

Point Reserve Foreshore Plan

Prepared for the Town of Bassendean

By Urbaqua together with Realm Studios

March 2023



TOWN OF
Bassendean

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1 Point Reserve

Point Reserve is a neighbourhood park located in the Town of Bassendean which has for many years been enjoyed by locals as a place to connect with the Swan River and each other.

Located approximately 12km from the city centre, the site sits at the confluence of the Swan and Helena Rivers and is surrounded by low density residential housing. Point Reserve is 1.6 hectares in size, with an additional 2.2 hectares of accessible public open space located to the north and south.

The Point Reserve area is largely grassed parkland with a number of endemic *Eucalyptus rudis* (Flooded Gum) trees scattered throughout. It is reserved for Parks and Recreation and is classified as an Environmentally Sensitive Area due to the site's association with the Swan Canning Estuary.

The reserve is considered to be a sanctuary for birdlife and dogs are prohibited. It is also home to a large flock of geese. The origin of the geese is unknown and there are mixed views on retaining their presence, although it was noted that some members of the community come to the reserve to feed the geese.

The site is also part of the Swan Canning Development Control Area (DCA), and within the area of the Lower Swan Locality Plan. Any works within the DCA are subject to the requirements of the *Swan and Canning Rivers Management Act* and the *Swan and Canning Rivers Management Regulations 2007*.

In 2020 two jetties were removed from the site following a structural assessment, that found they were unsafe. The following amenities are located within Point Reserve:

- Park benches/ picnic settings
- BBQ's
- Parking
- Lights (some being solar powered multi poles)
- Ablutions
- Playground and sand pit

As time has gone by, the amenities of the park have aged and are no longer meeting the needs of the community that use them.

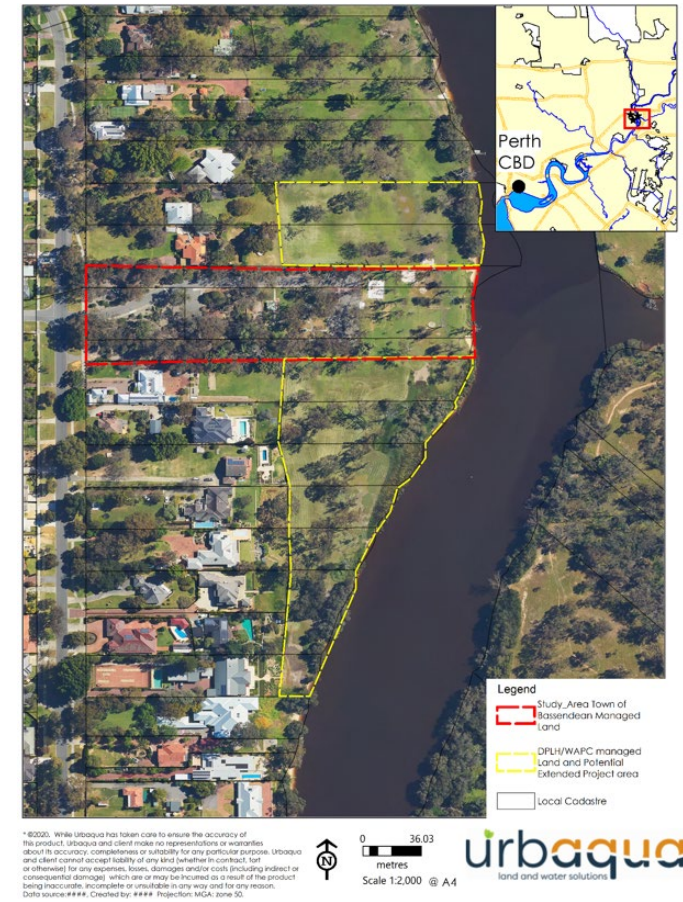


Figure 1: Point Reserve study area





2 Aboriginal History & Country

Point Reserve is on Whadjuk Noongar Country in a section of the Helena Valley referred to by local Noongars as Mandoon, meaning 'the place of many trees'.

Point Reserve is a significant site in Aboriginal context, being the place where Helena River and Swan River join and a place in which three Noongar groups met. It is believed that a corroboree ground exists near the confluence of the Swan and Helena Rivers, although exact location can no longer be identified. In addition, the Helena River was an important travelling route for local Noongar.

