BOOYIUP - place of frogs

Centennial Park Wetland is a constructed wetland Flood management designed to:

- 1. Manage the risk of floods from water running off amount of water that is washed into our streams surrounding urban and industrial land.
- 2. Make the space enjoyable for the community.
- 3. Improve the quality of water flowing through Yakamia Creek.

into the creek. The wetland is built to manage a ' As our urban areas increase in size so too does the in 10 year storm events. and drains. Hard surfaces like roads, roofs and **Community enjoyment** pavements stop water from soaking into the Centennial Park is Albany's recreation hub, with ground and can increase the risk of flooding during many people enjoying casual or organised sports heavy rain. in the precinct. The construction of the wetland

1. Entry point

A weir at the top of the wetland diverts water from Yakamia Creek forcing it to enter the wetland. However, when water levels are too high for the wetland to handle, water overflows the weir and continues down the creek.

2. Basin One

The wetland is split into two basins on either side of the path. Basin one holds 700,000 litres during summer but can hold up to 1,000,000 litres during winter. The wetlands are designed to completely flood and join with the creek when a 1 in 50 year flood occurs.

3. Shady trees

Large trees are important features of thriving ecosystems. They provide habitat to animals

like possums and birds and act as a wind break. They also provide shade to wetland plants and form microclimates, cooling the area during hot weather.

4. Pollution traps As water enters the wetland it passes through a pollution trap that catches rubbish and debris. The trap acts like a filter and needs to be cleaned regularly.

5. Yakamia Creek upstream Yakamia creek starts 2.5 km upstream of the wetlands and is fed by water flowing off the residential and light industrial land. As water runs off urban areas it carries oils, metals and nutrients into the creek which can unbalance the aquatic ecosystem.

Wetland design features

Centennial Park Wetland helps to manage flooding by slowing down the movement of water during heavy downpours. The wetland captures large pulses of water and releases the water slowly back Improving water quality



has improved the amenity of the precinct and the pedestrian connectivity to the area.

- Nutrients, sediments and other pollutants such as oils, are washed from gardens and roads when it rains Yakamia Creek.
- Nutrients like nitrogen and phosphorous are key to plant growth; however, they can threaten the health of waterways if there is too much in the

water, by fuelling the growth of algae.

Wetlands, both natural and man-made, slow down the movement of water and allow plants and microorganisms to take up nutrients. Plants and microorganisms also capture pollutants and produce oxygen which is important for fish and aquatic animals.

BOOYIUP - place of frogs

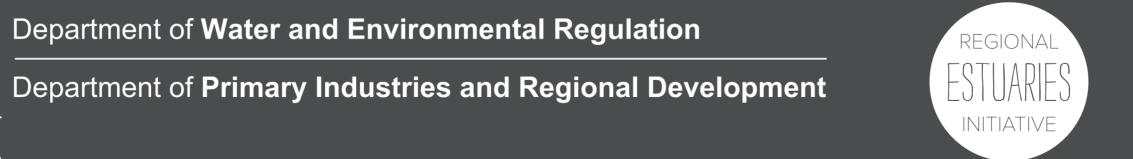


Centennial Park Wetland was funded by the City of Albany and Royalties for Region's Regional Estuaries Initiative in partnership with the Department of Water and Environmental Regulation.





GOVERNMENT OF WESTERN AUSTRALIA



6. Basin Two

The wetland is split into two basins on either side of the path. Basin two holds 1,800,00 litres during summer but can hold up to 2,400,000 litres during winter. The wetlands are designed to completely flood and join with the creek when a 1 in 50 year flood occurs.

7. Sedges and aquatic plants

The plants in and around the wetlands take up nutrients from the water, stabilise the sediments and provide an important habitat for microorganisms, fish, frogs and birds. Different species of plants are zoned into different water depth areas depending on how much or little water they can tolerate.

8. Swales

On the opposite side of the creek to the wetland are two swales. These are depressions in the ground and unlike the wetland basins, do not directly connect to the creek. Instead the swales capture water running off from the carpark that may contain oils and other pollutants. Like the

wetlands, they filter the water, where it eventually seeps through the ground joining Yakamia Creek. Swales also slow the flow of water running off the carpark reducing the risk of flooding further downstream.

9. Re-entry

The two exit pipes are designed to ensure that there is always water in the wetland - only when the wetland is full will clean water re-enter the creek.

10. Footpath

The wetland sits between the sporting precinct and residential area. A walkway connects the two areas and provides an important thoroughfare and opportunity to get up close to the wetland.

11. Yakamia Creek downstream From Centennial Park Wetland, Yakamia Creek continues for a further 7 km passing through semi-rural private land before entering Oyster Harbour. The wetland helps to reduce flooding of private land and reduces the nutrients entering Oyster Harbour.

Wetland design features

The City of Albany respectfully acknowledges the Menang Noongar people as the traditional custodians of the land on which Centennial Wetland sits, and pays respect to elders past and present.