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Knox City Council

Koolunga Native Reserve **Future Directions Plan** JULY 2023



Acknowledgement of traditional land owners

Knox City Council acknowledges the Wurundjeri Woi-wurrung people and Bunurong people of the Kulin Nation, the Traditional Custodians of all lands within Knox City Council, including Koolunga Native Reserve.

The Knox Aboriginal and Torres Strait Islander Community come from a variety of different Nations within Australia and Torres Strait, including the Traditional Custodians and Stolen Generation. As such we pay respect to all Aboriginal and Torres Strait Islander Elders, past and present, who have resided in the area and have been an integral part of the region's history.

Located at the foot of the Dandenong Ranges, Knox has many places of historic significance to the Kulin nation. Important cultural and historical sites within Knox hold both the traditional knowledge of the First Nations People and the traumatic stories of colonisation.

The journey ahead for Knox involves the land, the traditional custodians, the local Indigenous community, the wider community and the Council itself. Walking together and listening together to create a culturally safe and culturally rich community for all.

Community Vision 2031

“Knox: where we connect with our people and our environment, ensuring they are safe, supported and have every opportunity to thrive.”



Introduction



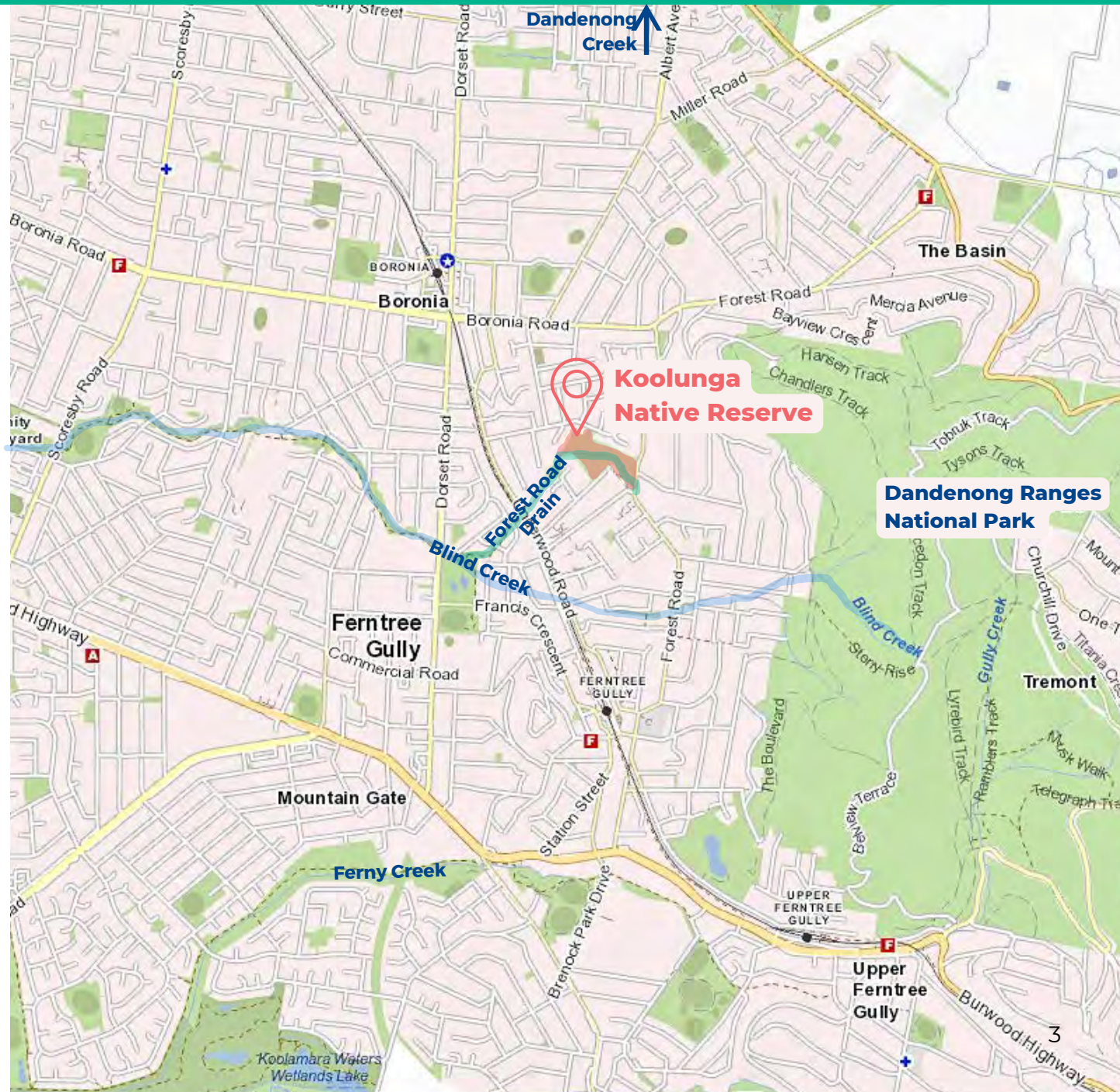
Koolunga Native Reserve

Koolunga Native Reserve is a 6 hectare reserve located in Ferntree Gully on the foothills of the Dandenong Ranges and is located on Wurundjeri land.

It is a 'Site of Biological Significance', one of the top 10 sites in Knox, with over 60% of the reserve being 'remnant bushland'. The site hosts a variety of native flora and fauna including significant and threatened species.

There is an open watercourse that flows through the site, into Blind Creek and later into Dandenong Creek and two kilometers of walking tracks wind through the reserve with two bridges across the watercourse.

The Reserve is highly valued by the local community due to its environmental significance and opportunities for passive recreation.





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1 Introduction



Project Purpose

Koolunga Native Reserve is well used and highly valued by the local community.

Whilst Council along with the Friends of Koolunga have been working diligently to preserve and enhance the natural environment to protect biodiversity, there has been growing concerns about the management of the waterway that runs through the site (Forest Road Drain). These concerns relate specifically to erosion created by stormwater events and the level of pollution in the creek.

