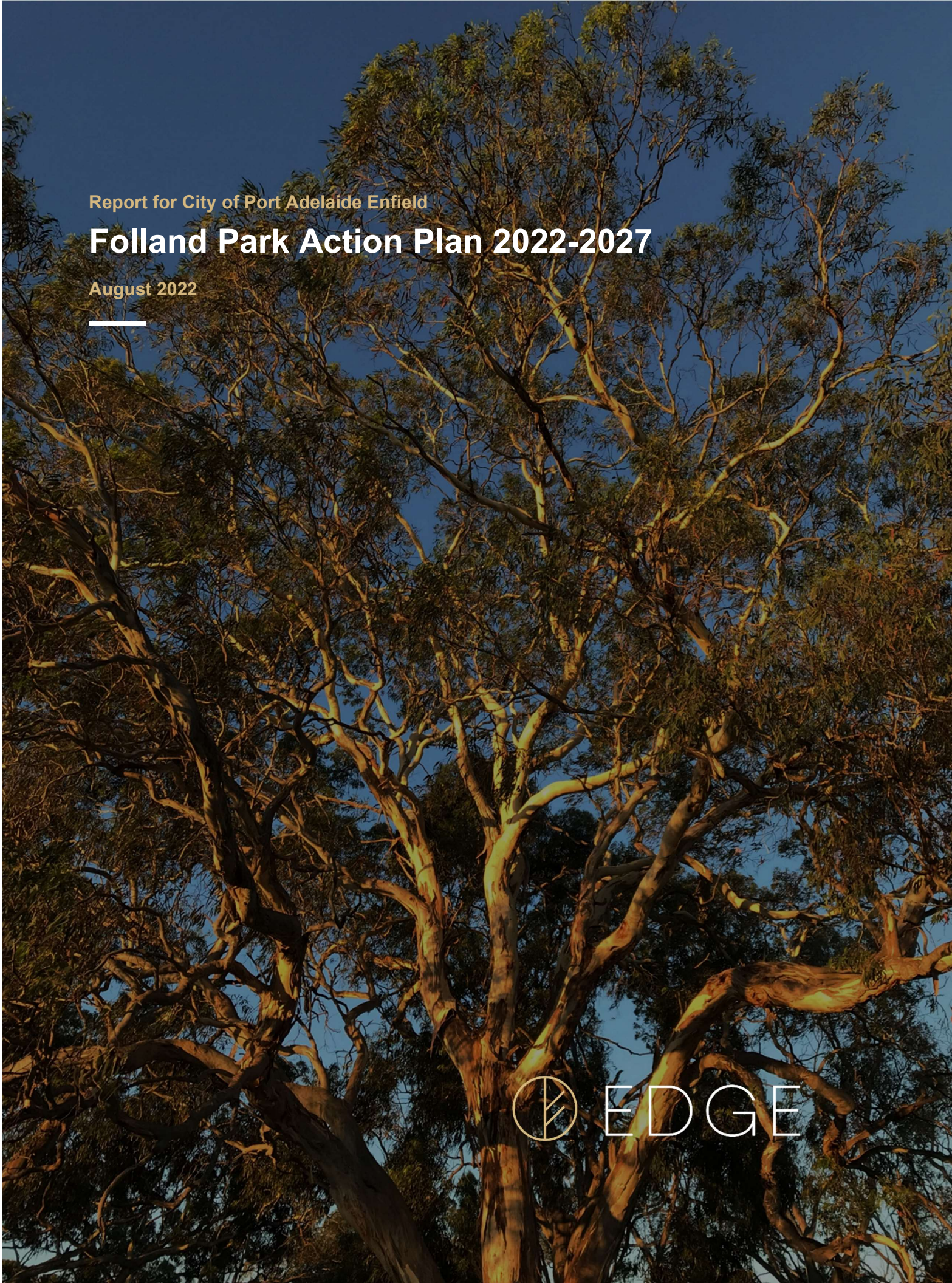

Report for City of Port Adelaide Enfield

Folland Park Action Plan 2022-2027

August 2022

EDGE

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Executive Summary

The City of Port Adelaide Enfield (Council) has a strong and practical commitment to enhancing and conserving biodiversity within their region, including managing Folland Park (the site), a 3.5-hectare habitat patch comprised of significant remnant vegetation that once covered much of the Adelaide Plains. The site, located in Enfield, is covered under a Heritage Agreement established in 1989 and has an active citizen-science program (BioCollect) and a volunteer management program, led by Trees For Life.

To help manage and improve ecological value within the site over the next five years, Council engaged Edge Environment (Edge) to develop this Folland Park Action Plan (FPAP). The aim of the FPAP is to provide a practical resource document for the community and land managers to assist in achieving on-ground works that enhance current native vegetation and biodiversity assets, together with recreation opportunities.

The FPAP has been developed through a co-design process through inviting input from Council as well as Trees for Life, the Enfield Memorial Park, Enfield Kindergarten, and Green Adelaide. Based on input received from these stakeholders, together with desktop reviews, analysis of the Urban Ecological Value score for the site, and specialist urban ecology expertise provided by Edge, 31 priority actions have been identified for implementation over the next five years. These 31 actions have been categorised into the following six Focal Areas:

1. Build Knowledge and Understanding;
2. Manage Pest and Weed Species;
3. Encourage Native Species;
4. Manage Infrastructure;
5. Community Engagement; and
6. Monitoring and Evaluation.

Actions have also been allocated a relative prioritisation based on a multi-criteria analysis. Based on this analysis, two actions are considered of low priority, ten of medium priority, 15 as high priority, and four as very high priority. The four very high priority actions span the four Focal Areas as follows:

- Focal Area 2, Action 2.2: Remove existing declared weeds;
- Focal Area 3, Action 3.1: Manual dispersal of seed to assist germination for endemic species including threatened species, where possible and in alignment with Heritage Listing requirements;
- Focal Area 4, Action 4.2: Develop signage to deter illegal incursions into Folland Park; and
- Focal Area 6, Action 6.3: Review and update the BioCollect citizen-science platform to include a broader range of species (additional to birds) and communicate this broadly. This may include provision of training to community volunteers and interested local residents in how to use the BioCollect platform.

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1 Introduction

The City of Port Adelaide Enfield (hereafter, 'Council') covers an area of approximately 97km^2 ranging from North Haven in the west to Gilles Plains in the east. This area encompasses numerous significant ecosystems including near marine and coastal dunes, inter-tidal mangrove forests, the River Torrens riparian corridor, and lowland native woodlands. Across the area, Council manages over 100 reserves that provide important resources for local biodiversity and also add value to the local community.

Council has a long-established strong and practical approach to enhancing and conserving biodiversity within their region, with this being reflected by undertaking regular, repeated biodiversity monitoring at a selection of locations across the region, and further supported by:

- a commitment in the City Plan 2030 to: "Protect, restore, and promote the city's natural environment, biodiversity, and ecological services…"; and
- a commitment to the development of a City-wide Biodiversity Strategic Management Plan[1] that will focus on strategies around protecting and enhancing the City's biodiversity across coastal, marine, freshwater and terrestrial landscapes and help provide direction in delivering biodiversity outcomes on the ground.

One of the largest terrestrial reserves managed by Council is Folland Park (Figure 1), a nearly 4-hectare reserve located within Enfield. This site is fully fenced and inaccessible to the Public (without explicit Council permission). It is significantly isolated within the broader landscape, being bounded to the north, south, and west by suburban roads and medium-density residential housing, and to the east by the Enfield Memorial Park. Though entirely Council owned, a small portion (~0.1ha) of the site along the northern boundary is designated for use by Enfield Kindergarten (Figure 1).

Though relatively small and highly isolated, the site comprises one of the best remaining examples of remnant mallee box (*Eucalyptus porosa*) woodland, a system that once covered a large portion of the Adelaide Plains[2]. The site also coincides with the historical location of a distinctive expanse of native pine (*Callitris gracillis*) forest, with the combination of these vegetation types being relatively unique across the Adelaide Plains[2]. Whilst much of this historical vegetation extent has since been cleared and replaced with urban development, Folland Park remains a vestige of this original vegetation. The site's vegetation is therefore considered to be ecologically and historically significant within the local area, and it is protected and managed under a Heritage Agreement established in 1989.

The management of native vegetation within Adelaide's metropolitan area remains a conservation priority, particularly given that much of the region has been heavily modified. As urban development expands, there is increasing pressure on landscapes to provide multiple uses, including public recreation and open space and biodiversity conservation.

To guide ongoing management of Folland Park, Council engaged Edge Environment (Edge) to develop the Folland Park Action Plan (FPAP). The information contained and updated as part of this plan, will assist land managers in making key decisions towards the long-term conservation and management of biodiversity values within the area. However, this Plan is also intended to provide a practical resource document for land managers and community groups, alike, to assist in implementing and monitoring on-ground works that will enhance the ecological value of the site and create opportunities for positive community engagement and education.

[1] Under development at the time this Action Plan was being developed.

[2] https://data.environment.sa.gov.au/Content/Publications/Forests_Woodlands_Ad_Plains_1836.pdf

1.1 Objectives of the FPAP

The main objectives of the Plan are:

- Contextualise the Plan within existing Council strategy/policy documents;
- Describe the current status of Folland Park and management actions;
- Quantify the current ecological value within the site;
- Identify and prioritise actions to enhance and protect the site's ecological value; and
- Provide a monitoring and evaluation framework for implementation of actions within the site.

The Plan is intended to be a readily accessible, practical document able to support strategic planning and practical actions by Council officers and community volunteer groups, alike. The intended audience is intended to be, but not limited to, Council (Parks and Gardens staff), Community Groups (especially Trees for Life; TFL), the kindergarten, key neighbours including the Memorial Park, Universities, researchers, and the local community.

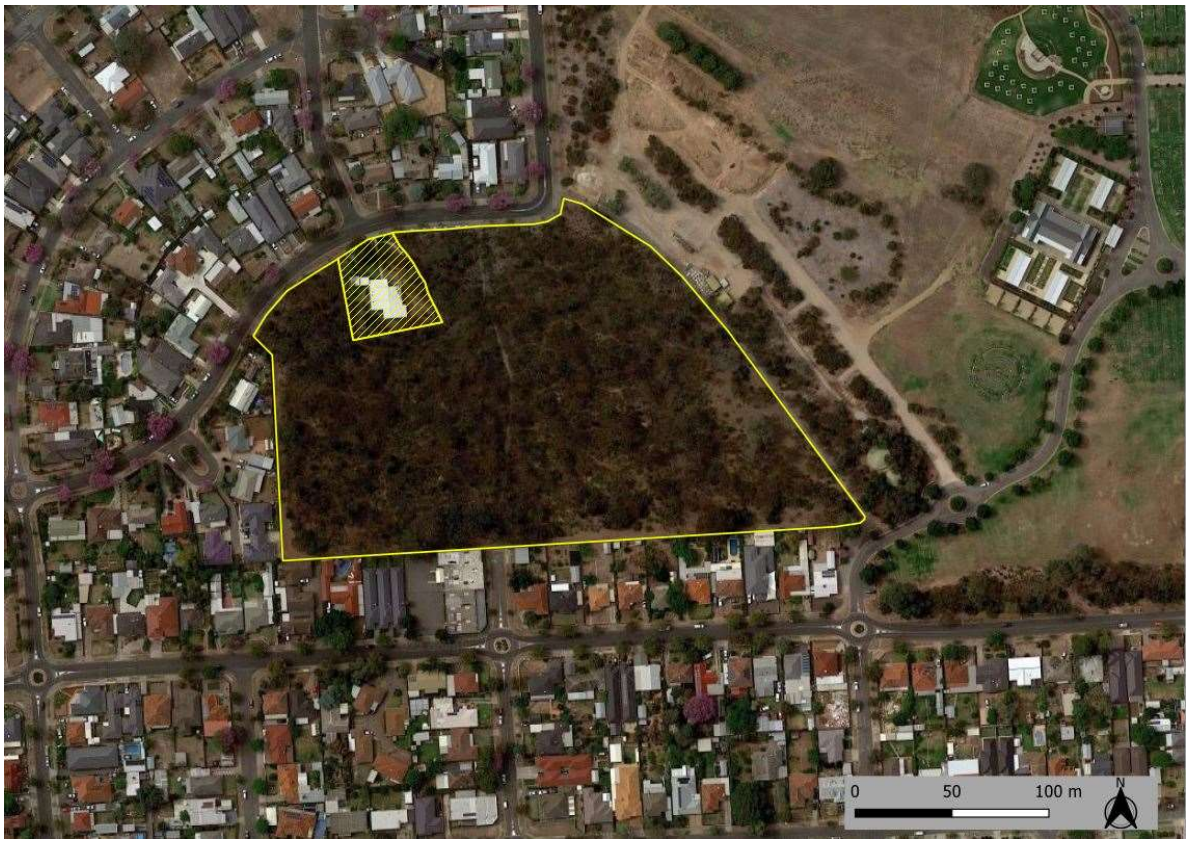

Figure 1. Folland Park (yellow boundary) showing approximate area of land designated for kindergarten use (yellow lined).