The following sites of significance are registered over the site in the Aboriginal Heritage Inquiry System mapping:

- 3536 Swan River - mythological site
- 3840 Bennet Brook Camp Area (Artefacts / Scatter, Ceremonial, Fish Trap, Historical, Man-Made Structure, Mythological, Skeletal Material / Burial, Camp, Hunting Place, Plant Resource, Water Source)
- 3758 Helena River (Ceremonial, mythological, Repository/cache)



3 Community history

In 1904, the Lands Department granted a land parcel for a Road Board office site and Recreation Reserve. In 1926, a request was made by the Road Board for access to a drinking water supply. Then in 1927, tenders were called to erect a cement bathing shed. In August 1939, the Swan River overflowed its banks and the bathing shed was almost covered by water. Figure 2 shows Swan River floods looking from Point Reserve to the Guildford recreation ground.



Figure 2: Swan River Floods Article from The West Australian Newspaper, Tuesday 29 August, 1939.

The following year, the Bassendean Road Board requested the re-build of the showers and the construction of a jetty at the reserve. In 1946, two jetties were constructed to create a swimming area for the community. The swimming area was highly utilised by the community and even supported many swimming races and competitions including a River Carnival, hosted by the local sea and air scout group (Figure 3).

Swimming greatly increased in popularity at Point Reserve, which led to the Road Board suggesting further improvements including sanitary conveniences, a children's pool, fireplaces and a fence. In 1947, the jetties were officially opened to the public for recreational use, and the reserve supported a number of events including the swim-through-Bassendean Race, night swimming races, and a swimming championship.

In 1953, the reserve was pronounced unfit for swimming. Three samples taken from the river at Point Reserve showed coliform pollution and one sample taken between the jetties contained faecal coliforms. The Health Department warned against the risk of polio infection.

In early 2020 the jetties were deemed unsafe and unsalvageable due to termite damage, structural deterioration, and deficiencies to such an extent that removal was required. At the time of jetty removal there was a strong community desire for the jetties to be replaced, and it is likely that this is still a matter of interest to the community.

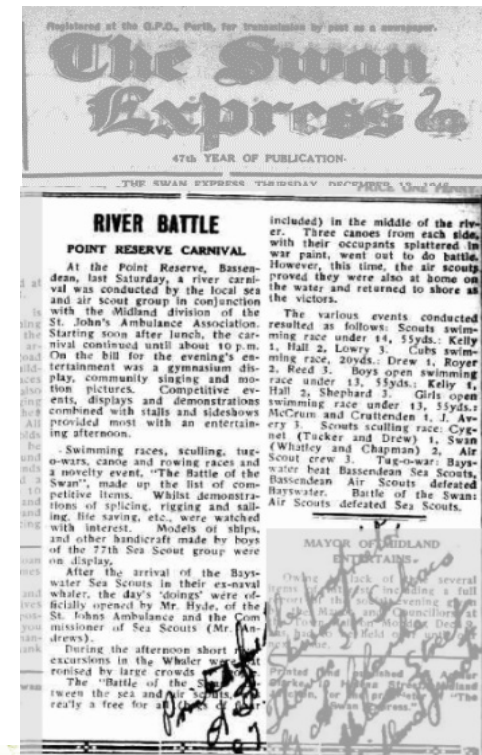


Figure 3: The Swan Express Article on Point Reserve Carnival



4 Respecting the river

A large proportion of the study area is affected by the risk of flooding as it is located within the Swan River floodway, which extends beyond the edge of the Parks and Recreation reserve and into private properties in many locations (Figure 4).

Large parts of the study area are subject to inundation and contain standing water during the winter months. These areas are largely located in the land to the north and south of the amenities and are challenging to maintain during this time.

Anecdotal evidence suggests that the facilities in the reserve including the lower car park up to the toilet block have been flooded on a number of occasions, leading to the need to replace sand from the playgrounds. It will be critical to ensure that any new infrastructure is able to withstand seasonal inundation with low levels of maintenance.

Large parts of the river edge are affected by erosion. An assessment of the condition of the Point Reserve foreshore by MP Rogers and Associates in 2021 recommends a “managed retreat” scenario, which includes actions to improve the existing condition of areas of the foreshore currently experiencing erosion to reduce the impact of damaging processes.

