Kadaltilla

Adelaide Park Lands Authority

Botanic Creek Rehabilitation

How works in Botanic Creek (Park 13 to Park 16) will improve watercourse stability, biodiversity and water quality.

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Associate Director, Infrastructure









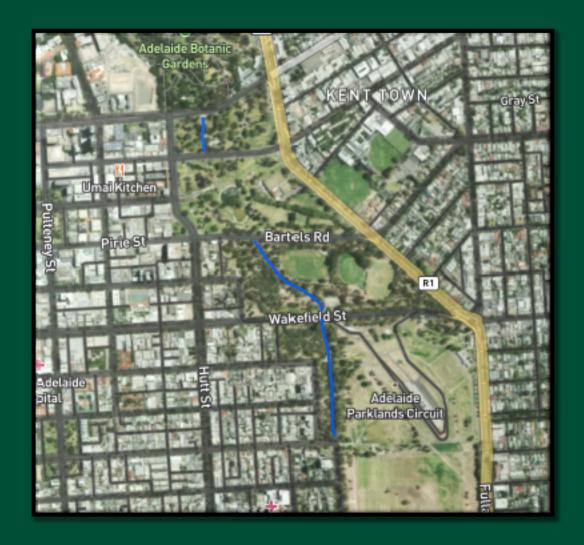




Key Messages

Botanic Creek Rehabilitation Project

- Botanic Creek is a section of watercourse consisting of sections of open channel and underground pipes.
 The reach being discussed extends from Victoria Park / Pakapakanthi (Park 16) to Rundle Park / Kadlitpina (Park 13).
- The current condition is poor with numerous issues that detract from the watercourse being a focal point for community engagement in the Park Lands.
- The project will address many of the current issues and create a corridor with significant appeal to these spaces.



Key Questions

KEY QUESTION

Do Members have any feedback on the proposed Botanic Creek rehabilitation works?

Implications

Implication	Comment
City of Adelaide Strategic Plan 2024-2028	Outcome: The status, attributes and character of our green spaces and the Park Lands are protected and strengthened.
Adelaide Park Lands Management Strategy – Towards 2036	Goal 3: Natural Systems, Cultural Landscapes and Climate Resilience. Outcomes relating to Biodiversity, Tree Canopy and Greening, Riparian, and Stormwater.
Integrated Climate Strategy 2030	Goal 3: A City Where Nature Thrives Target: 15% of urban stormwater catchment is directed to large-scale treatment systems.
Draft Victoria Park /Pakapakanthi (Park 16) Master Plan	Section 2 – Biodiversity Targets, Improve Water Quality.

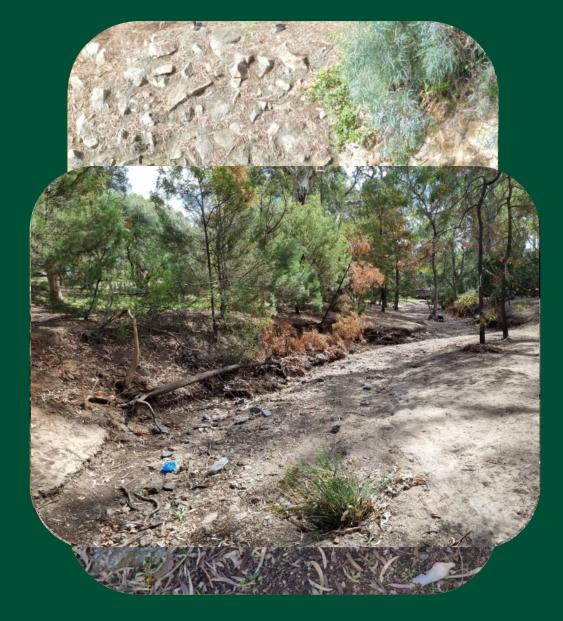
Botanic Creek Condition

- Ongoing erosion and sedimentation
- Poor public amenity
- Lack of vegetation, biodiversity and habitat value
- Minimal water quality benefit



Watercourse Erosion

- Erosion leading to sediment mobilisation and undermining riparian vegetation.
- Erosion noted at several locations through King Rodney Park / Ityamai-itpina (Park 15) with the greatest extent of open channel.
 - Scour at outlet from culvert under Wakefield Road
 - Erosion and bed deepening
 - Several local bank erosion points undermining vegetation
 - Scouring along and downstream of horse jump near existing bridge



Watercourse Sedimentation

- Sediment diverting low flows towards toe of banks leading to scour and reducing drainage capacity.
- Botanic Creek in Rymill Park / Murlawirrapuka (Park 14) (bottom left), downstream of Wakefield Road in King Rodney Park / Ityamai-itpina (Park 15) (bottom middle) and King Rodney Park / Ityamai-itpina (Park 15) from timber bridge (right).







Slide 7 Rymill Park / Murlawirrapuka / Park 14

King Rodney Park / Ityamai-itpina / Park 15

King Rodney Park / Ityamai-itpina / Park 15

Watercourse Amenity

- Botanic Creek current provides a poor asesthetic outcome due to a lack of vegetation in the channel bed, sedimentation (including building waste and quarry rubble) and stagnant pools in scour holes.
- Botanic Creek from bridge in Rundle Park / Kadlitpina (Park 13) (bottom left), concrete bridge in King Rodney Park / Ityamai-itpina (Park 15) (bottom middle) and Rymill Park / Murlawirrapuka (Park 14) from Rundle Road (right).









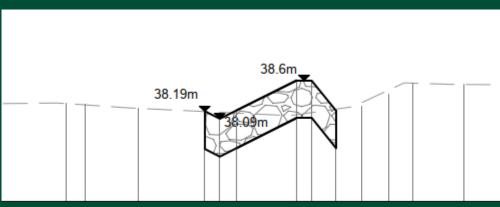
Rymill Park / Murlawirrapuka / Park 14

Slide 8 King Rodney Park / Ityamai-itpina / Park 15

Rehabilitation Works

- Rehabilitation works to include:
 - Desilting removal accumulated sediment
 - Erosion protection rock protect erosion sites and modify jump in King Rodney Park / Ityamaiitpina (Park 15)
 - Hydraulic control structures rock riffles in King Rodney Park / Ityamai-itpina (Park 15) to reduce velocity and weir in Victoria Park / Pakapakanthi (Park 16) to reduce flow rates
 - Revegetation plant riparian zone with native species to improve amenity, water quality and biodiversity
 - Tree protection minimise impact on existing trees.





Rehabilitation Works – Park 13



Rehabilitation Works - Park 13



Rehabilitation Works - Park 13



Rehabilitation Works - Park 15



Park Lands Creek Watercourse Rehabilitation

Recent rehabilitation of Park Lands Creek in Blue Gum Park / Kurangga (Park 20)



Key Questions

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Do Members have any feedback on the proposed Botanic Creek rehabilitation works?

Thank You.