Council's proposed plans to introduce a wetlands to improve stormwater in 2018 were not supported by some community members and Council has taken this feedback on board and committed to considering the future directions of the Reserve more broadly, including improved outcomes for the environment and community health and wellbeing.

This document consolidates and draws conclusions from technical studies and community engagement activities which have been carried out over the last couple of years to better inform Council and the community, before establishing future directions. These include -

- Koolunga Native Reserve Values Plan November 2022
- Koolunga Native Reserve and Vaughan Reserve Bushland Management Plan 2022
- Koolunga Stormwater Quality Study 2023

This Future Directions Plan provides clear direction for the protection and future development of Koolunga Native Reserve.



Introduction



Timeline

This Plan responds to a timeline of activities undertaken to improve the Reserve, dating back to 2018.

Over the last 5 years, Council has worked consistently to better understand the local environment including community values and priorities.

An outline of the timeline is shown below.





Strategic Context

The Knox City Council Community Plan 2021-2031 and Council Plan 2021-2025, provide strategic context for the future of Koolunga Native Reserve.

These key strategic documents are based on the community's needs and aspirations, and work together to inform all of the planning and decisions, guiding the future of Knox.

The proposed Future Directions for the Reserve align with the Community Plan key directions (below).



Knox Community Plan Key Directions



Natural environment and sustainability

Knox's natural environment is protected and enhanced to ensure sustainability for future generations.

- Increased tree canopy cover
- More diversity in flora and fauna.



Connection, resilience and wellbeing

Knox is a place to call home. Our community is strong, healthy and we support and respect each other.

- A more active community.
- People feeling safe and secure in the community.
- Increased sense of being valued and sense of empowerment.



Neighbourhoods, housing and infrastructure

Building on what's great about our city, Knox's housing and infrastructure will meet the changing needs of our community.

- Making sure our buildings and community spaces are inclusive and accessible.



Civic engagement and integrity

Knox Council is a trusted and respected leader in our community, acting appropriately and ensuring all voices are heard.