2 Strategic Context

As a practical, on-ground implementation plan, the FPAP sits below, and responds to, a hierarchy of State and local Strategies and Plans (Figure 2, Annex A). It should be noted though, at the time of writing this Plan, both the State Government's Urban Greening Strategy and Council's Biodiversity Strategic Plan 2022-2027 were also under development. Consultation with Council and the State government formed a part of developing this Plan to ensure that key connection points between all documents were established.

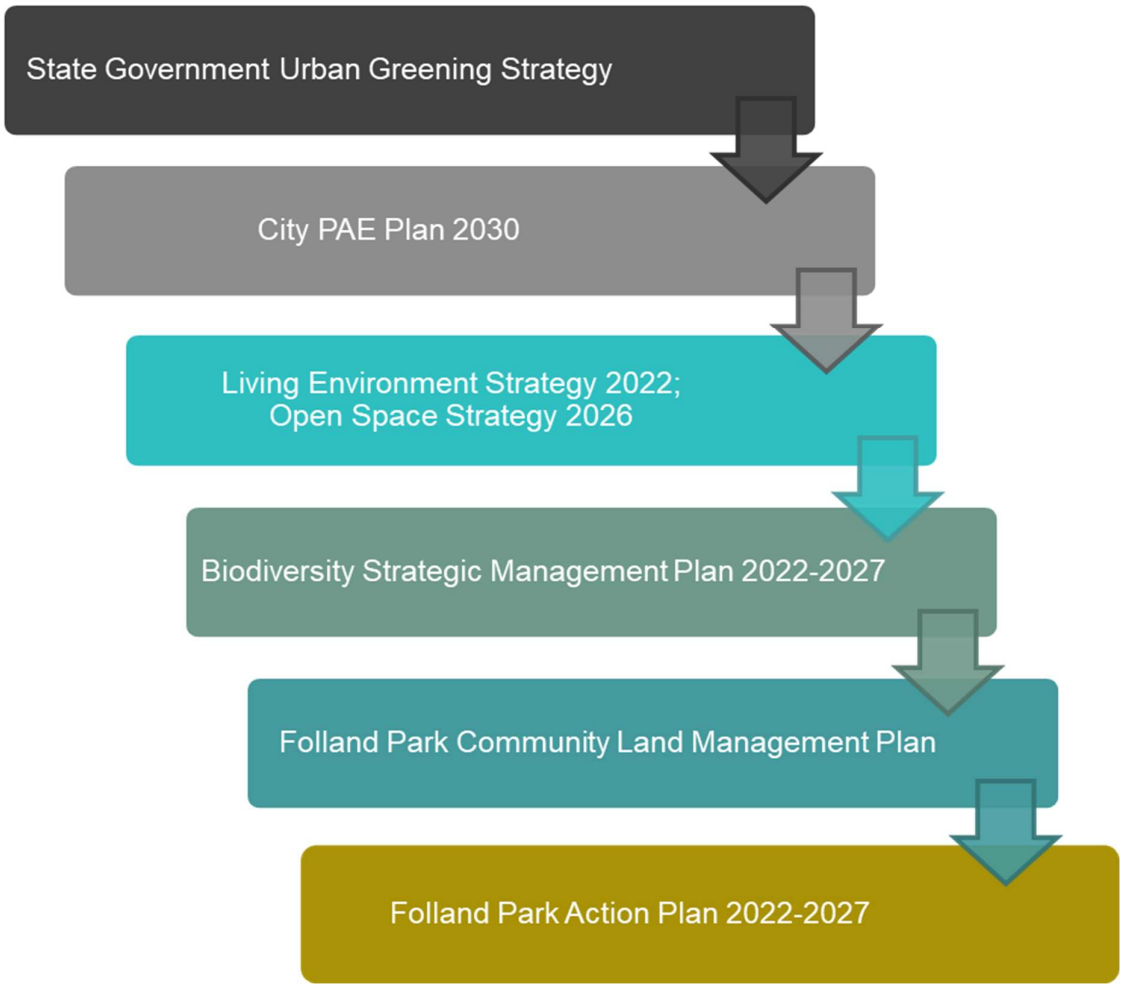

Figure 2. Folland Park Action Plan strategic context.

3 Developing the Action Plan

The development of the FPAP included a multi-staged approach comprising four distinct stages of work (Figure 3).

Stage 1 of the project included two foundation workshops: one with community stakeholder representatives from Enfield Memorial Park and Trees For Life; and the other with Council officers and Green Adelaide staff.

- The purpose of the foundation workshops was to understand current actions and their relative success occurring within the site, conservation priorities of each group, and desired ongoing actions and targets for the site (see Section 3.1).

Stage 2 of the project involved a desktop review of available documents and species databases relating to the site, review of available spatial datasets of conservation actions and park assets, and application of Edge's Urban Ecological Value (UEV) tool to establish a baseline ecological value score for the site (see Section 3.3).

Stage 3 centred on development of the draft FPAP and 2 more workshops with the same stakeholders from Stage 1 to allow for review and feedback on the draft Plan.

Stage 4 constituted completion of the final Plan, collating feedback received in Stage 3.

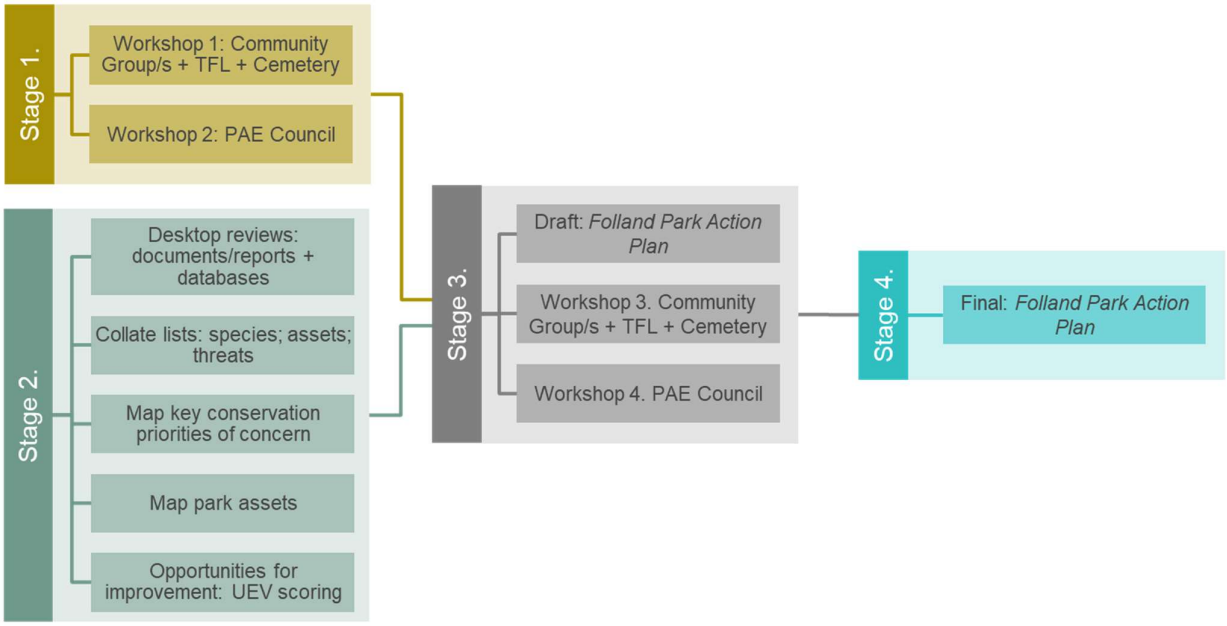

Figure 3. Approach to developing the Folland Park Action Plan.

3.1 Foundation workshops

The foundation workshops provided the framework for developing the FPAP through a co-design process. This approach recognises the important roles that multiple stakeholders play in helping to manage, protect, and champion the site and its legacy. The Foundation workshops invited key representatives of Council, Green Adelaide, Enfield Memorial Park, and Trees For Life to provide their input into the Plan development.

The aims of both workshops were to:

- Document the conservation priorities of all parties;
- Understand past and current management of the site, specifically successful and non-successful actions and any key challenges; and
- Document feedback from all parties related to scope and desired outcomes from the revised Action Plan.

To accommodate as many people as possible, the workshops were designed to enable people to participate in-person or remotely online. The MURAL platform was used to guide activities and capture comments and ideas (Annex B). In addition, all stakeholders were invited to provide any additional comments following the workshop, to ensure that the greatest opportunity was provided to all relevant stakeholders to provide input.

3.2 Desktop reviews

Field surveys were not undertaken as part of developing this Action Plan. Instead, species occurrences at the site were derived from a review of online database (Table 1) together with available independent consultant reports (Table 1). Whilst this review is considered to have provided a many of the species occurring at the site, it should not be considered comprehensive; ongoing flora and fauna monitoring should be undertaken regularly at the site to help build a more comprehensive understanding of species diversity within the site across seasons and years.

The compiled species list was used as input into the UEV tool (see Section 3.3). Only confirmed species records from within the last five years (2017-2022) were included given the highly dynamic nature of urban landscapes. Further, records provided only at taxonomic levels coarser than Genus were also excluded, as were two records considered to be a misidentification and an escaped pet[3].

In addition to collating a species list for the site, a review of Council's spatial datasets and mapping was undertaken to generate maps and quantify the site's shape, size, and general landscape context for UEV scoring purposes.

Table 1. Desktop review species data sources.

Source	Details
eBird	Global database; bird records only. https://ebird.org/
Atlas of Living Australia (ALA)	National database; flora and fauna records; compiled from a range of sources, including PAE surveys and BioCollect. https://www.ala.org.au/
FrogID	National database; frog records only. https://australianmuseum.net.au/get-involved/citizen-science/frogid/
FrogWatchSA	State database; frogs records only. https://www.frogwatchsa.com.au/learning-resources/frogs-in-sa

[3] A single record of an Australian raven (*Corvus coronoides*), is considered a misidentified little raven (*C. mellori*), as the Australian raven distribution does not tend to extend into the Adelaide Plains region. A single record of a coconut lorikeet (Trichoglossus haematodus) is considered to be an aviary escapee.

Source	Details
iNaturalist	Global database; flora and fauna records. https://www.inaturalist.org/
NatureMaps	State database; flora and fauna records. https://data.environment.sa.gov.au/NatureMaps/Pages/default.aspx
O'Sullivan, S. Invertebrate Study for a Masters Thesis (Forthcoming).	The invertebrates identified in this study were not identified at the species level, as such, they were not able to be included for consideration in the UEV tool. However, they have been considered in the overall context of this FPAP.
Rust, H. (unpublished), Folland Park / Northgate Reserve – Enfield Micro-bat survey data.	'Suspected' species not included. One week's worth of data from survey undertaken in summer/autumn 2022.
Folland Park Species List	Excel spreadsheet based on bush for life sites and provided by Council for the purposes of this project. Noting that TFL comment the list and associated maps need updating.

3.3 UEV scoring process

Edge's Urban Ecological Value tool has been designed specifically for application within highly modified urban sites. Other tools that support quantification of biodiversity or habitat value have been developed for use in non-urban landscape, often scoring metrics relative to a remnant state. In urban highly modified and managed urban landscapes though, comparisons with a remnant status are unrealistic as achieving remnant condition in most urban areas is practically impossible. Even within Folland Park, an area that represents some of the best remaining example of the remnant vegetation, the habitat is highly modified and managed and unlikely to ever operate in isolation at the same level as a remnant system.

However, whilst not readily comparable to a remnant condition, urban areas still provide critical habitat and connectivity resources for numerous species. In fact, urban areas are likely to increasing become conservation custodians of climate refugee flora and fauna species. A number of local, patch, and landscape level attributes contribute to the ecological value of a site, and it is these attributes that the UEV focuses on quantifying to develop an overall UEV score. The ecological score of a site is a measure of the site's suitability or potential to support native biodiversity and healthy ecosystem functioning. By understanding the attributes that have contributed to the UEV score (either negatively or positively) it is possible to generate a UEV target score and derive management actions that will help to achieve the target score over time.

Note that the UEV score for a site is intended to provide an improved understanding of elements that drive high functioning biodiverse systems, those that negatively influence system functioning, highlight where management actions may be applied to improve biodiversity within a site, and allow for monitoring of changes in biodiversity within a site. The score is not intended to be directly compared to another site's score as a way of ranking site value. Further, scores are intended to help identify management options and assess change over time within a site – as a way of assessing the impact of landscape change or effectiveness of management actions. Further, the scoring process is based on widely accepted influences on species diversity and should be used as a guide for decision-making and monitoring; it does not proclaim to be exhaustive of all influences on biodiversity or ecological value.