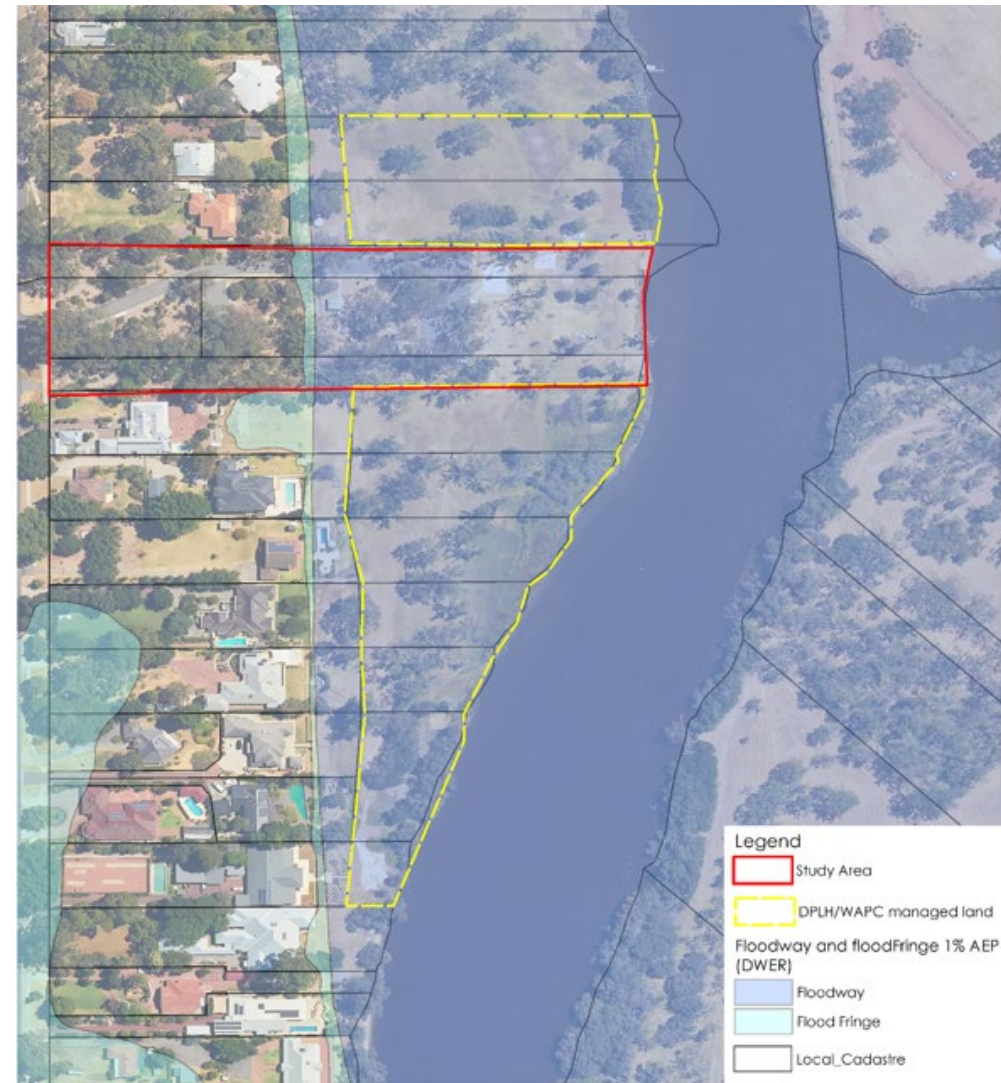


Figure 4: Flood risk

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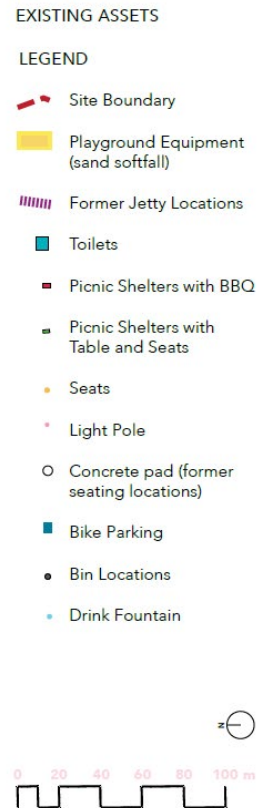
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5 Point Reserve now

There are a number of facilities within the Point Reserve park including public toilets, three playground equipment areas (with sand underneath), two picnic shelters with BBQs, four picnic shelters with table and seats, two seats, five light poles, two concrete pads (former seating locations), bike parking, four bins and a drink fountain (Figure 5). It is noted that some of these amenities are nearing the end of their useful life.

The car parking is spread across two areas – one above the ridge near the entrance to the park and one on the level of the floodplain. Parts of the reserve are currently irrigated, but the majority of the study area is unirrigated, and parts of the WAPC-land associated with the areas of inundation during winter are often bare of vegetation during summer.

While no jetties now remain at Point Reserve, jetties are located nearby at Success Hill Reserve and Sandy Beach Reserve.