- All voices, not just the loudest ones, need to be heard, listened to and acted on, in an open and respectful way



Planning Context

Koolunga Native Reserve is zoned 'Public Park and Recreation Zone' with the purpose *to recognise areas for public recreation and open space, protect and conserve areas of significance where appropriate to provide for commercial uses where appropriate.*

The Reserve also has several overlays which restrict development based on its environmental significance:

- Environmental Significance Overlay (42.01)
- Schedule 2 to Clause 42.05 Sites of Biological Significance
- Significant Landscape Overlay (42.03)
- Schedule 3 to clause 42.03 Dandenong Foothills: lower slope and valley area
 - The Dandenong Foothills area is a visually sensitive area due to its proximity to slopes of the Dandenong Ranges which are recognised by the National Trust as a significant landscape.

Any future direction actions will need to comply with the Knox Planning Scheme and be sensitive to it's unique landscape qualities and location.

Catchment Context

Koolunga Native Reserve is located at the foothills of the Dandenong Ranges National Park and is one of the early catchments for Blind Creek and later the Dandenong Creek. These both flow through Knox and further south east and provide a key wildlife corridor linking the national park through suburbia.

Figure 2, below illustrates the significance of it's location within the broader Dandenong Creek catchment.

Figure 2 -Koolunga Native Reserve within the Dandenong Creek catchment





Reserve Functions



**Natural
systems &
biodiversity**



**Community
health &
wellbeing**



**Storm water
quality &
management**

Neighbourhood Conservation Reserve

Koolunga Native Reserve is a 'neighbourhood' open space within the broader Knox open space network.

"Neighbourhood open spaces are large parks that are used by a suburb scale catchment. They can accommodate multiple users and types of activities. They should have some special features unique to the suburb. These open spaces have place based relationship involving immediate family, neighbours and friends."

Open Space Plan 2012-2022

It's primary function is as a conservation reserve. Conservation reserves feature significant natural heritage areas, where fragments of the pre-European ecosystem have been preserved and reinvigorated.

Areas of Koolunga Native Reserve are identified as having National Biological Significance due to the presence of critically endangered flora and regionally significant habitat. It is also locally significant due to it's position on the local habitat corridor.

Core Activities

Identified via community engagement for the Values Plan



**Bushland
protection**



Dog walking



Exercise



**Nature
appreciation**



Nature walk



**Social
gatherings**



Relaxing



Informal Play



Environmental Significance

Koolunga Reserve provides critical habitat and breeding options for over 50 recorded bird species. Other important animals include two frog species, galaxias fish, short-finned eels, echidnas, sugar gliders and a large range of insects and water bugs. The site is environmentally significant for the following reasons:

- contains endangered, threatened and rare plant species
- rich levels of biodiversity with over 150 indigenous plant species
- provides prey and roost sites for some Powerful Owls (listed as Vulnerable in Victoria), whose large home ranges include the neighbourhood; and
- two migratory native fish species (Shortfin Eel and Broadfin Galaxias) live in the creek that flows through the reserve.



Cultural Heritage

Knox City Council, located at the foot of the Dandenong Ranges, possesses places of historic significance to the Kulin nation.

Important cultural and historical sites within Knox hold both the traditional knowledge of the First People and the traumatic stories of colonisation. Cultural sites in Knox include campsites, stone tools, scar trees and travelling routes or songlines.

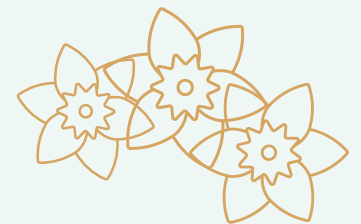
Koolunga Native Reserve is located in close proximity to both the Dandenong Ranges and Blind Creek, both areas of cultural sensitivity.



Local History

The Chandler Boronia and Daffodil Farm operated in Boronia from 1898 to 1971 and was for many years the largest daffodil farm in the southern hemisphere (over 100 acres). The rows of daffodils were bordered by boronia plants with rows of pines (*Pinus radiata*) as windbreaks separating the flower-growing fields.

The existing pine trees are landscape features that reflect and pay respect to the original landscape features and history of the farm, particularly in the eastern end of the reserve. This area contains rows of pine trees (from 50 to 65 years old), bordering paddocks that were used for daffodil growing.