For each site, the scoring is comprised of two compound scores, each of which is a composite of a number of scored input metrics (Annex C):

1. Species score, combines:
   - Species origin score and Species conservation score (e.g. native to Australia or introduced; threatened species, or declared weed/pest);
2. Site score, combines:

- Species diversity score and Class diversity score (i.e. number of different flora and fauna species, and number of different classes);
- Structural complexity of vegetation (e.g. ground, shrub, midstorey, canopy, emergent);
- Occurrence of hollow-bearing trees, stags, logs;
- Presence of water (permanent or ephemeral);
- Site area (small to very large);
- Site compactness (perimeter:area ratio relative to a circle); and
- Visual landscape connectivity (connected, stepping-stone, isolated).

Based on this, a site with a higher ecological score will tend to have:

- more native species present across a range of classes;
- more threatened species and fewer (if any) introduced or declared weed/pest species;
- greater structural complexity;
- more hollow-bearing structures;
- permanent, deep water on site;
- a larger and more circular shape; and
- a more connected landscape context.

Comparatively, a lower ecological score will be driven by: fewer native and threatened species, more introduced and pest/weed species, less diversity in taxonomic classes and structural complexity, a lack of water and hollow-bearing structures, a size and shape that is smaller and more linear, and increased isolation in the landscape.

3.4 Action development and prioritisation

Management actions (see Section 6) were derived from input to the foundation workshops together with learnings from the desktop review, the UEV scoring, and professional knowledge. All actions were assessed through a multi-criteria analysis in which a set of ranked criteria are applied to determine the relative implementation priority for each action. The following criteria were applied herein:

- Completion timeframe;
- Cost of implementation;
- Delivery skills/capacity;
- Feasibility;
- Expected ecological benefit;
- Long-term financial plan impact;
- Monitoring frequency

These criteria generally will mean that that highest priority actions are those able to be completed quickly, relatively cheaply, with existing skills/know how, and with the greatest projected ecological benefit. Comparatively, low priority actions are those that will take a long-time to complete, will require specialist skills/know how, be costly to deliver, and will have a relatively low ecological benefit.

Prioritisation of actions are not prescriptive and should be used as a guide only, as there will likely be actions deemed a high implementation priority despite this not being reflected in the prioritisation scoring. This is because the ranking of criteria are not weighted, meaning that an action may be prioritised, for example by Council based on a single criteria alone, regardless of other criteria.

For example, an action may have a high ecological benefit, but it may be difficult to achieve, take a long time to complete, and be very costly. As such, it is likely to have a low relative prioritisation rank. However, the high ecological benefit may compel Council to prioritise this action despite the likely challenges.

4 Current Status and Management

4.1 Heritage Status

In September 1989 the Minister for Environment and Planning registered a Native Vegetation Heritage Agreement over the Site for the purposes of conservation of native vegetation and native fauna (by virtue of the *South Australian Heritage Act 1978-1980*). As such, the site is subject to strict management rules.

As per the *South Australian Heritage Act 1978-1980*, Council should not undertake or allow someone else to undertake any of the following activities without the permission of the relevant Minister responsible for administering the heritage legislation:

- clearance or planting of native vegetation;
- planting of vegetation (whether native or exotic);
- grazing of stock; or
- the construction of a building or other structure.

4.2 Actions within Folland Park

Numerous points of input were received from Council, and Trees for Life and Memorial Park representative during the foundation workshops (Annex B). The key common messages received are summarised below within the framework of:

- actions that are currently working well and should be continued (successes);
- priority considerations within the site (conservation priorities).
- actions that are not working well or are difficult to implement and may need to be ceased or altered (challenges); and
- potential new actions or directions that are considered beneficial moving forwards (opportunities)

The input provided has been used to inform development of the priority actions for the next 5 years (see Section 6).

4.2.1 What are the key successes to date?

- The Park is generally well protected – the Heritage Status of the park together with boundary fencing and the locked gate policy has largely protected the site from many of the urban-related disturbances experienced extensively elsewhere that people and domestic animals are permitted to roam freely (e.g. increased weed incursions, trampling of native vegetation, disturbance of wildlife, inappropriate and undesirable behaviours, and motorbike/push bike off track use).
- The Park is generally well managed – Trees For Life (TFL) undertake substantial work helping to manage the park, including: collection and dispersal of native seeds; woody weed monitoring and control; mapping locations of weeds and other pests requiring management (
-
-
- Figure 4 - though note this information is needing updating), and regular surveys of BCM plots within the sites (
-
-
- Figure 4);

    - though is the BCM approach the most appropriate for information ecological value and management of an urban patch?

- Management partnership between Council and Enfield Memorial Park – a positive line of open-communication and mutual support exists between Council and Enfield Memorial Park, including for instance, planting of Folland Park sourced seeds within Memorial Park along the shared boundary.

Figure 4. Management actions and priorities within Folland Park as of January 2021. Map provided by City of Port Adelaide Enfield.

4.2.2 What are the key conservation priorities?

- Better management of pest species – of particular concern within the park are foxes, European honey bees, and domestic cats. There is a need to manage these pests as a priority.
- Ongoing weed management – whilst weed control is an ongoing action within the park, there is a need to focus key problem species, such as annual grasses.
- Increase native plants within the park and representation in the surrounding areas – a focus within the park will be to expand the high biodiversity core areas adjacent to the TFL storage box (see Figure 4), and also increase representation of plants from Folland Park to outside the park boundaries, such as along street verges, within Memorial Park and through the establishment of pocket parks (using local provenance seed collections);
- Fire management – the 5-8m fire track buffer around the park boundary must be regularly maintained.

Detailed, regular and repeated flora and fauna surveys - given the site's relatively small area, flora and fauna surveys plots (see

- Figure 4) could be realistically expanded to transects that provide more complete coverage of the site. Further, reptile species occurrences within the park are not understood and should be a focus for improved knowledge.
- Educational signage – signage that increases awareness, understanding, and support of Folland Park management should be erected around the Park and within Memorial Park, particularly around the shared boundary to raise awareness of the links between plantings and natural burials in this culturally sensitive area.

4.2.3 What are the key challenges being faced?

- Heritage status – presents substantial restrictions to planting activities and also public access which could help to build local resident awareness and appreciation of the park. However, these limitations are partly responsible for the current reduced disturbance within the park that come from public access.
- Fence maintenance - fences are not currently well maintained or regulated. For example, a recent housing development on the southern boundary removed a section of the Park fence but has failed to reinstate it.
- Feral fox, domestic cats, and annual grass weeds – incursions of these species into the park have proven difficult to manage.
- Transparency and continuity of information – ensuring ease of access to relevant information will be a challenge moving forwards. For example, the previous management plant for the park was very poorly known by volunteers managing the park.

4.2.4 What are the opportunities moving forward?

- Work with the Memorial Park to ensure future proposed activities and developments (e.g. artificial night lighting) within Memorial Park does not negatively impact on Folland Park's flora and fauna assemblages.
- Engage and educate the local community about Folland Park significance through multiple avenues, including, for example:
    - regular guided walks through the park (night and day);
    - engaging and informative signage around the Park but also within Memorial Park;
    - capitalising on TFL community planting days;
    - training in how to use citizen science apps; and

- information sessions/sources at Council libraries.

- Technological solutions to help manage foxes and understand the level of predation by cats, such as tracking devices and cameras able to distinguish foxes and felines from native wildlife, and deterrent options such as Fox Watch[4].
- Enhance biodiversity and ecological value within the Park through:
  - increased vegetation buffers and plantings within the surrounding landscapes using local provenance seeds.
    - This would require collaboration with business stakeholder and adjacent residents.
    - Increase verge plantings using local native understory species for insects and biodiversity - heritage status permitting.
  - installation of artificial wildlife resources to attract native species. For example, insect hotels and bird- and microbat- boxes;
  - expanded, and repeated long-term flora and fauna surveys, with a focus on reptiles, invertebrates, and orchids.

[4] https://www.easypestsupplies.com.au/fox-watch-ultrasonic-deterrent

5 Ecological Value Score

	FAUNA DIVERSITY		
	Total: 62	**Native:** 56	**Introduced: 6**
	FLORA DIVERSITY		
	Total: 101	**Native:** 64	**Introduced:** 37
	CLASS DIVERSITY		
	Total: 7	**Fauna:** 4	**Flora:** 3
	STRUCTURAL COMPLEXITY		
	Total: 4	Ground, Shrub, Midstorey, Canopy	

The calculated UEV score for Folland Park is 498.12 (Annex C). This score includes an evaluation of the site's: flora and fauna diversity, patch dimensions and habitat complexity, and landscape context. The following sections provide further insights into key points of interest and influences on the score.

5.1 Species Diversity

A total of 163 species were identified through a desktop review, comprising 62 fauna species and 101 flora species. Of these, 9.6% of fauna and 37% of flora species were introduced. Annex D provides a list of all species identified. It is important to note that the species records are not considered a comprehensive list of occurrences, and so without any additional management actions, the UEV is likely to be higher given species occurrences that are currently unrecorded for various reasons. For example, the lesser long-eared bat (*Nyctophilus geoffroyi*) is a notable record closer to the city and is likely responding to tree hollows and lower light pollution within the Park. However, this species is semi-nomadic and was not detected during the autumn. Detailed and repeated surveys of the site will help to generate a more comprehensive list UEV score.

5.1.1 Threatened species

Of the species recorded, a total of two fauna and 18 flora species were identified as threatened at the regional, State, national or international level (Table 2). An additional two bird species and 13 plant species are considered near threatened or near endangered within the Adelaide Mount Lofty Ranges (AMLR) region (Table 3). Encouraging threatened species into the site through plantings or provision of wildlife habitat resources (e.g. nest boxes) will improve the ecological value at the site and help to achieve a UEV stretch target score (see Section 5.4).

Table 2. Threatened Species recorded within Folland Park.

		Conservation Status			
Scientific Name	**Common Name**	**AMLR**	**State**	**Nat'l**	**Int'l**
Fauna					
Cereopsis novaehollandiae	Cape Barren goose[5]	LC	**RA**	LC	LC
Melanodryas cucullata	Hooded robin	**CE**	**RA**	LC	LC

[5] Record is considered a fly-over observation.

Scientific Name	Common Name	Conservation Status			
		AMLR	State	Nat'l	Int'l
Flora					
Acacia acinacea	Wreath wattle	**RA**	LC	LC	LC
Acacia ligulata	Umbrella bush	**RA**	LC	LC	LC
Acacia notabilis	Notable wattle	**EN**	LC	LC	LC
Acacia pendula	Weeping myall	LC	**VU**	LC	LC
Austrostipa multispiculis	Many-flowered spear-grass	**RA**	**RA**	LC	LC
Austrostipa platychaeta	Flat-awn spear-grass	**RA**	LC	LC	LC
Comesperma volubile	Love creeper	**RA**	LC	LC	LC
Crassula sieberiana	Sieber's creeper	**VU**	**EN**	LC	LC
Eremophila deserti	Turkey-bush	**VU**	LC	LC	LC
Eucalyptus dumosa	White mallee	**VU**	LC	LC	LC
Eucalyptus socialis ssp. *socialis*	Beaked red mallee	**VU**	LC	LC	LC
Myoporum platycarpum ssp. *platycarpum*	False sandlewood	**VU**	LC	LC	LC
Rhagodia parabolica	Fragrant saltbush	**RA**	LC	LC	LC
Rytidosperma tenuius	Short-awn wallaby-grass	**RA**	**RA**	LC	LC
Senna artemisioides ssp. *filifolia*	Fine-leaf desert senna	**RA**	LC	LC	LC
Teucrium racemosum	Grey germander	**RA**	LC	LC	LC
Thysanotus baueri	Mallee fringe-lily	**VU**	LC	LC	LC
Vittadinia cervicularis var. *cervicularis*	Waisted New Holland daisy	**RA**	LC	LC	LC

Note: RA = Rare, VU = Vulnerable, EN = Endangered, LC = Least Concern

Table 3. Regionally classified near threatened or near endangered species recorded within Folland Park.

Scientific Name	Common Name
Fauna	
Glossopsitta porphyrocephala	Purple-crowned lorikeet
Rhipidura leucophrys	Willie wagtail
Flora	
Arthropodium fimbriatum	Nodding vanilla-lily
Atriplex suberecta	Lagoon saltbush
Austrostipa drummondii	Cottony spear-grass
Calandrinia eremaea	Dryland purslane
Clematis microphylla	Old man's beard
Convolvulus angustissimus	Australian bindweed
Eucalyptus porosa	Mallee box
Goodenia pinnatifida	Cut-leaf goodenia
Hardenbergia violacea	Native lilac
Lomandra effusa	A grass-like plant
Pittosporum angustifolium	Native apricot
Sarcocornia quinqueflora (syn. *Salicornia quinqueflora*)	Beaded samphire
Stackhousia monogyna	Creamy candles

5.1.2 Declared pest and weed species

Of the 163 recorded species, two fauna and five flora species were identified as declared species (pests/weeds) at the State or national level (Table 4, Annex D). Management of State declared weed and pest species must be undertaken in accordance with the relevant Class, Category and Provisions as listed within the *Landscape South Australia Act 2019* (LSA)[6] (Table 4). Management advice for nationally listed pests and weeds can be found online via:

- https://www.awe.gov.au/biosecurity-trade/invasive-species/feral-animals-australia,
- https://www.feralscan.org.au/, and
- https://weeds.org.au/weeds-profiles/.