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Figure 5: Park amenities



6 Point Reserve in the future

The development of ideas for the future for Point Reserve has been guided by the local site conditions and the need to create a place that is resilient to the effects of the river – something that gives it room to move and yet is able to be enjoyed by the local community. Conversations with the local community have also pointed to the desire for a place to connect with nature and provide simple recreational opportunities.

The plan therefore seeks to fulfil the community's desire for restoration, reflection, relationships and resilience.

Restoration of the local ecosystem through:

- Use of endemic flora and restoration of tidal wetlands
- Replanting of endemic trees including *Eucalyptus rudis* (Flooded Gum), *Melaleuca raphiophylla* (Freshwater Paperbark) and *Casuarina obesa* (Western Swamp Sheoak)
- Creation of habitat for endemic fauna which also helps to manage mosquitos

Reflecting on the past to inform the future by:

- Recognising the level of incursion of the river that occurs quite frequently

- Finding opportunities to infuse design with reference to history including through signage and materials
- Reconnecting the community with the environment to support future stewardship

Enhancing **relationships** for people and this place through:

- Supporting relationships within the community through creating spaces where people will meet
- Providing an opportunity to be amongst and interact with the environment
- Offering opportunities for education about the ecosystem
- Ensuring retention of lines of sight to connect with other landscapes and enhance community safety

Creating a **resilient** future by:

- Amelioration of flooding through riparian planting
- Addressing urban heat through provision of shade trees and structures
- Reducing maintenance needs and ensuring infrastructure is appropriate to site conditions.
- Ensuring the health of the ecosystem into the future



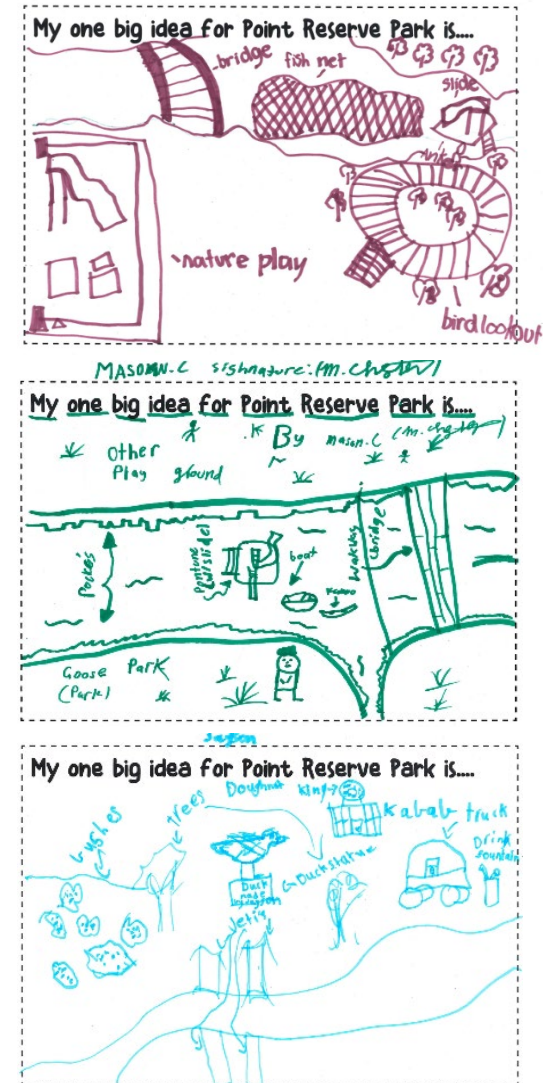
Key ideas suggested for inclusion in the Point Reserve Foreshore Plan are:

- Providing a pathway/boardwalk from car park to foreshore as well as a circuit – material appropriate to withstand inundation with potential for boardwalks over lowest points to be accessible during moderately wet times
- Construction of a boardwalk along the foreshore
- Riparian planting between the foreshore and the path, wetland planting in low-lying areas and some reduction of grassed areas (and mowing needs) by adding vegetation around mature trees
- Increased shade through additional tree planting
- Upgraded (and potentially relocated) car park and amenities including BBQ, shelters, seating and nature play area
- Installation of tree pits (drainage) in car park and reduction in car bay numbers
- Stabilising sections of foreshore with vegetation. This is likely to include rock revetment in areas with visible erosion (around a few of the trees). May also need some sand nourishment
- Creation of places for local animals and connections for people - erection of a bird hide at the southern end, bat and