Roles & Responsibilities

Group	Role at Koolunga Native Reserve
Council	Plan for, fund and maintain the Reserve including the drainage systems and for flood mitigation. Fund and support Friends Group. Land ownership and administration, including the Knox Planning Scheme.
Melbourne Water	Waterway manager and referral authority for works within the Reserve that may impact on the waterway.
Friends of Koolunga	Care for the bushland areas and creek line on a volunteer basis. Including weeding, replanting and pest control in collaboration with Council.
State / Federal Government	Referrals / assessments & approvals <ul style="list-style-type: none"> • Planning Scheme Amendments • Administer Environment Protection and Biodiversity Conservation Act



Community Groups

There are several community groups with interests regarding the future of the Reserve and have made significant contributions to planning for the reserve to date.

Friends of Koolunga

A local volunteer group, established in 1994, focusing on positive environmental and community outcomes across the entire area of the Koolunga Native Reserve. Volunteers work throughout every month to preserve and enhance the unique flora and fauna of Knox via hands-on activities, community engagement and education, and other projects supporting biodiversity.

The group advocates for biodiversity values to Council, State government, federal government. Their work is supported by Council management and resourcing, and they also apply for grants to improve the biodiversity of the site. The group also assists Council at the nearby Wirrianda Reserve and Vaughan Reserve, and provides volunteers to facilitate Council-led community activities.

To assist in educating the community the friends host educational walks through the site in partnership with scouts and school groups. Citizen science programs and university partnerships support ongoing monitoring and research efforts.

Knox Environment Society

The Knox Environment Society engages in a number of projects and activities that monitor, protect and enhance the environment and has advocated for Reserve since the 1980's*

Stewards of Koolunga

The Stewards of Koolunga are a group of local residents formed in 2021 in response to the planned wetland in Koolunga Reserve. The Stewards have compiled a report** detailing the connection to the history of the Chandler Boronia and Daffodil Farm at Koolunga Reserve.

*2022 Bushland Management Plan for Koolunga Native Reserve and Vaughan Road Reserve

** Stewards of Koolunga Connection to the history of the Chandler Boronia & Daffodil Farm at Koolunga Reserve

2 The Community



Consultation Outcomes

There have been numerous opportunities for community input into the future directions of the Reserve over the project's history.

Priorities identified by the community during the values plan initiative are shown to the right.

The high levels of engagement show that the reserve is well used and enjoyed by the local community and that there is a strong sense of ownership.

Along with a strong sense of ownership, comes divergent views and expectations often based on personal use, requirements and personal values. While most stakeholders value the natural bushland, there has been some contrast between those who have a preference towards future directions that prioritise conservation and protection, and those who primarily value access to a peaceful open space setting for recreational and social activity.

"You told us you value all the bushland areas, nature reserves, parks, reserves and waterways that Knox has to offer. During the COVID-19 pandemic, many people found a strong connection with nature. We need to continue to protect and enhance our waterways, bushland, nature reserves and parklands, so they will be there for generations to enjoy. We need to find the balance of being able to enjoy these spaces without damaging the natural habitat of our native bird, wildlife and plant species."