An additional four plant species are listed regionally as environmental weeds or alert weeds (Annex D). Controlling weed and pest incursions are a critical management action for the site, but also a significant challenge (Section 4.2). Eradication of declared pests and weeds from the site will enhance ecological value at the site and achieve the UEV target score proposed below (see Section 5.4).

Table 4. Declared pests and weeds recorded within Folland Park.

		Conservation Status				
Scientific Name	**Common Name**	**AMLR**	**State**	**Nat'l**	**Int'l**	**LSA Provisions[5]**
Fauna						
Felis catus	Cat	**DP**	**DP**	LC	LC	Class 4, Category 3 Provisions: 189, 191(1)
Sturnus vulagris	Common starling	LC	**DP**	**DP**	LC	
Vulpes vulpes	European fox	**DP**	**DP**	**DP**	LC	Class 5, Category 2 Provisions: 186(1)(3), 87(1), 188, 189, 192(2)
Flora						
Asparagus asparagoides	Bridal creeper	**EW**	**DW**	**DW**	LC	Class 19, Category 2 Provisions: 186(2), 88(1)(2), 192(2), 194
Euphorbia terracina	False caper	LC	**DW**	LC	LC	Class 46, Category 3 Provisions: 186(2), 188(1)(2)
Lycium ferocissimum	African boxthorn	**AW**	**DW**	**DW**	LC	Class 19, Category 2 Provisions: 186(2), 188(1)(2), 192(2), 194
Marrubium vulgare	Horehound	LC	**DW**	LC	LC	Class 38, Category 3 Provisions: 186(2), 188(1)(2), 192(2), 194
Olea europea[7]	Olive	**EW**	**DW**	LC	LC	Class 27, Category 2 Provisions: 192(2)(3), 194
Tribulus terrestris	Caltrop	LC	**DW**	LC	LC	Class 19, Category 2 Provisions: 186(2), 88(1)(2), 192(2), 194

Note: DP = Declared pest, DW = Declared weed, EW = Environmental weed, AW = Alert weed, LC = Least concern.

[6] Further information relating to requirements of relevant provisions of the LSA can be found at: https://www.legislation.sa.gov.au/__legislation/lz/c/a/landscape%20south%20australia%20act%202019/current/2019.33.auth.pdf

[7] Excludes planted, used and maintained for domestic, public amenity or commercial purposes

5.2 Site dimensions and landscape context

Folland Park is a small-sized site within a residential suburban landscape context. The reserve is relatively compact in shape, with a perimeter:area ratio (PAR) of 0.882[8]. This is important as a more compact shape helps to minimise the depth of edge effects, creating a greater area of core habitat, and so supporting disturbance-sensitive species. However, the overall small size of the site and its high isolation within the landscape will greatly limit native fauna diversity able to access and live within the site. Though small and isolated, the unique vegetation community protected within Folland Park gives this site high ecological value in its own right.

The highly urbanised nature of the surrounding landscape greatly limits the ability for increasing the site size, which would help to increase the ecological value at the site. However, collaborative efforts with the Memorial Park to increase plantings synonymous with the Folland Park vegetation community may help to create a small functional increase in the site size, particularly if such plantings are concentrated along the shared boundary and extended as 'corridors' through the Memorial Park land.

5.3 Biodiversity Resources

Folland Park as a whole provides a diverse range of biodiversity resources, including:

- a structurally complex vegetation community, including canopy, midstorey, shrub and ground layers.
- hollow-bearing trees, stags, and logs;
- complex ground cover types including: taller native grasses, shed bark, diverse leaf litter, coarse woody material, and open ground; and
- a variety of flowering and fruiting plants.

Together these offer a range of habitat resources for native wildlife and plants and help to establish a unique microclimate within the urban landscape. There is limited changes able to be made to the biodiversity resources within the site given the heritage status restrictions. However, management actions should focus on maintaining the high structural complexity within the site to help support natural regeneration and use of the site by native plants and animals.

5.4 Target UEV Score

The target UEV score for Folland Park is 517.12, an increase of 19 points. This score is achievable if State and nationally declared pest and weed species are successfully eradicated from the site. The target UEV score is recommended as the minimum effort score as management actions required align with legislative directives.

Achieving a more ambitious UEV score, the so called "stretch target", will require additional management actions that are not legislatively required. This may include, for example, increasing the site size or connectivity within the landscape, establishing new plant species or structural layers not currently represented within the site, and attracting new wildlife species to the site through plantings or provision of additional resources (e.g. nest boxes). Encouraging threatened plant and animal species into the site will further enhance ecological value and the UEV stretch target score. A stretch target, if desired, should be calculated based on a commitment to specific actions as determined through consultation between Council and community stakeholder groups.

[8] Relative to a PAR of 0 for a perfect circle.

6 Actions Schedule

In light of the actions and conservation priorities identified during the foundation workshops a series of 27 priority actions for the next five years have been identified to help protect and enhance the ecological value of Folland Park. These actions have specifically been developed within the SMART framework (Figure 5).

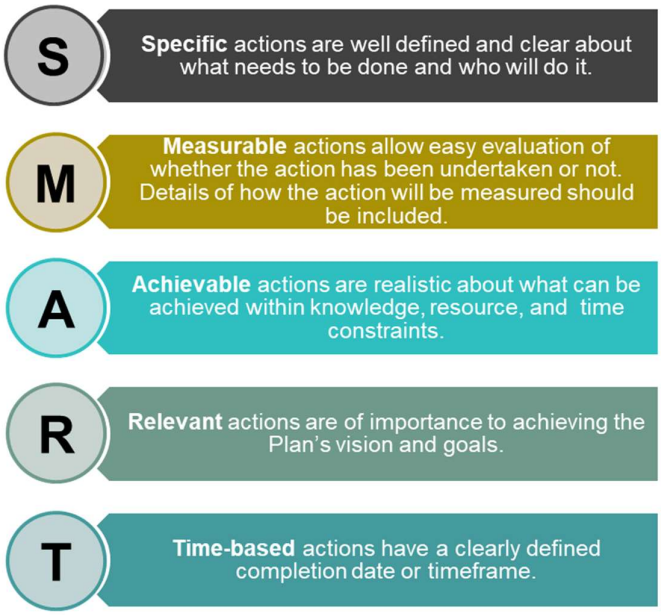

Figure 5. The SMART framework for developing actions.

For ease of reference, the 27 actions have been grouped into six key focal areas, each with a defined objective.

- Focal area 1: Build knowledge and understanding
- Focal area 2: Manage pest and weed species
- Focal area 3: Encourage native species
- Focal area 4: Manage infrastructure
- Focal area 5: Community engagement
- Focal area 6: Monitoring and evaluation

For each Focal Area, the actions are shown together with: the party responsible for leading implementation of the action, the measure of success, and the proposed time required to complete the action. Further, actions have been prioritised using a 6-point multi-criteria assessment (see Section 3.4, Annex E). Of the 27 actions, eight are ranked as high priority, 16 as medium priority, and three as low priority. Note that the priority rankings are relative, and a low priority action does not mean the action is unimportant. For example, one of the low priority actions (Action 2.1) relates to management of foxes within the site. This action ranked low relative to the other actions largely due to the high cost and difficulties of implementation. However, management of foxes is a required legislative action and so this action should not be disregarded.

Undertaking these actions over the next five years will help to improve the ecological value of the site (see Section 5) and also build support and awareness about management of the site and its significance in the landscape.

Focal Area 1: Build Knowledge and Understanding.

The objective of this focal area is to build a comprehensive knowledge base about the flora and fauna within Folland Park and be able to proactively respond as needed to protect and enhance ecological value.

#	Action Item	Responsible Party	Measure of Success	Timeframe		
				Commencement	Delivery	Repeatability
1.1	Undertake detailed flora and fauna surveys (including invertebrates) to determine comprehensive understanding of species diversity and population dynamics across seasons and years. Surveys should specifically include reptiles, invertebrates, and orchids.	PAE	Survey schedule developed and implemented by spring/summer season of 2023/2024.	Immediately (by end 2023)	Medium (2-3 years)	Once-off
1.2	Review existing plant list and determine other species that could add to the diversity value for Folland Park and identify species under high climate change risk.	TFL / PAE	Review of planting lists completed by 2024.	Immediately (by end 2023)	Short (<1 year)	Once-off
1.3	Undertake a detailed fox and cat monitoring program.	PAE	Fox and cat activity is understood within the Park, including a map of active fox dens and identification of individual cats entering the Park.	Immediately (by end 2023)	Short (<1 year)	Once-off
1.4	Establish and implement annual pest and weed survey dedicated to identifying species incursions before they are able to take hold.	TFL / PAE	Annual weed and pest monitoring is undertaken	Immediately (by end 2023)	Short (<1 year)	Annually repeated / ongoing
1.5	Create a detailed spatial map of required actions to guide implementation (e.g. locations of active fox den, declared weeds, feral bee hives).	TFL / PAE	Detailed spatial map of actions is generated.	Soon (by end 2024)	Short (<1 year)	Once-off

Note: Cells highlighted: **red** = very high priority action; **orange** = high priority action; yellow = medium priority actions; green = low priority action. Responsible party acronyms are: TFL: Tree for Life; PAE = City of Port Adelaide Enfield.

Focal Area 2: Manage Pest and Weed Species

The objective of this focal area is to manage or eradicate pest and weeds species from Folland Park to provide enhance ecological value within the site.

#	Action Item	Responsible Party	Measure of Success	Timeframe		
				Commencement	Delivery	Repeatability
2.1	Implement a Fox Watch[9] trial program to investigate success of this approach to deterring fox use of park.	PAE	Fox eradication program is implemented	Immediately (by end 2023)	Medium (2-3 years)	Once-off
2.2	Remove existing declared weeds	TFL / PAE	All existing declared weeds have been eradicated.	Immediately (by end 2023)	Short (<1 year)	Annually repeated / ongoing
2.3	Implement weed and pest removals as required from annual monitoring (see Action 1.4)	TFL	Weeds and pests are eradicated when identified	Soon (by end 2024)	Short (<1 year)	Annually repeated / ongoing

Note: Cells highlighted: **red** = very high priority action; **orange** = high priority action; yellow = medium priority actions; green = low priority action. Responsible party acronyms are: TFL: Tree for Life; PAE = City of Port Adelaide Enfield.

[9] https://www.easypestsupplies.com.au/fox-watch-ultrasonic-deterrent

Focal Area 3: Encourage Native Species

The objective of this focal area is to encourage native plants and animals to naturally populate Folland Park and to ensure a strong foundation is established for the long-term protection of the vegetation community and its fauna species.

#	Action Item	Responsible Party	Measure of Success	Timeframe		
				Commencement	Delivery	Repeatability
3.1	Manual dispersal of seed to assist germination for endemic species including threatened species, where possible and in alignment with Heritage Listing requirements.	TFL / PAE	Suitable threatened species, not already within the Park are planted.	Soon (by end 2024)	Medium (2-3 years)	Annually repeated / ongoing
3.2	Manage/protect existing plantings and threatened species.	PAE / TFL	Threatened species are identified and protected to ensure their survival.	Soon (by end 2024)	Medium (2-3 years)	Annually repeated / ongoing
3.3	Establish a managed seed bank for seeds of local provenance.	PAE / TFL	Local seeds are collected and stored.	Later (be end 2025)	Long (>3 years)	Once-off
3.4	Undertake plantings on local street verges and within Memorial Park using seeds from the Folland Park seed bank to help increase representation of this vegetation community in the broader landscape.	PAE / TFL / Memorial Park	Plantings of Folland Park local provenance species are increased in the broader landscape.	Soon (by end 2024)	Long (>3 years)	Once-off
3.5	Install insect hotels, and bird, bat and mammal boxes (as suitable) within the Park.	PAE	Insect hotels, and bird and micro-bat boxes are installed.	Later (be end 2025)	Medium (2-3 years)	Once-off

Note: Cells highlighted: **red** = very high priority action; **orange** = high priority action; yellow = medium priority actions; green = low priority action. Responsible party acronyms are: TFL: Tree for Life; PAE = City of Port Adelaide Enfield.

Focal Area 4: Manage Infrastructure

The objective of this focal area is to ensure all infrastructure associated with the site is maintained in good condition and acts to support protection of Folland Park.

