swan Alcoa Landcare Program (SALP) grants for local (community) action

#### 3.2 Monitoring and document review

Part 1 of the Master Plan is a rolling document that allows for continuous improvement as new information emerges on outcomes, as well as risks and their management.

Delivery of the actions in the Master Plan will be monitored by stakeholder agencies and a brief "traffic light" annual progress report, prepared by the Town of Bassendean, is to be shared with the community.



#### Ashfield Flats Master Plan

#### Table 1: Preliminary recommendations for timing of implementation

Action		Comments	Indicative budget required
Objective 1: Allow for the protection and adaptation of unique environmental qualities			
1.1.1 Protect the TEC from uncontrolled access through fencing including areas to the east of the TEC.	f Short	Could implement in stages but preference is to complete as single action.	High
1.1.2 Monitor and record the eastward movement of the Coastal Saltmarsh vegetation complexes.	Short, ongoing	Establish protocols then continue to implement (ongoing).	Low, annual cost
1.1.3 Monitor changes in hydrology affecting the TEC and undertake remedial works if possible to reduce this change.	Short, ongoing	Establish protocols then continue to implement (ongoing).	Low, annual cost Does not include cost of remedial measures
1.1.4 Undertake appropriate weed management including removal of East Coast casuarina species.	Short, ongoing	Establish practices then continue to implement (ongoing).	Medium, annual cost
1.2.1 Implement the Town of Bassendean Sandy Beach Reserve foreshore works.	Short	Could be staged.	High
1.2.2 Undertake staged works to stabilise the foreshore through bioengineering, and pockets of fenced revegetation at least 30m wide, as indicated on the Master Plan. Fencing to be visually permeable and able to be removed when vegetation is sufficiently established. Vegetation selection to favour ground covers, sedges and tall trees to facilitate views to the river from the foreshore paths.	Short	Undertake in stages.	High
1.2.3 Acknowledge the failing condition of the revetment west of Kitchener drain through signage that indicates the area will increasingly be subject to flooding and encourage access to Hardy Rd along the Kitchener St drain.	Medium		Low
1.2.4 Monitor sea level rise and implement responsive management actions based on these experiences where required to protect agreed social or environmental values.	Short, ongoing	Establish protocols then continue to implement (ongoing).	Low, annual cost. Does not include cost of remedial measures.
1.3.1 Investigate feasibility and develop a concept to modify the western bank of the Chapman St drain north of the TEC (in Hamilton St parkland, Chapman North), minimising the impact on existing trees, to reduce the steepness of the bank and revegetate with appropriate local native species to provide additional area for water quality treatment and reduce flow velocities.	Short	Cost will depend on level of contamination.	Medium – study only

Action	Timing	Comments	Indicative budget required
1.3.2 Explore the opportunity to construct an additional "low flow" pathway through the parkland into the existing wetland area just south of the Kitchener St drain to provide water quality treatment of the frequent events while the larger (and cleaner) events can bypass and continue to discharge into the Swan River (Derbarl Yerrigan).	Investigations short term Construct – medium term		Medium – study only
1.3.3 Ensure any drainage upgrade works are undertaken in collaboration with DBCA and consistent with the intent of this Master Plan.	As required		Existing agency operational budget
Objective 2: Connect people with nature and support community wellbeing			
2.1.1 Identify and establish a future pedestrian path located along the foreshore at approximately 0.8m AHD to provide access in most weather conditions.	Short	Path to be constructed with crushed limestone or similar.	High
2.1.2 Extend the boardwalk to allow for tidal movements into and out of the wetland while providing an accessible path in most weather conditions.	Medium	Undertake in stages	High
2.1.3 Provide a new path connection from the Sandy Beach jetty to the car park and create an informal track through the southern fenced area at Sandy Beach to encourage better connection between the jetty and carpark.	Short		Medium
2.1.4 Consider additional signage or improved access at an appropriate grade along the Kitchener Drain to Hardy Rd to facilitate a better connection for cyclists to the surrounding road network and Route ID 2954 in the Perth and Peel Long-Term Cycle Network.	Medium		Low
2.1.5 Explore solutions for low intervention access to the Roy Hookway Platform from the current westernmost boardwalk extent when seasonal access is no longer viable.	Medium		Medium
2.1.6 Consider need for access by Aboriginal people for bush tucker or traditional medicines.	Short		Low
2.1.7 Consider the need for universal access as part of any upgrade.	As required	As part of relevant activity	Low – study only
2.1.8 Plan to remove the existing path material prior to failure, so it does not contribute to erosion or become a safety hazard. Information on path condition to be provided to the community through the Town's annual report. Revegetate the area.	Long	As required	High
2.2.1 Plant canopy trees on both sides of the new path to provide shade and install appropriate seating. Choose tree species that provide ability for views through the foliage on maturity (but still provide canopy coverage).	Short	Develop ongoing program to address tree deaths.	Medium
2.2.2 Expand urban forest coverage within Hamilton Reserve with a focus to improve local biodiversity and complement the parkland setting, while minimising bushfire risk.	Medium		Low