Community Vision 2021 Aspiration

Community Priorities

**Highlight
existing
nature and
biodiversity**

**Retain
bushland
and open
spaces**

**Accessibility
wayfinding
and parking**

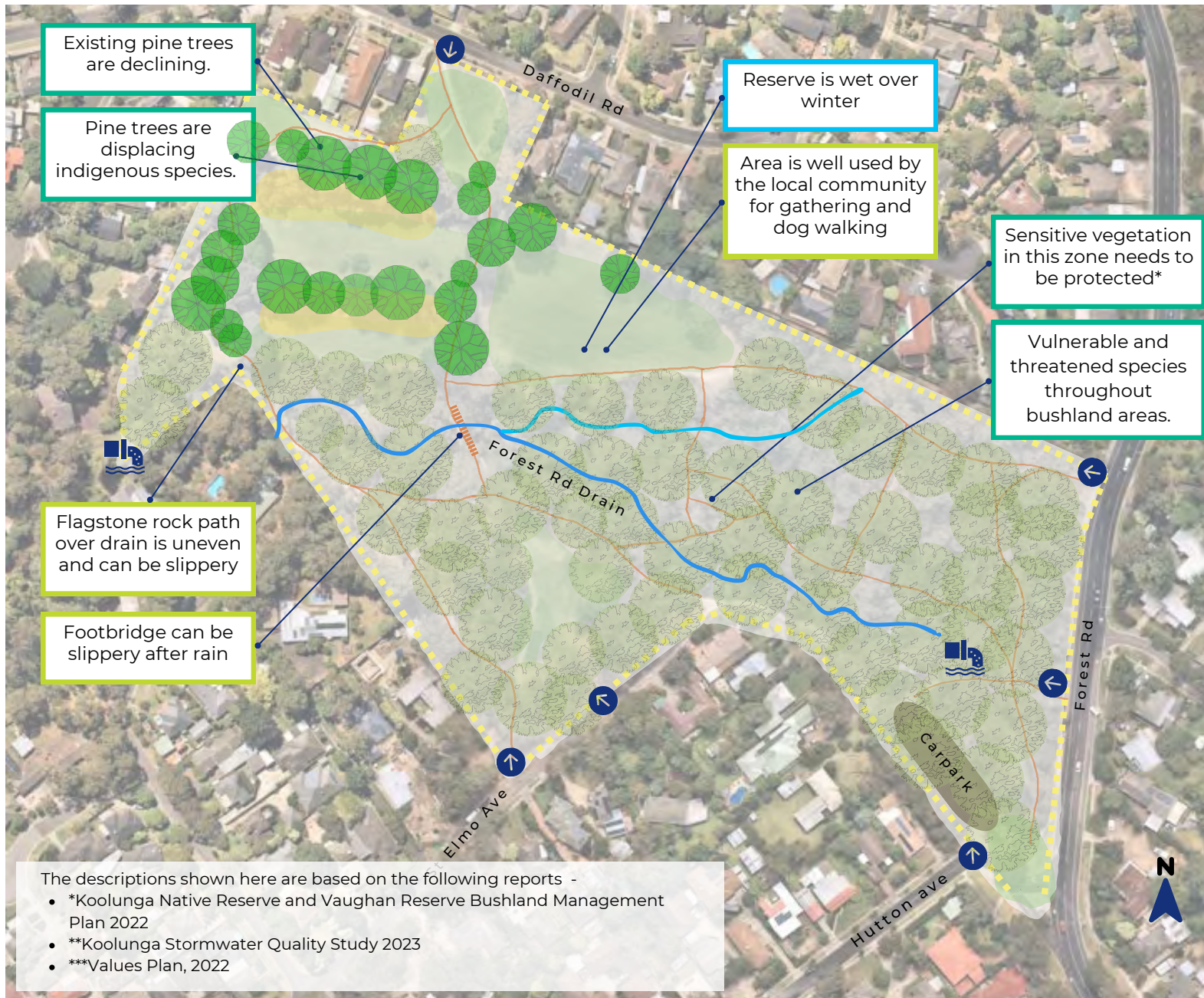
**Improve
water
quality**

**Create a
maintenance
plan**

3 The Site



Existing Conditions and Challenges



Existing conditions and challenges



- Vulnerable and threatened plant species need to be protected*
- Death of stream life such as fish and invertebrates when the watercourses run dry or after large rain events due to intensity of water flow**
- Ecological decline of the vegetation due to the drying climate, depth of the water table unnaturally high populations of possums*
- Friends of Koolunga provide many hours of volunteer assistance and are highly valued*
- Existing environmental education signage is in need of renewal*



- Water quality is poor - water pollution, e.g. toxins, turbidity and excessive nutrients*
- Erratic stream flows with very high flows during rainfall events (causing erosion/damage) and no flow for extended periods**



- Lack of accessible seating in some areas and some furniture reaching end of life***
- Open grass areas are muddy throughout wet months**
- Bridges and rocky path areas may be unsafe after rain***
- Dog waste not collected and dog poo bags left on site*
- DDA compliant path is not connected throughout the reserve***

Legend



Reserve entry/
exit point



Existing Pine
trees



Existing trees



Indigenous
understory
vegetation



Forest Road
Drain



Existing trails



Existing open
space



Stormwater
outlet