#	Action Item	Responsible Party	Measure of Success	Timeframe		
				Commencement	Delivery	Repeatability
4.1	Assess the fence line and repair damage, as necessary	PAE	The fence line is maintained in good working order. Damage to fence lines are reported and addressed within 2 weeks.	Immediately (by end 2023)	Medium (2-3 years)	Once-off
4.2	Develop signage to deter illegal incursions into Folland Park	PAE	Fewer illegal incursions into the park occur following the installation of signage.	Immediately (by end 2023)	Medium (2-3 years)	Once-off
4.3	Investigate limited access to Folland Park by the public.	PAE	Undertake consultation to determine whether Folland Park can be safely opened to the Public without undermining its ecological value.	Later (by end 2025)	Short (<1 year)	Once-off
4.4	Improve path between Folland Park and Memorial Park.	PAE	The path is upgraded and maintained.	Later (by end 2025)	Long (>3 years)	Once-off
4.5	Investigate establishment of a nursery within Memorial Park to support growth of local provenance seeds from Folland Park; with grown plants to be used in plantings within Folland Park, street verges and Memorial Park	PAE / Memorial Park	Resolution around feasibility of nursery establishment	Later (by end 2025)	Medium (2-3 years)	Once-off
4.6	Work with Memorial Park to ensure proposed development actions within Memorial Park adjacent to Folland Park do not negatively influence Folland Park.	PAE / Memorial Park	Folland Park ecological value is not negatively influenced by external works in Memorial Park.	Immediately (by end 2023)	Medium (2-3 years)	Annually repeated / ongoing

#	Action Item	Responsible Party	Measure of Success	Timeframe		
				Commencement	Delivery	Repeatability
4.7	Establish and implement a procedure for monitoring private development activities adjacent to the Park so Park infrastructure and ecological value are not negatively impacted.	PAE	Follans Park is not negatively impacted by adjacent private development activities.	Soon (by end 2024)	Medium (2-3 years)	Once-off

Note: Cells highlighted: **red** = very high priority action; **orange** = high priority action; yellow = medium priority actions; green = low priority action. Responsible party acronyms are: TFL: Tree for Life; PAE = City of Port Adelaide Enfield.

Focal Area 5: Community Engagement

The objective of this focal area is to ensure all build awareness and support within the broader community about Folland Park, its significance in the landscape, and opportunities to help protect the site.

#	Action Item	Responsible Party	Measure of Success	Timeframe		
				Commencement	Delivery	Repeatability
5.1	Develop and undertake community biodiversity events to inform and inspire community action in Folland Park and the local neighbourhood. Examples of events: • Noctural species walks • Diurnal plant/bird walks • Tree Tags / Tree Trail • Working bees • Seed collections	PAE	At least two community biodiversity education events are held each year.	Immediately (by end 2023)	Short (<1 year)	Annually repeated / ongoing
5.2	Support the community in actively engaging with the environment, through assisting in the establishment of volunteer groups to work collaboratively within Council to enhance and protect biodiversity within Folland Park and neighbouring	PAE	By 2024, the number of community volunteers active within Folland Park has increased from the current number	Soon (by end 2024)	Medium (2-3 years)	Annually repeated / ongoing
5.3	Develop signage to promote storytelling around Folland Park, including links of cultural significance, benefits of trees, and the relationship with Memorial Park.	PAE / Memorial Park	Signage is developed and installed at Folland Park	Immediately (by end 2023)	Medium (2-3 years)	Once-off
5.4	Host an annual volunteer recognition event to celebrate and recognise the efforts of volunteers in contributing to the conservation of Folland Park	PAE	An annual volunteer recognition event is hosted each year by PAE.	Immediately (by end 2023)	Short (<1 year)	Repeat year 3

#	Action Item	Responsible Party	Measure of Success	Timeframe		
				Commencement	Delivery	Repeatability
5.5	Build and manage social platforms to help raise awareness of Folland Park and associated volunteer and citizen-science opportunities. Link with TFL to help run community workshops around how to use citizen science platforms (e.g. iNaturalist; BioCollect).	PAE / TFL	Folland Park social platforms (e.g. facebook, Instgram) are established managed.	Immediately (by end 2023)	Short (<1 year)	Once-off
5.6	Investigate the opportunity to establish interactive/evolving information signs for TFL and the Kindergarten to provide regular news/updates/fun facts/cultural heritage information to community members.	PAE	Level of support and feasibility of installing updatable sign boards is understood.	Immediately (by end 2023)	Short (<1 year)	Once-off
5.7	Explore opportunities to support increased interaction/learning by kindergarten students to learn about Folland Park species and also help to record species observations opportunistically on citizen science platforms.	PAE / TFL	Requirements to support increased learning about Folland Park by Kindergarten students is understood.	Soon (by end 2024)	Short (<1 year)	Once-off
5.8	Explore opportunities to establish a volunteer tree grower program with local landholders.	TFL / PAE	Level of support and feasibility of engaging volunteer tree growers is understood.	Soon (by end 2024)	Short (<1 year)	Once-off

Note: Cells highlighted: **red** = very high priority action; **orange** = high priority action; yellow = medium priority actions; green = low priority action. Responsible party acronyms are: TFL: Tree for Life; PAE = City of Port Adelaide Enfield.

Focal Area 6: Monitoring and Evaluation

The objective of this focal area is to ensure ongoing knowledge building about Folland Park and enable actions to be adaptive and proactive.

#	Action Item	Responsible Party	Measure of Success	Timeframe		
				Commencement	Delivery	Repeatability
6.1	Develop a Monitoring and Evaluation Schedule (see Section 7)	PAE	A MES is prepared and implemented.	Immediately (by end 2023)	Short (<1 year)	Once-off
6.2	Report annually on progress of the actions in this Action Plan.	PAE / TFL	An Action Plan progress report is prepared annually.	Soon (by end 2024)	Short (<1 year)	Annually repeated / ongoing
6.3	Review and update the BioCollect citizen-science platform to include a broader range of species (additional to birds) and communicate this broadly. This may include provision of training to community volunteers and interested local residents in how to use the BioCollect platform.	PAE	Data collection platform reviewed and updated, and training provided as needed to community volunteers	Immediately (by end 2023)	Short (<1 year)	Once-off

Note: Cells highlighted: **red** = very high priority action; **orange** = high priority action; yellow = medium priority actions; green = low priority action. Responsible party acronyms are: TFL: Tree for Life; PAE = City of Port Adelaide Enfield.

7 Monitoring and Evaluation Schedule

7.1 Overview

Monitoring of biodiversity is not the same as measuring biodiversity. Measuring biodiversity provides a snapshot in time, whereas monitoring is a long-term, on-going process which identifies temporal trends and allows decisions to be made regarding whether actions are achieving desired biodiversity targets. Accordingly, biodiversity measurements taken over time contribute to biodiversity monitoring.

A Monitoring and Evaluation Schedule (MES) is a strategic mechanism for assessing whether the FPAP is meeting its goals and targets through the outlined actions (Table 5). Specifically, a MES is a detailed program of works which defines what monitoring activities will take place, when and by whom, and how that information will feed back into actions and management decisions. In this way, the MES assumes the FPAP is adaptive in nature to allow, if necessary, changes to targets and actions to ensure greater on-going success of the FPAP goals.

7.2 MES Considerations

The MES framework presented here has considered State, National, and international best practice for developing environmental guidelines and monitoring and evaluation frameworks. Principally, the MES should be developed to be:

- Fit for purpose;
- Credible;
- Transparent; and
- Cost effective.

Further, in developing the MES, the following should also be considered:

- Temporal scale;
- Spatial scale; and
- Socio-economics and stakeholder participation.

7.3 MES Framework

This section provides the framework for developing a MES for the FPAP. It is important that the MES outline is developed in the initial FPAP implementation stages, with further development and refinement undertaken during implementation of the FPAP, by drawing on a combination of the data, observations, and learnings of the focal actions. In many cases, actions will set a benchmark on which success and re-evaluation of the direction of the FPAP in 2027 will be made.

The key elements of a MES framework are: (1) target; (2) baseline; (3) action; (4) indicator; (5) data collection method; (6) data source; (7) frequency; and (8) reporting (Table 5).

Table 5. MES Template with a Hypothetical Example.

Target ***What is trying to be achieved?***	**Baseline Value** ***What is the current value?***	**Action** ***How will the target be achieved?***	**Indicator** ***How will actions be assessed?***	**Data Collection Method** ***e.g., online, focus group?***	**Data Source** ***What sources can data be derived from?***	**Frequency** ***How often will data collection occur?***	**Responsible** ***Who will collect the data?***	**Reporting** ***Where will data be reported?***
The community is engaged and educated, through Council-run events around Folland Park and its significance.	*0*	*Run bi-annual biodiversity engagement events*	*Number of biodiversity events run each year*	*Tracking spreadsheet*	*Events database*	*Bi-annually*	*Community engagement department*	*FPAP Action Plan – Annual Progress Report*

8 References

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9 Annexes

Annex A. Strategic Context Documents

Green Adelaide Urban Greening Strategy

- Currently under development
- Further information: https://www.greenadelaide.sa.gov.au/projects/adelaide-greening-strategy
- Stage 1: Scoping and Early Engagement Summary Report: https://cdn.environment.sa.gov.au/greenadelaide/images/Stage-1_Scoping-and-early-engagement-summary-for-web-site.pdf

Port Adelaide Enfield City Plan

- Further information: https://www.cityofpae.sa.gov.au/council/corporate-documents/city-plan
- City Plan 2030: https://www.cityofpae.sa.gov.au/__data/assets/pdf_file/0013/410404/PAE-City-Plan-2030.pdf

Port Adelaide Enfield Living Environment Strategy

- Further information: https://www.cityofpae.sa.gov.au/live/environment/living-environmental-strategy
- Living Environment Strategy 2017-2022: https://www.cityofpae.sa.gov.au/__data/assets/pdf_file/0034/409696/Environment-Strategy.pdf

Port Adelaide Enfield Open Space Strategy

- Further information: https://haveyoursay.cityofpae.sa.gov.au/open-space-strategy
- Open Space Strategy 2020-2025: https://www.cityofpae.sa.gov.au/__data/assets/pdf_file/0035/786239/PAE-Open-Space-Strategy.pdf

Port Adelaide Enfield Biodiversity Strategic Management Plan 2022-2027

- New plan (2022-2027) currently under development
- Further information: https://www.cityofpae.sa.gov.au/live/environment/biodiversity-management
- [Old] Biodiversity Management Plan (2016-2020): https://www.cityofpae.sa.gov.au/__data/assets/pdf_file/0018/410760/Biodiversity-Management-Plan.pdf

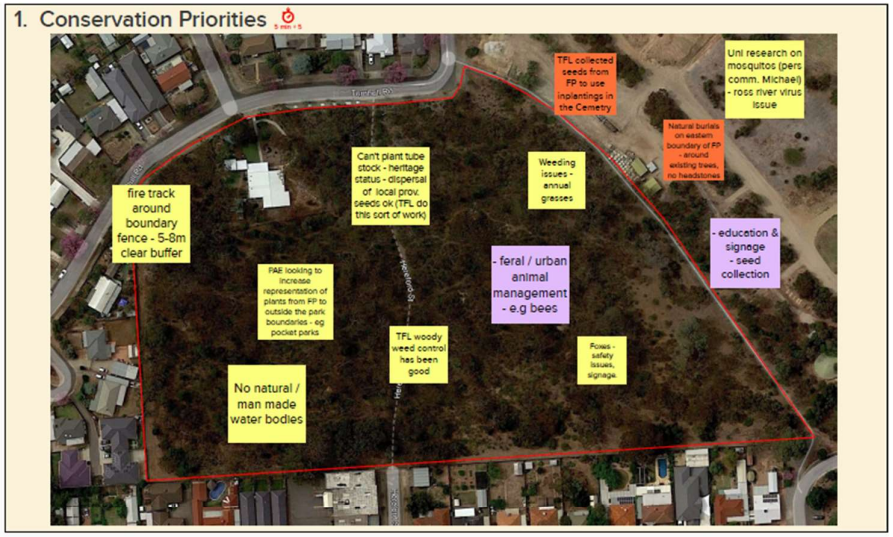
Port Adelaide Enfield Community Land Management Plans

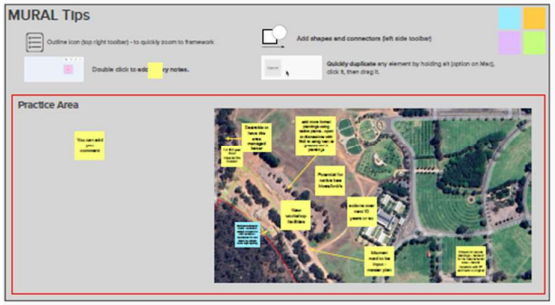
- Further information: https://www.cityofpae.sa.gov.au/council/corporate-documents/plans
- Folland Park Land Management Plan: https://www.cityofpae.sa.gov.au/__data/assets/pdf_file/0018/521154/Community-Land-Management-Plan-Folland-Park.pdf

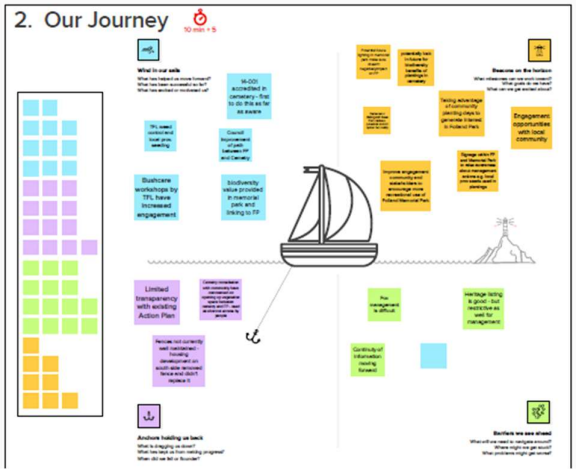
Annex B. Foundation Workshop Outputs

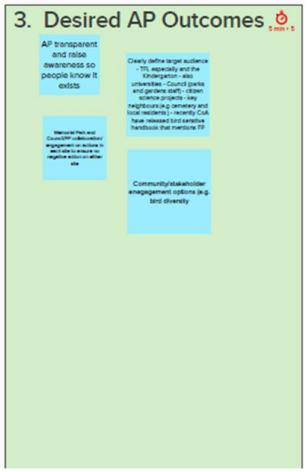
MURAL board screenshots from (a) community workshop and (b) Council and Green Adelaide workshop. Specific comments are captured in the Action Plan Sections 4.2 - 4.6.