bird boxes, fauna tunnels, sheltered areas, frog habitat and insect hotels

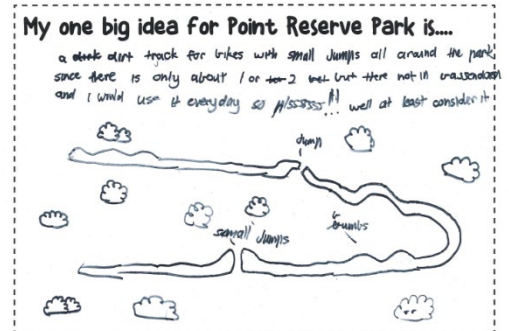
- Retention of existing beach access points
- Planting along northern and western fence lines adjacent private property
- Maintenance of private property pedestrian access to reserve along western boundary
- Installation of electricity points (for temporary community activities)
- Lighting to only be around car park and amenities and at low levels to minimise disturbance of wildlife
- Celebration of Noongar stories through art and interpretation
- Educational signage

These have been developed based on input from Bassendean primary school ('My one big idea for Point Reserve' drawings shown here), Town staff and Councillors, adjacent landowners and discussions with the Department of Planning, Lands and Heritage and the Department of Biodiversity, Conservation and Attractions, who are co-funding development of the Foreshore Plan and are the planning approval authority for the Riverpark.

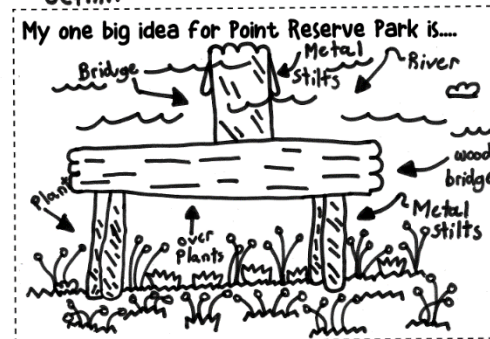




My one big idea for Point Reserve Park is...
Kids Activities (Noongar Based)
Food Trucks
Singing Performance
(free breakfast & lunch)
Tacos Competition
(Best taco is sold - will be at a supermarkets)
More spaces
Fresh toilets
More shade for events
More drink fountains
Sausage sizzlers



Gethin



7 Options for the Point Reserve Foreshore

In late 2022, the Town of Bassendean invited the broader community to consider several options for the future of Point Reserve.

The community's level of support for a range of possible elements to be included in the Point Reserve Foreshore Plan was obtained via a survey. The survey was advertised for a five week period during September and October 2022 via the Town's website and social media. Hard copy surveys were also available at the Towns' offices and library.

The elements of the plan where specific feedback was being sought are:

- Area for improvement
- Location of playground and car park
- Jetty/boardwalk options
- Different path configurations
- Path material

Options for these elements were presented, together with a brief discussion of some of the aspects the community was asked to consider. The information presented in the consultation is outlined in sections 7.1 to 7.5 below. It was noted that the information was indicative and may not represent the actual outcome.



Images of revegetation and a bird hide. The suggested design of the bird hide does not provide shelter for users, simply obscures them from view from the wetland.



7.1 Area for improvement

The Town of Bassendean currently only maintains the Point Reserve park area (shown in red in Figure 1). An opportunity exists to extend facilities and management into the adjacent Government-owned land. While extension of the park would require additional resources to install facilities and maintain the larger area, it also provides an opportunity to address foreshore erosion issues and weeds, creating an improved environmental outcome for visitors and fauna.

Option 1: Limit the plan to the Town's land (existing park area) (Plans 1 & 2)

- Adjacent Government-owned land to remain publicly accessible
- No foreshore stabilisation activities, revegetation works or creation of additional fauna habitat outside the current area
- Lowest ongoing maintenance cost

Option 2: Include the adjacent State Government-owned land (Plan 3)

- Provides a consistent vision and approach across the whole site, maximising community and environmental benefit

- Extension of foreshore management activities beyond the current park footprint
- Requires additional Town resources to maintain the larger area of land

7.2 Location of playground and car park

The current location of the car park is considered to create unnecessary separation between the foreshore and playground and the seating, shade and barbeque. The existing play equipment is at the end of its useful life and is often affected by flooding. It is recommended that for all options, the playground and car park are renewed. This provides an opportunity to implement water sensitive urban design techniques and provide parking for Acrod permit holders and potentially reduce the number of car bays in this location (noting the additional car park to the west).