#### Ashfield Flats Master Plan

Action	Timing	Comments	Indicative budget required
2.2.3 Formalise the circuit around Ashfield Flats through improved wayfinding including signage that indicates some of the paths may not be useable in certain weather conditions.	Short		Medium
2.2.4 Explore the opportunity for a bird hide near Kitchener North.	Medium	Approvals may be required.	Low
2.2.5 Construct a pedestrian bridge over the Chapman St drain in Chapman North that also provides a place to view the wetland habitats. Consider widening the boardwalk in a few locations and the inclusion of seating.	Medium		High
2.2.6 Allow overflow parking at Sandy Beach adjacent to the formal car park (on DPLH- managed land) in an area unaffected by future inundation.	Short, ongoing		N/A
2.3.1 Retain access to the water in defined areas where a sandy foreshore already exists (see Master Plan).	N/A		
2.3.2 Retain views to the river and wetland in agreed locations through active management of vegetation and/or establishment of viewing platforms/boardwalks.	Medium		Medium to High
2.3.3 Remove some trees at the base of the Lookout to assist with retaining the views from the public realm across the wetland. Any vegetation removal should not impact the stability of the bank.	Short	Action already completed. Review outcome and revisit if required	Existing agency budget.
Objective 3: Provide opportunities for knowledge sharing			
3.1.1 Partner with Whadjuk and Nyungah people to better understand local cultural knowledge and values and develop a framework for sharing this knowledge in a culturally safe manner.	Short, ongoing	Establish protocols then continue to implement (ongoing)	Low, annual cost Does not include cost of activities.
3.1.2 Investigate dual naming of Ashfield Flats.	Medium		Medium
3.1.3 Establish ongoing relationships/partnerships with Whadjuk and Nyungah groups, including youth, to assist with ongoing management of the Master Plan area.	Short, ongoing	Establish protocols then continue to implement (ongoing)	Low, annual cost Does not include cost of activities.
3.2.1 Investigate opportunities for interpretation walking trails including artwork, text and illustrative signage that is non-intrusive in scale and character.	Medium		Medium – study only Does not include cost of recommendations.
3.2.2 Provide information to visitors about pressures on and changes in the local environment to promote understanding, support for coordinated action and stewardship.	Medium		Medium

Action	Timing	Comments	Indicative budget required
3.2.3 Develop online and physical information signage to improve awareness and education of the Ashfield Flats natural assets and processes including flooding and sea level rise.	Medium		Medium
3.2.4 Facilitate walking tours for locals and visitors to learn and appreciate the heritage and cultural values of the Master Plan area.	Medium		Low
Objective 4: Deliver sustainable & coordinated management			
4.1.1 Key stakeholder agencies to continue to collaborate and agree on an integrated approach to the long term management of Ashfield Flats.	Short, ongoing	Establish protocols then continue to implement (ongoing)	Existing agency operational budget.
4.1.2 Work together to develop an implementation plan that is supported by the key stakeholder agencies.	Short		Existing agency operational budget.
4.1.3 Monitor the delivery of actions and share progress periodically with the community.	Annually		Low
4.1.4 Work with the Department of Transport to seek a solution that better manages speeding boats in this section of the river.	Short		Existing agency operational budget.
4.2.1 Dogs are to be on-lead in all areas, apart from the TEC (dogs prohibited) and the designated off-lead area.	Short		Existing agency operational budget.
4.2.2 Designate and sign post the dog off-lead areas.	Short		Existing agency operational budget.
4.3.1 Ensure fire access tracks are managed to ensure they are continuous, and provide safe access/egress for emergency services personnel and appliances.	Annually		Existing agency operational budget.
4.3.2 Explore the opportunity to incorporate Aboriginal Cultural values into the future wildfire management regime	Medium		Medium
4.4.1 Work with SERCUL to develop a revegetation strategy to reduce mosquito numbers while minimising impacts on the TEC.	Medium		Medium
4.4.2 Maintain appropriate access to areas requiring mosquito control to enable agreed management activities to be undertaken.	Annually		Existing agency operational budget.

Timing:

- Short: 0-5 years
- Medium: 5-10 years
- Longer: 10-20 years

New funding requirement:

- Low: under \$10,000
- Medium: \$10,000 \$100,000
- High: over \$100,000

#### 4 **REFERENCES**

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- Department of Parks and Wildlife, 2015, *Swan Canning River Protection Strategy*. Department of Parks and Wildlife, Perth, WA.

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## Report Version Prepared Reviewed Submitted to Client

Client: Department of Biodiversity, Conservation and Attractions

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		by	by	Copies	Date	
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