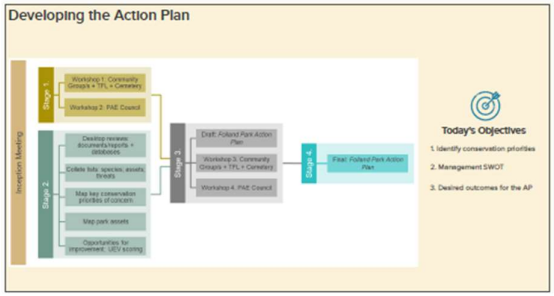
(A)











(B)

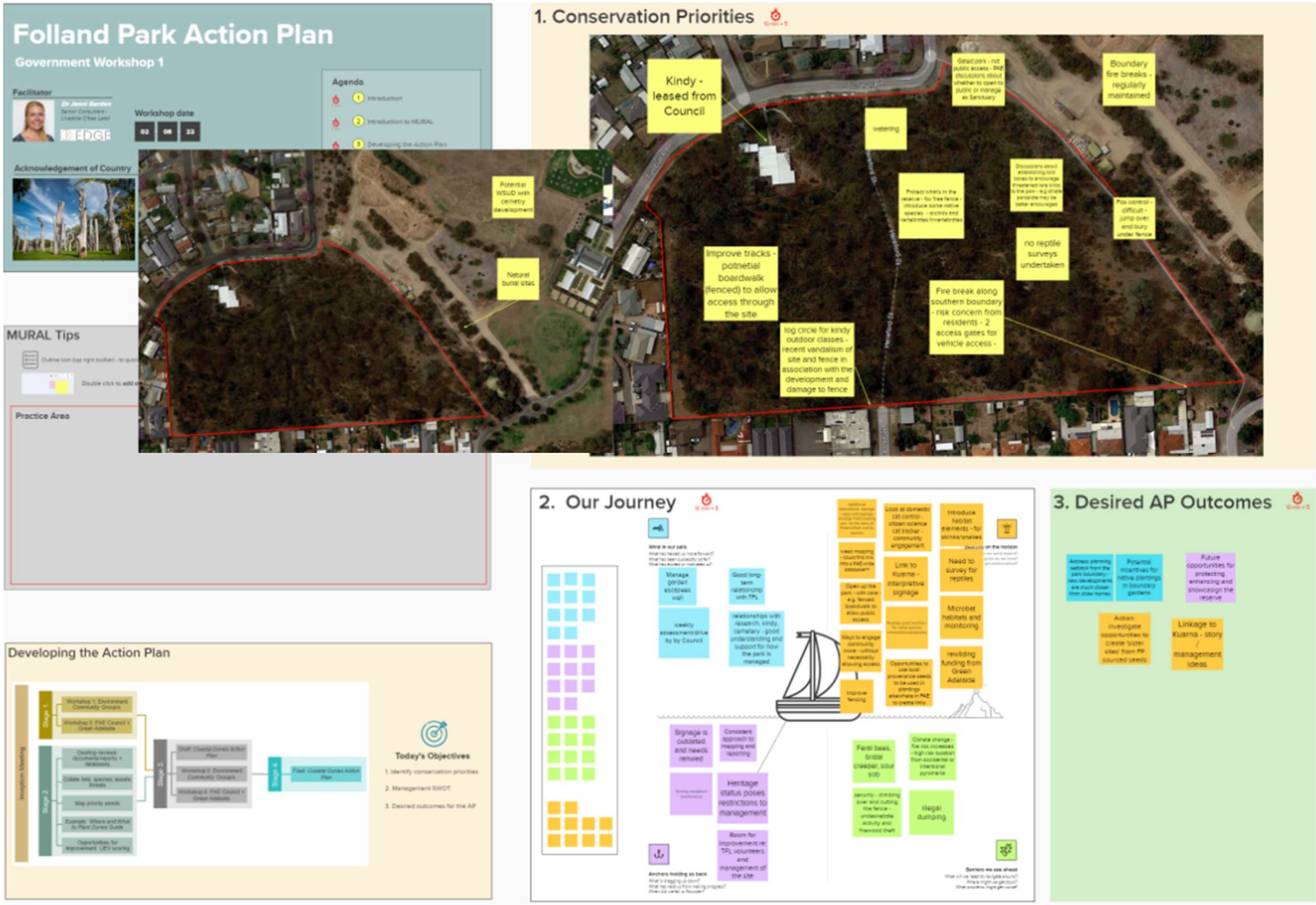

Folland Park Action Plan
Government Workshop 1
Facilitator
Workshop date
Agenda
Acknowledgement of Country
MURAL Tips
Practice Area
Developing the Action Plan
Today's Objectives
1. Conservation Priorities
Kindy - leased from Council
Boundary fire breaks - regularly maintained
watering
Improve tracks - potnetial boardwalk (fenced) to allow access through the site
log circle for kindy outdoor classes - recent vandalism of site and fence in association with the development and damage to fence
Fire break along southern boundary - risk concern from residents - 2 access gates for vehicle access -
no reptile surveys undertaken
Potential WSUD with cemetry development
Natural burial sites
2. Our Journey
3. Desired AP Outcomes

Table 6. Verbatim comments provided during the foundation workshops.

Activity 1. Conservation Priorities. *What are the main priorities for promote biodiversity conservation within the dunes system and/or segments of the dunes system?*
Fire track around boundary fence - 5-8 m clear buffer
No natural / man made water bodies
PAE looking to increase representation of plants from Folland Park to outside the park boundaries - e.g., pocket parks
Can't plant tube stock due to heritage status. However, dispersal of local provenance seeds ok (Trees For Life (TFL) do this sort of work).
TFL woody weed control has been good
Feral / urban animal management (e.g., bees)
Foxes - safety issues, require signage.
Weeding issues (e.g., annual grasses)
TFL collected seeds from Folland Park to use in plantings in the Cemetery.
Natural burials on eastern boundary of Folland Park - around existing trees, no headstones.
Education and signage, and seed collection, around the eastern boundary regarding the natural burial sites
Personally to completely fathom the relevance/importance of Folland Pk, intensive non-destructive surveying should continue to know exactly who/what we are protecting/preserving.
Kindy – leased from Council
Improve tracks. Potential boardwalk (fenced) to allow access through the site.
Log circle for Kindy outdoor classes.
Recent vandalism of site and fence in association with the development and damage to the fence.
Watering
Protect what's in the reserve, for free fence, introduce some native species, orchids and vertebrates/invertebrates

Fire break along southern boundary. Risk concern from residents. 2 access gates for vehicle access
Discussions about establishing bird boxes to encourage threatened rare birds to the park e.g., *Striate pardalote* may be better encouraged
No reptile surveys undertaken
Gated park, no public access. PAE discussions about whether to open to public or manage as Sanctuary
Boundary fire breaks – regularly maintained
Fox control is difficult, jump over and bury under fence.
Activity 2. Our Journey (SWOT) ***What are the Strengths, Weaknesses, Opportunities, and Threats for managing the reserve?***
Strengths (What are we doing well? What actions have been successful?)
Manage garden escapees well
Weekly assessment/drive-by undertaken by Council
Good long-term relationship with Trees for Life (TFL)
Relationships with research, kindy, cemetery – good understanding and support for how the park is managed
Cemetery is 14001 accredited cemetery - first to do this as far as aware.
TFL weed control and local provenance seeding
Council improvement of path between Folland Park and Cemetery
Bushcare workshops by TFL have increased community engagement
Biodiversity value provided in memorial park and linking to Folland Park
Maintenance weeding to maintain current landscape
I'm an invertebrate person so I will comment with that hat on. I think it is wonderful that Folland is fenced off from the public to minimise disturbance to the landscape especially leaf litter in some spots and some lovely microhabitats that are great for invertebrates. I have undertaken a significant research project in Folland looking at the invertebrates present and I am only now processing the information. There are some very interesting invert. stories but they are not quite ready yet, essentially I am comparing remnant urban vegetation i.e Folland and revegetation sites in urban areas and their respective invertebrate biodiversity's. Folland is the gold standard and I am grateful to have access to such a rare piece of land.

Maintenance weeding etc to maintain current landscape going well
Park seems well-managed
Weaknesses (What aren't we doing well? What actions haven't worked?)
Limited transparency with existing Action Plan
Cemetery consultation with community have commented on opening up vegetation space between cemetery and Folland Park - used as shortcut access by people
Fences not currently well maintained - housing development on south side removed fence and didn't replace it
Feral cats, and fox incursions
Signage is outdated and needs renewing
Fencing vandalism/maintenance
Consistent approach to mapping and reporting
Heritage status poses restrictions to management
Room for improvement with regard to TFL volunteers and management of the site
Opportunities (What would you like to be doing/see happen?)
Additional education signage, align with signage strategy that is coming out. Tell the story of Folland Park and its species.
Weep mapping. Could this into link a PAE-wide database?
Open up the park with care – e.g., fenced boardwalk to allow public access.
Ways to engage community without necessarily allowing access
Improve fencing
Look at domestic cat control. Citizen science cat tracker, community engagement
Link to Kaurna – interpretive signage
Predator proof and free – for native species introductions/protection
Opportunities to use local province seeds to be used in plantings, elsewhere in PAE to create links

Introduce habitat elements for skinks/snakes
Need to survey for reptiles
Microbat habitats and monitoring
Rewilding funding from Green Adelaide
Potential future lighting in memorial park, make sure it doesn't negatively impact on Folland Park
Improve engagement with community and stakeholders to encourage more recreational use of Folland Memorial Park
Signage within Folland Park and Memorial Park to raise awareness about management actions e.g., local provenance seeds used in plantings.
Engagement opportunities with local community
Cameras to distinguish foxes from natives - potential control option, but costly
Potentially look in future for biodiversity benefits of plantings in cemetery
Taking advantage of community planting days to generate interest in Folland Park
Verge plantings using local native understory species for insects and biodiversity - heritage status permitting.
Installation of insect hotels in appropriate places
Installation of bird and micro bat boxes in suitable trees
More public education around biodiversity opportunities, potentially a small information staff, or session in the library.
Ongoing insect trapping
Annual invertebrate surveys
FP as a teaching resource for tertiary students
More verge plantings using local native understory species for the insects and biodiversity - Where possible using local native trees as street trees eg Eucalyptus porosa, Eucalyptus microcarpa, Callitris pressii etc.
More public education around these things, maybe a small info stall / session in the libraries?
Is there a space for a nursery where these plants could be grown? I'm sure there would be plenty of folk, willing to volunteer in such a place

Installation of bird and micro bat boxes in suitable trees/parks
Installation of insect hotels in appropriate places (if you haven't already)
Threats (What may prevent you from undertaking actions/achieving outcomes for the reserve?)
Fox management is difficult
Continuity of information moving forward
Heritage listing is good, but restrictive for management
Feral animals and plants are main threats
Feral bees, Bridal Creeper, Soursob
Security – climbing over and cutting the fence. Undesirable activity and firewood theft.
Climate change. Fire risk increased, high risk location from accidental or intentional pyromania
Illegal dumping
Activity 3. Desired Action Plan Outcomes ***What would you like to see included as part of the Action Plan?***
Action Plan transparent and raise awareness so people know it exists
Clearly define target audience - especially TFL and the Kindergarten - also, universities, Council (Parks and Gardens staff), Citizen Science projects, key neighbours (e.g., cemetery and local residents)
Memorial Park and Council/Folland Park collaboration/engagement on actions in each site to ensure no negative action on either site
Community/stakeholder engagement options (e.g., bird diversity)
Contextualise the relevant/importance of Folland Park, including intensive non-destructive surveying should continue to know exactly what we are protecting and preserving.
Action Plan transparent and raise awareness so people know it exists
Clearly define target audience - especially TFL and the Kindergarten - also, universities, Council (Parks and Gardens staff), Citizen Science projects, key neighbours (e.g., cemetery and local residents)
Memorial Park and Council/Folland Park collaboration/engagement on actions in each site to ensure no negative action on either site

Community/stakeholder engagement options (e.g., bird diversity)
Contextualise the relevant/importance of Folland Park, including intensive non-destructive surveying should continue to know exactly what we are protecting and preserving.