Option 3: Relocate the seating and barbeque so they are closer to the playground and move the car park to the end of the access road with reduced bays (Plan 1)

- Removes interruption of site amenities and provides good flow from BBQs to the River.
- Allows pedestrian access between playground and toilets without the need to cross a driveway/road

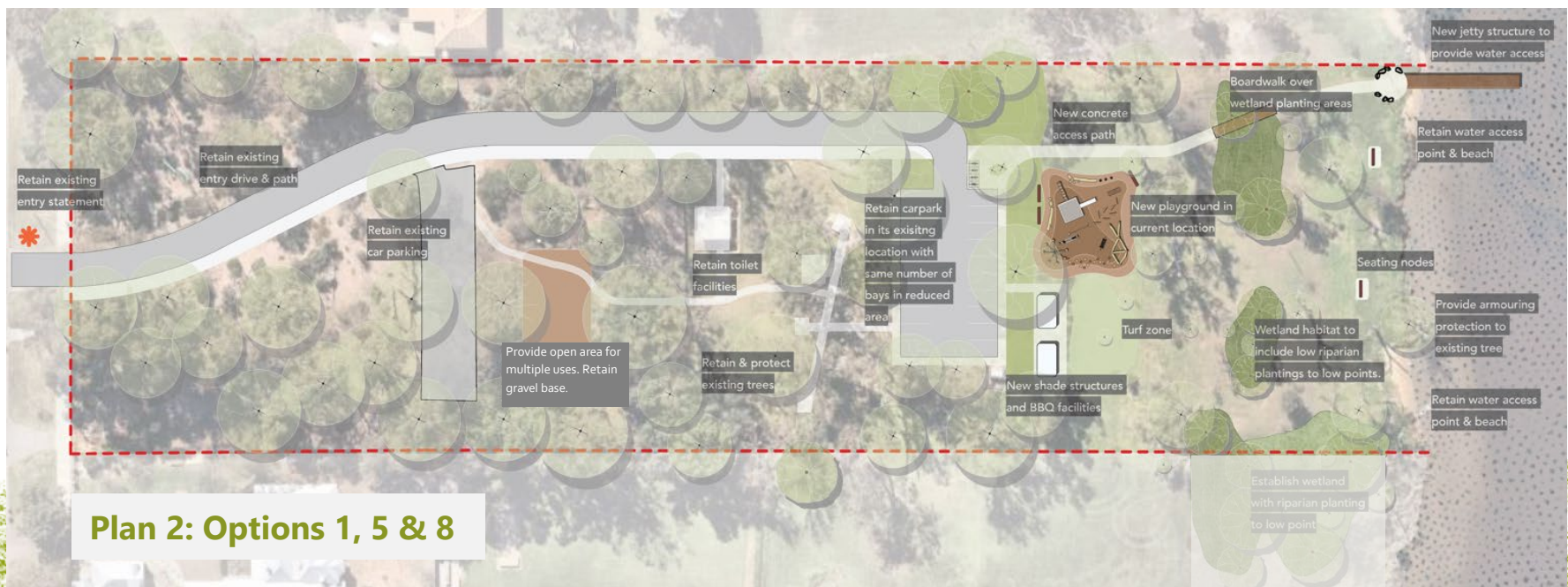
- Allows for playground and car park to be located on higher ground and therefore reduced exposure to potential flooding
- Reduced footprint of parking bays, reducing environmental impact, and encouraging alternative modes of transport
- No view of river when seated in car
- Careful design to work around trees/ avoid impacting root protection zones and likely loss of 2 trees

Option 4: Relocate the seating and barbeque so they are closer to the playground and move the car park to the west with reduced bays (Plan 3)

- As above with no tree loss
- Visitors remaining in parked cars have view of foreshore
- People likely to need to cross the car park to access the toilets
- Highest cost

Option 5: No change to current location or size of the car park but upgrade the playground (Plan 2)

- Potentially lowest cost
- No tree loss or need to move services
- Does not allow relocation of the playground to higher ground
- People likely to need to cross the car park to access the toilets





7.3 Jetty/boardwalk options

The strong history of use of the site for swimming, fishing and other recreational activities, together with input from the local community has demonstrated a desire to reinstate some form of jetty or access to the water. As part of the Department of Health microbiological water quality monitoring program, Point Reserve is classified as having poor or very poor water quality, with a recommendation to avoid swimming.

Each option for a new jetty/boardwalk will seek to provide universal access to the jetty and access to the water while minimising impact to the river bank and bed. The jetty will not permit motorised water craft access.