Annex C. Urban Ecological Value Scoring Process

For each site, the UEV scoring is comprised of two compound scores: species score and site score, each of which is a composite of a number of scored input metrics as described in further detail below.

Species Score

The **Species Score** is developed for each species identified occurring at the site. It is the sum of the species' **origin score** and the species' **conservation status score** (Figure xx). The **species score** is used as input into the **site score** (Figure 7).

The **origin score** is allocated based on a native or introduced species.

The **conservation status score** is the sum of values allocated for regional, State, national, and international conservation status of the species.

Conservation status for each species at regional to international levels are in accordance with the following documents:

Regional (AMLR)

- threatened species = Adelaide and Mount Lofty Ranges Regional Species Conservation Assessment Project (Gillam & Urban, 2014);
- environmental/declared weeds = Environmental Weeds of Adelaide and the Mount Lofty Ranges (NRAMLR, 2015);

State

- threatened species: National Parks and Wildlife Act 1972 (Government of South Australia, 1972);
- declared weeds/pests: Landscape South Australia Act 2019 (Government of South Australia, 2019);

National

- threatened species: Environment Protection and Biodiversity Conservation Act 1999 (Department of Agriculture, Water and the Environment, 1999);
- weeds: Weeds of National Significance (Australian Government, 2012);
- pests: FeralScan (https://www.feralscan.org.au/)

International

- Protected migratory species = bilateral agreements with China (CAMBA), Republic of South Korea (ROKAMBA), and Japan (JAMBA), Bonn Convention, RAMSAR convention, ACAP
- Threatened species = IUCN Red List.

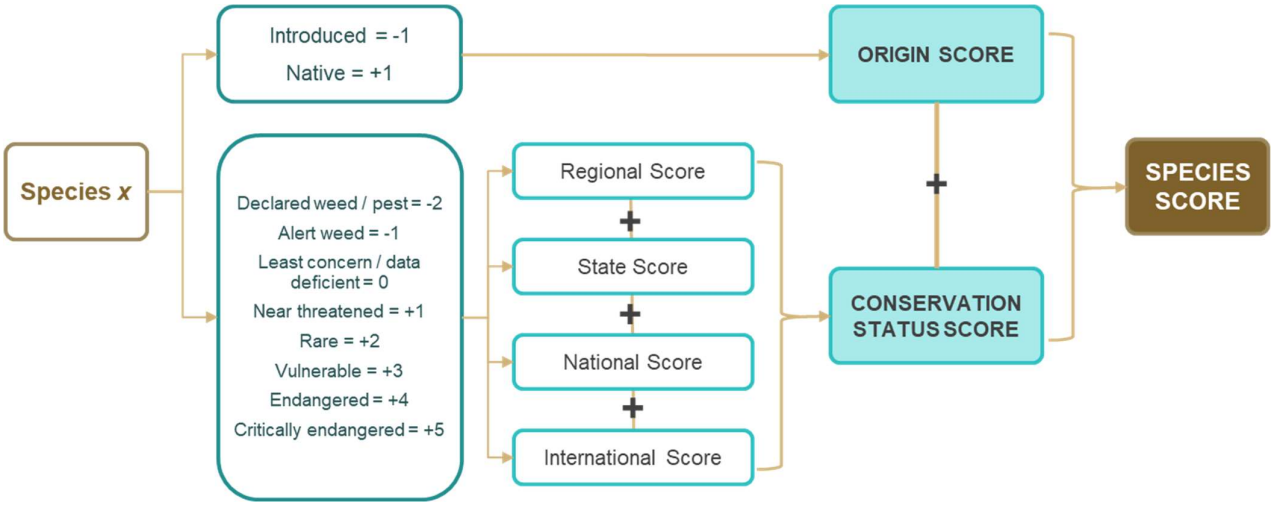


Figure 6. UEV process for generating Species Score for each species.

Site Score

The **Site Score** is developed for each site assessed. It is the sum of:

= summed species scores + context score + area score + PAR + water score + HB score + species count + fauna class diversity + flora class diversity + structural score.

Where:

- **summed species scores** is the sum of the species scores (Figure 4) for all species identified occurring at the site.
- **context score** is a categorised indication of how visually connected the site is in the broader landscape (connected, stepping stone, isolated). It is not an indication of functional connectivity for different species.
- **area score** is the area of the site in ha and then classified as small (<4.4ha), medium (4.4-27ha), large (27-50ha), and very large (>50ha).
- **PAR** is the perimeter:area ratio relative to a circle. The PAR indicates how compact a site is, with rounder more compact sites tending to have a greater proportion of core habitat area (important for disturbance sensitive species) then longer, narrower sites. The PAR value is a negative number, with a value of 0 indicating a perfect circle.
- **Water score** is a categorised score based on the occurrence of permanent, ephemeral, or no water bodies within the site.
- **HB score** is a categorised score indicating the presence and abundance of hollow-bearing structures (e.g. logs, stags, trees).
- **Species diversity** is a measure of species diversity and is the total number of different species recorded within the site.
- **Fauna class diversity** is the total number of different fauna classes represented by species within the site.
- **Flora class diversity** is the total number of different flora classes represented by species within the site.
- **Structural score** is a categorised score based on the number of structural vegetation layers (out of 7) represented by flora species within the site.

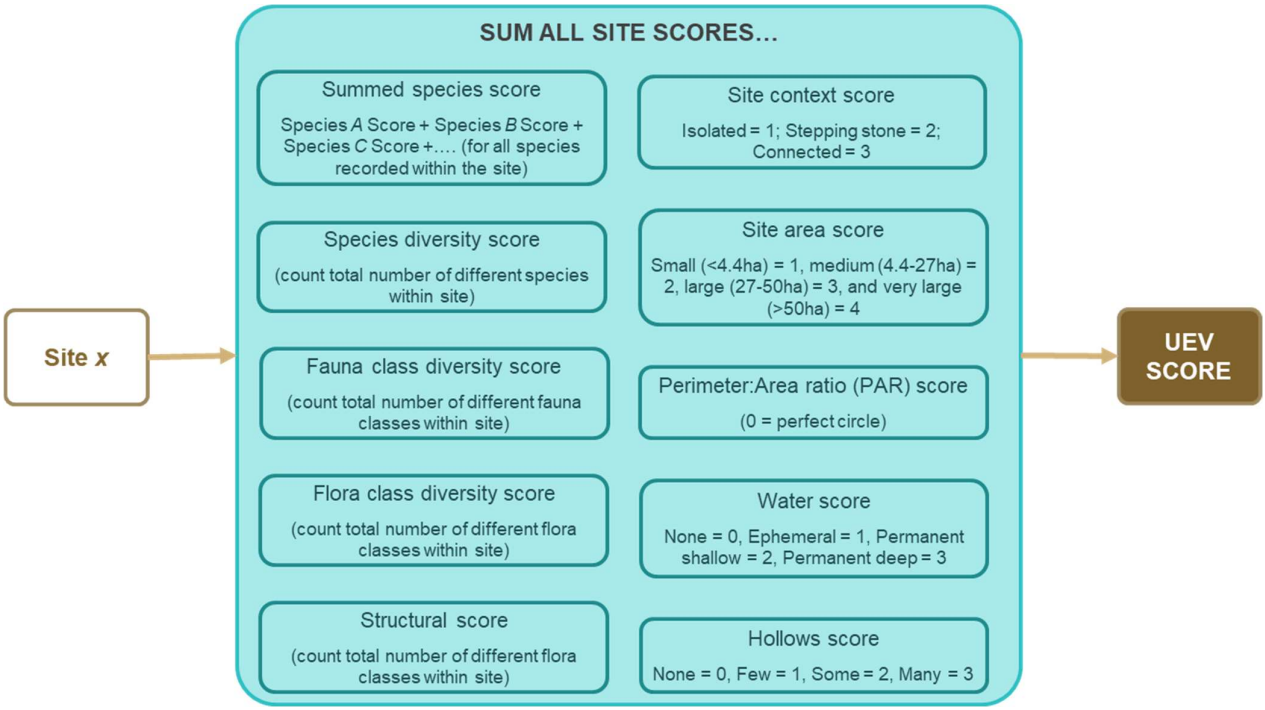


Figure 7. UEV process for generating UEV Score for a site.

Annex D. Species List

Total species recorded within Folland Park over the last 5 years (2017-2022). Introduced species are denoted by a ^ next to the Class name. Conservation status at the regional Adelaide Mount Lofty Ranges (AMLR), State, national and international levels are: LC = least concern, NT = near threatened, RA = rare, VU = vulnerable, EN = endangered, CE = critically endangered, AW = alert weed, EW = environmental weed, DW = declared weed, DP = declared pest.

Class	*Scientific Name*	Common Name	Conservation Status				UEV Species Score
			AMLR	State	National	International	
FAUNA							
Aves	*Accipiter cirrocephalus*	Collared sparrowhawk	LC	LC	LC	LC	2
Aves	*Anthochaera carunculata*	Red wattlebird	LC	LC	LC	LC	2
Aves	*Anthochaera chrysoptera*	Little wattlebird	LC	LC	LC	LC	2
Mammalia	*Austronomous australis*	White-striped freetail bat	LC	LC	LC	LC	2
Insecta	*Bembix sp.*	Sand wasp	LC	LC	LC	LC	2
Aves	*Cereopsis novaehollandiae*	Cape Barren goose	LC	RA	LC	LC	4
Mammalia	*Chalinolobus gouldii*	Gould's wattled bat	LC	LC	LC	LC	2
Aves	*Chlidonias hybrida*	Whiskered tern	LC	LC	LC	LC	2
Aves	*Coracina novaehollandiae*	Black-faced cuckoo-shrike	LC	LC	LC	LC	2
Aves	*Corvus mellori*	Little raven	LC	LC	LC	LC	2
Aves	*Dicaeum hirundinaceum*	Mistletoebird	LC	LC	LC	LC	2
Aves	*Eolophus roseicapilla*	Galah	LC	LC	LC	LC	2
Insecta	*Eurema smilax*	Small grass-yellow	LC	LC	LC	LC	2
^ Mammalia	*Felis catus*	Cat	DP	DP	LC	LC	-3
Aves	*Gelochelidon nilotica*	Gull-billed tern	LC	LC	LC	LC	2

	Class	*Scientific Name*	Common Name	Conservation Status				UEV Species Score
				AMLR	State	National	International	
	Aves	*Glossopsitta concinna*	Musk lorikeet	LC	LC	LC	LC	2
	Aves	*Glossopsitta porphyrocephala*	Purple-crowned lorikeet	NT	LC	LC	LC	3
	Aves	*Grallina cyanoleuca*	Magpie-lark	LC	LC	LC	LC	2
	Aves	*Gymnorhina tibicen*	Australian magpie	LC	LC	LC	LC	2
	Insecta	*Hemicordulia australiae*	Australian emerald	LC	LC	LC	LC	2
	Insecta	*Hemicordulia tau*	Tau emerald	LC	LC	LC	LC	2
	Amphibia	*Limnodynastes tasmaniensis*	Spotted marsh frog	LC	LC	LC	LC	2
	Insecta	*Liris sp.*	Wasp	LC	LC	LC	LC	2
	Aves	*Manorina melanocephala*	Noisy miner	LC	LC	LC	LC	2
	Aves	*Melanodryas cucullata*	Hooded robin	CE	RA	LC	LC	4
	Aves	*Milvus migrans*	Black kite	LC	LC	LC	LC	2
	Mammalia	*Nyctophilus geoffroyi*	Lesser long-eared bat	LC	LC	LC	LC	2
	Aves	*Ocyphaps lophotes*	Crested pigeon	LC	LC	LC	LC	2
	Insecta	*Orthetrum caledonicum*	Blue skimmer	LC	LC	LC	LC	2
	Mammalia	*Ozimops planiceps*	Southern freetail bat	LC	LC	LC	LC	2
	Aves	*Pardalotus striatus*	Striated pardalote	LC	LC	LC	LC	2
^	Aves	*Passer domesticus*	House sparrow	LC	LC	LC	LC	1
	Aves	*Phylidonyris novaehollandiae*	New Holland honeyeater	LC	LC	LC	LC	2
	Aves	*Platycercus elegans*	Crimson rosella	LC	LC	LC	LC	2
	Aves	*Platycercus eximius*	Eastern rosella	LC	LC	LC	LC	2