Option 6: Jetty to be angled into the river with a pontoon (see below)

- Pontoon provides additional space for recreational activities
- Facilitates easier access to the water
- Moderate cost



Option 7: Create a boardwalk adjacent to the river bank (Plan 1)

- Provides more space for recreational activities
- Greatest accessibility
- Highest cost
- Does not provide deep water access

Option 8: Create a jetty into the river (similar to historic jetty) (Plan 2)

- Recreates the historic form and provides deep water access
- Moderate cost

7.4 Different path configurations

Best practice landscape design is to provide access to all areas of the park for people of all mobility types. This is generally achieved through creation of a path network. Due to the size of the land, the number of alignments that could be created are significant. The options presented are therefore intended to reflect the widest range of opportunities. It should also be noted that the final location of the path network will be designed in response to site topography, existing vegetation and objectives for access.

Option 9: Provide access without boardwalks (not shown).

- Some areas of the path will become inundated during winter and at some high tide events
- Lowest cost
- This option is only to be considered together with Option 1. If Option 2 is preferred, the path network will be extended beyond this area.

Option 10: A circuit within the Town managed land with boardwalks where the area becomes inundated (Plan 1)

- Provides access to the park facilities at all times of the year
- Unlikely to be used for recreation due to the small size of the path network
- Increased construction and maintenance costs
- This option is only to be considered together with Option 1. If Option 2 is preferred, the path network will be extended beyond this area.

Option 11: A circuit around the whole area (Plan 3)

- Facilitates access to the whole park for users of different mobility
- Creates a recreational opportunity for visitors and clear wayfinding regarding where the park terminates
- Provides a clear boundary for revegetation and maintenance works and controls access, providing increased protection to conservation areas and fauna habitat



Plan 3: Options 2, 4, 8, 11

- LEGEND**
- ① Retain existing entry statement
 - ② Retain existing entry path and drive
 - ③ Retain existing car park
 - ④ Retain gravel area
 - ⑤ Retain toilet facilities
 - ⑥ Retain and protect existing trees
 - ⑦ Reduced and relocated car park
 - ⑧ New shade structures and BBQ facilities
 - ⑨ Turf zone
 - ⑩ New concrete loop share path
 - ⑪ New playground and seating on former car park (elevated grade)
 - ⑫ Boardwalk over wetland planting areas
 - ⑬ New jetty structure
 - ⑭ Seating nodes
 - ⑮ Wetland habitat to include low riparian planting to low points
 - ⑯ Provide armouring protection to existing tree
 - ⑰ Retain water access point and beach
 - ⑱ Establish wetland with riparian planting to low point
 - ⑲ Rehabilitated planting areas to form buffer, improve biodiversity and habitat
 - ⑳ Existing trees in grass
 - ㉑ Remove large expanses of turf and replace with low native plantings
 - ㉒ New share path to form maintenance edge to new and existing plantings
 - ㉓ Provide small timber deck
 - ㉔ Retain all private access points to reserve
 - ㉕ Establish riparian planting edge to improve habitat
 - ㉖ Remove existing stand of non endemic species and replant with native
 - ㉗ Establish bird hide (open structure to path side)

- New native tree and shrub plantings (weed removal)
- Wetland & riparian plantings (to low points)
- Flood plain revegetation (over former turf)
- Riparian foreshore revegetation (over former turf)
- Proposed Concrete Share Path (2.2m wide)
- Existing entry road with reconfigured car park
- Existing trees to be retained (subject to Arborist Report)
- Proposed native floodplain tree plantings



Option 12: Single path to end of DPLH land

- Facilitates some access to the whole park for users of different mobility
- May be perceived to lead beyond the park without a loop at the edge of the park to demonstrate the extent of access
- Reduced hard landscape footprint and maintenance costs



7.5 Path material (Options 11 and 12)

Due to the periodic inundation of the area and location within the floodplain of the Swan River, it is important to consider the durability of the material used for path construction. Paths constructed of compacted limestone or pea gravel have been considered but discounted on the advice of other local governments and the Department of Biodiversity, Conservation and Attractions due to the significant level of maintenance that would be required to maintain a safe surface.

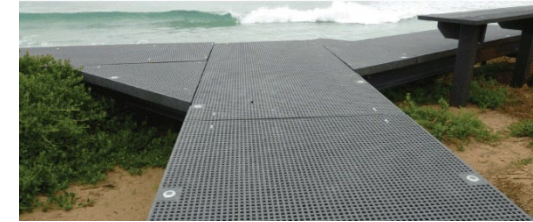
Option 13: Limestone coloured concrete

- Lowest maintenance requirement
- High cost



Option 14: Low boardwalk

- Raised above area of inundation
- Highest installation cost
- Highest maintenance cost



7.6 Consultation outcome

The survey was open from Thursday 27 September to 5pm on Monday 31 October 2022.

81 completed surveys were received, with 70 submitted online and 11 completed as a PDF. All written comments received (including from three additional respondents who provided comments separately to the survey) were reviewed to assist with interpretation of the results.

The results were presented to the Town of Bassendean Council at its meeting in February 2023. The following Council Resolution was used as the basis of the final plan.

Council Resolution – Item 12.7, that Council:

1. Approves the Point Reserve Foreshore Plan, contained in the attachment, subject to the inclusion of the following elements as amended in the final concept:

- Area for improvement (spatial extent): Limit area to the Town’s land (existing park area): Option 1;
- Path configuration: A circuit within the Town managed land where the area becomes inundated (Option 10) keeping hard surfaces to the minimum in respect to path width and the occasional use of boardwalk sections over wetland planting areas;
- Playground/ carpark location: Relocation of the seating and barbeque so they are closer to the playground and move the carpark to the end of the access road with reduced bays (Option 3);
- Jetty/ boardwalk options: Create a jetty into the river similar to historic jetty but at approximately half the original length (Option 8);

- Other elements: All “other elements” within Town managed land:
 - Retaining beach access at three locations

- Lighting around car park and amenities (must be at low levels and wildlife friendly)
- New playground (delete “with shade structures”)
- Seating nodes
- Celebration of Noongar stories through art and interpretation
- Unobtrusive educational signage
- Increased shade through additional tree planting
- Foreshore stabilisation. This is likely to include rock in areas with visible erosion (around a few of the trees)/ either side of river access points. May also need some sand nourishment.
- Riparian planting between the foreshore and the path, wetland planting in low-lying areas and some reduction of grassed areas (and mowing needs) by adding vegetation around mature trees
- Creation of places for local animals including bat and bird boxes, insect hotels, fauna tunnels, sheltered areas and frog habitat
- Planting along northern fence lines adjacent private property
- Open area for multiple uses (upper park area) without disruption to viable mature trees;

2. Notes that the approved Foreshore Plan will be used to inform detailed design, with staged implementation to be considered for inclusion in the future Long Term Financial Plan and future Annual Budgets, with the intention to seek grant funding where possible; and

3. Requests that the Town assists the Bassendean Preservation Group and advertise/promote/contact other groups/individuals who may wish to establish a Bushcare Volunteer Group dedicated to enhancing the natural environment of Point Reserve.

The final Point Reserve Foreshore Plan is presented below.





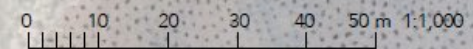
Legend

- Extent of proposed works (Town owned land)
- Wetland plantings (to low points)
- Riparian foreshore revegetation
- New native shrub plantings
- x Existing trees to be retained
- x Proposed native floodplain tree plantings
- Proposed concrete shared path
- Jetty

- x Seating nodes
- New BBQ shelters
- x Foreshore stabilisation
- Seating
- Bicycle parking

- 1** Retain existing entry statement
- 2** Retain existing entry and path
- 3** Retain existing carpark
- 4** Retain open area for multiple uses. Retain existing gravel base.
- 5** Retain and protect existing trees
- 6** Retain existing ablution facilities
- 7** Relocated and reduced car park
- 8** Turf zone (over former car park)
- 9** New playground and seating on former carpark (elevated grade)
- 10** Celebration of Noongar stories through art and interpretation

- 11** New concrete loop path
- 12** Wetland habitat to include low riparian plantings to low points
- 13** Planting along northern fence line of adjacent private property
- 14** Boardwalk over wetland planting areas
- 15** Habitat creation for local fauna including bat and bird boxes, insect hotels, fauna tunnels, sheltered areas and frog habitat
- 16** New jetty
- 17** Foreshore stabilisation
- 18** Retain water and beach access
- 19** Remove existing shelters





Client: Town of Bassendean

Report	Version	Prepared by	Reviewed by	Submitted to Client	
				Copies	Date
Draft Consultation Report	V1	SSh	REp	Electronic	15 August 2022
Final draft Consultation report	V2	SSh	REp	Electronic	26 August 2022
Final Consultation Report	V3	SSh	REp	Electronic	20 September 2022
Final report	V4	SSh	REp	Electronic	6 April 2023

Urbaqua

land & water solutions

Suite 4/226 Carr Place

p: 08 9328 4663 | f: 08 6316 1431

e: info@urbaqua.org.au

www.urbaqua.org.au

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