	Class	Scientific Name	Common Name	Conservation Status				UEV Species Score
				AMLR	State	National	International	
	Insecta	*Podomyrma adelaidae*	Common ant	LC	LC	LC	LC	2
	Aves	*Ptilotula penicillata*	White-plumed honeyeater	LC	LC	LC	LC	2
	Aves	*Rhipidura albiscapa*	Grey fantail	LC	LC	LC	LC	2
	Aves	*Rhipidura leucophrys*	Willie wagtail	NT	LC	LC	LC	3
^	Aves	*Streptopelia chinensis*	Spotted dove	LC	LC	LC	LC	1
^	Aves	*Sturnus vulgaris*	Common starling	LC	DP	DP	LC	-3
	Aves	*Threskiornis molucca*	Australian white ibis	LC	LC	LC	LC	2
	Aves	*Trichoglossus moluccanus*	Rainbow lorikeet	LC	LC	LC	LC	2
^	Aves	*Turdus merula*	Common blackbird	LC	LC	LC	LC	1
^	Mammalia	*Vulpes vulpes*	European fox	LC	DP	DP	LC	-5
FLORA								
	Eudicot	*Acacia acinacea*	Wreath wattle	RA	LC	LC	LC	4
	Eudicot	*Acacia ligulata*	Umbrella bush	RA	LC	LC	LC	4
	Eudicot	*Acacia notabilis*	Notable wattle	EN	LC	LC	LC	6
	Eudicot	*Acacia pycnantha*	Golden wattle	LC	LC	LC	LC	2
	Monocot	*Aristida behriana*	Brush wire-grass	LC	LC	LC	LC	2
	Monocot	*Arthropodium fimbriatum*	Nodding vanilla-lily	NT	LC	LC	LC	3
	Monocot	*Arthropodium strictum*	Chocolate lily	LC	LC	LC	LC	2
^	Monocot	*Asparagus asparagoides f. asparagoides*	Bridal creeper	EW	DP	DW	LC	-3
^	Eudicot	*Astragalus hamosus*	Milk-vetch	LC	LC	LC	LC	1

	Class	*Scientific Name*	Common Name	Conservation Status				UEV Species Score
				AMLR	State	National	International	
	Eudicot	*Atriplex semibaccata*	Berry saltbush	LC	LC	LC	LC	2
	Eudicot	*Atriplex suberecta*	Lagoon saltbush	NT	LC	LC	LC	3
	Monocot	*Austrostipa curticoma*	Short-crest spear-grass	LC	LC	LC	LC	2
	Monocot	*Austrostipa drummondii*	Cottony spear-grass	NT	LC	LC	LC	3
	Monocot	*Austrostipa flavescens*	Coast spear-grass	LC	LC	LC	LC	2
	Monocot	*Austrostipa multispiculis*	Many-flowered spear-grass	RA	RA	LC	LC	6
	Monocot	*Austrostipa nodosa*	Tall spear-grass	LC	LC	LC	LC	2
	Monocot	*Austrostipa platychaeta*	Flat-awn spear-grass	RA	LC	LC	LC	4
^	Monocot	*Avena fatua*	Wild oat	LC	LC	LC	LC	1
	Eudicot	*Boerhavia domminii*	Tar-vine	LC	LC	LC	LC	2
	Eudicot	*Brachychiton repestris*	Queensland bottletree	LC	LC	LC	LC	2
^	Monocot	*Brachypodium distachyon*	False brome	LC	LC	LC	LC	1
	Eudicot	*Bursaria spinosa ssp. Spinosa*	Sweet bursaria	LC	LC	LC	LC	2
	Eudicot	*Calandrinia eremaea*	Dryland purslane	NT	LC	LC	LC	3
	Pinopsida	*Callitris gracilis*	Southern cypress pine	LC	LC	LC	LC	2
	Monocot	*Calostemma purpureum*	Pink garland-lily	LC	LC	LC	LC	2
^	Monocot	*Catapodium rigidum*	Rigid fescue	LC	LC	LC	LC	1
	Monocot	*Chloris truncata*	Windmill grass	LC	LC	LC	LC	2
	Eudicot	*Clematis microphylla*	Old man's beard	LC	LC	LC	LC	2
	Eudicot	*Comesperma volubile*	Love creeper	RA	LC	LC	LC	4

	Class	*Scientific Name*	Common Name	Conservation Status				UEV Species Score
				AMLR	State	National	International	
	Eudicot	*Convolvulus angustissimus*	Australian bindweed	NT	LC	LC	LC	3
^	Eudicot	*Conyza bonariensis*	Flax-leaf fleabane	LC	LC	LC	LC	1
	Eudicot	*Cotula australis*	Common cotula	LC	LC	LC	LC	2
	Eudicot	*Crassula sieberiana*	Sieber's creeper	VU	EN	LC	LC	9
^	Eudicot	*Delairea odorata*	Cape ivy	AW	LC	LC	LC	0
	Monocot	*Dianella revoluta var. revoluta*	Black-anther flax-lily	LC	LC	LC	LC	2
	Eudicot	*Dodonaea viscosa ssp. spatulata*	Sticky hop-bush	LC	LC	LC	LC	2
	Eudicot	*Dysphania pumilio*	Small crumbweed	LC	LC	LC	LC	2
^	Monocot	*Ehrharta longiflora*	Annual veldtgrass	LC	LC	LC	LC	1
	Eudicot	*Einadia nutans ssp. nutans*	Climbing saltbush	LC	LC	LC	LC	2
	Eudicot	*Enchylaena tomentosa var. tomentosa*	Ruby saltbush	LC	LC	LC	LC	2
	Monocot	*Enneapogon nigricans*	Black-headed grass	LC	LC	LC	LC	2
	Eudicot	*Eremophila deserti*	Turkey-bush	VU	LC	LC	LC	5
	Eudicot	*Eucalyptus dumosa*	White mallee	VU	LC	LC	LC	5
	Eudicot	*Eucalyptus porosa*	Mallee box	NT	LC	LC	LC	3
	Eudicot	*Eucalyptus socialis ssp. socialis*	Beaked red mallee	VU	LC	LC	LC	5
^	Eudicot	*Euphorbia terracina*	False caper	LC	DP	LC	LC	-1
^	Monocot	*Freesia sp.*	Freesia	LC	LC	LC	LC	1
	Eudicot	*Goodenia pinnatifida*	Cut-leaf goodenia	NT	LC	LC	LC	3
	Eudicot	*Hardenbergia violacea*	Native lilac	NT	LC	LC	LC	3

	Class	*Scientific Name*	Common Name	Conservation Status				UEV Species Score
				AMLR	State	National	International	
^	Eudicot	*Hedera helix*	English ivy	EW	LC	LC	LC	1
^	Monocot	*Hordeum leporinum*	Wall barley-grass	LC	LC	LC	LC	1
^	Eudicot	*Lepidium africanum*	Common peppergrass	LC	LC	LC	LC	1
^	Monocot	*Lolium rigidum*	Wimmera ryegrass	LC	LC	LC	LC	1
	Monocot	*Lomandra densiflora*	Soft tussock mat-rush	LC	LC	LC	LC	2
	Monocot	*Lomandra effusa*	A grass-like plant	NT	LC	LC	LC	3
^	Eudicot	*Lycium ferocissimum*	African boxthorn	AW	DP	DW	LC	-4
	Eudicot	*Lysiana exocarpi ssp. exocarpi*	Harlequin mistletoe	LC	LC	LC	LC	2
	Eudicot	*Maireana brevifolia*	Short-leaf bluebush	LC	LC	LC	LC	2
	Eudicot	*Maireana enchylaenoides*	Wingless fissure-plant	LC	LC	LC	LC	2
^	Eudicot	*Malva parviflora*	Mallow weed	LC	LC	LC	LC	1
^	Eudicot	*Marrubium vulgare*	Horehound	LC	DP	LC	LC	-1
^	Eudicot	*Medicago polymorpha*	Burr-medic	LC	LC	LC	LC	1
	Eudicot	*Myoporum platycarpum ssp. platycarpum*	False sandlewood	VU	LC	LC	LC	5
^	Eudicot	*Olea europaea ssp. europaea*	Olive	EW	DP	LC	LC	-1
^	Eudicot	*Oxalis perennans*	Native sorrel	LC	LC	LC	LC	1
^	Eudicot	*Oxalis pes-caprae*	African wood-sorrel	AW	LC	LC	LC	0
	Monocot	*Pauridia glabella var. glabella*	Tiny star	LC	LC	LC	LC	2
^	Monocot	*Piptatherum miliaceum*	Rice millett	AW	LC	LC	LC	0
	Eudicot	*Pittosporum angustifolium*	Native apricot	NT	LC	LC	LC	3

	Class	*Scientific Name*	Common Name	Conservation Status				UEV Species Score
				AMLR	State	National	International	
^	Eudicot	*Plantago lanceolata var. lanceolata*	Ribwort plantain	LC	LC	LC	LC	1
^	Eudicot	*Polycarpon tetraphyllum*	Four-leaved allseed	LC	LC	LC	LC	1
	Eudicot	*Rhagodia parabolica*	Fragrant saltbush	RA	LC	LC	LC	4
^	Eudicot	*Rumex hypogaeus*	Three-corner jack	LC	LC	LC	LC	1
	Monocot	*Rytidosperma tenuius*	Short-awn wallaby-grass	RA	RA	LC	LC	6
	Eudicot	*Sarcocornia quinqueflora (syn. Salicornia quinqueflora)*	Beaded samphire	NT	LC	LC	LC	3
	Eudicot	*Scaevola albida*	White fan-flower	LC	LC	LC	LC	2
^	Eudicot	*Senecio pterophorus*	African daisy	LC	LC	LC	LC	1
	Eudicot	*Senecio quadradentatus*	Cottony fireweed	LC	LC	LC	LC	2
	Eudicot	*Senna artemisioides ssp. filifolia*	Fine-leaf desert senna	RA	LC	LC	LC	4
^	Eudicot	*Sisymbrium erysimoides*	Smooth mustard	LC	LC	LC	LC	1
^	Eudicot	*Sonchus oleraceus*	Common sow-thistle	LC	LC	LC	LC	1
	Eudicot	*Stackhousia monogyna*	Creamy candles	NT	LC	LC	LC	3
^	Eudicot	*Stellaria media*	Chickweed	LC	LC	LC	LC	1
	Eudicot	*Teucrium racemosum*	Grey germander	RA	LC	LC	LC	4
	Monocot	*Thysanotus baueri*	Mallee fringe-lily	VU	LC	LC	LC	5
^	Eudicot	*Tribulus terrestris*	Caltrop	LC	DP	LC	LC	-1
^	Eudicot	*Urospermum picroides*	False hawkbit	LC	LC	LC	LC	1
^	Eudicot	*Urtica urens*	Small nettle	LC	LC	LC	LC	1
	Eudicot	*Vittadinia blackii*	Narrow-leaf New Holland daisy	LC	LC	LC	LC	2

	Class	*Scientific Name*	Common Name	Conservation Status				UEV Species Score
				AMLR	State	National	International	
	Eudicot	*Vittadinia cervicularis var. cervicularis*	Waisted New Holland daisy	RA	LC	LC	LC	4
	Eudicot	*Vittadinia gracilis*	Woolly New Holland daisy	LC	LC	LC	LC	2
^	Monocot	*Vulpia myuros f. megalura*	Fox-tail fescue	LC	LC	LC	LC	1
^	Eudicot	*Galenia pubescens*	Coastal galenia	LC	LC	LC	LC	1
^	Monocot	*Avena barbata*	Bearded oat	LC	LC	LC	LC	1
	Eudicot	*Acacia pendula*	Weeping myall	LC	VU	LC	LC	5
	Eudicot	*Senecio pinnatifolius var. lanceolatus*	Variable Groundsel	LC	LC	LC	LC	2
	Eudicot	*Senecio quadridentatus*	Cotton Groundsel	LC	LC	LC	LC	2
^	Eudicot	*Rhus sp.*	Sumac	LC	LC	LC	LC	1
^	Monocot	*Rostraria sp.*	Hairgrass	LC	LC	LC	LC	1
	Monocot	*Rytidosperma caespitosum*	Common Wallaby Grass	LC	LC	LC	LC	2
	Monocot	*Rytidosperma sp.*	Wallaby Grass	LC	LC	LC	LC	2

Annex E. Multi-criteria Prioritisation Assessment

Actions were prioritised by applying a multi-criteria assessment. Each action was scored against the following seven criteria, each of which contained three categories allocated a score of 1-3 (Table 7).

1. **Commencement timeframe:** refers to the timeframe in which the action should be started and highlights that not all actions need to be started at the same time. A higher score is allocated to more immediate commencement timeframe.
2. **Delivery timeframe:** refers to the expected time needed to complete the action once commenced. A higher score is allocated to a shorter completion time.
3. **Repeatability timeframe:** refers to how often, if at all, the action should be repeated. A higher score is allocated to actions that don't need to be repeated.
4. **Skills/capacity:** refers to whether the action can be undertaken "in-house" (e.g. by existing CoA staff or TFL) or if an external consultant/specialist will need to be contracted. A higher score is allocated for completion by "in-house" skills.
5. **Feasibility:** refers to how easily implemented the action is likely to be. Feasibility of an action includes the mechanics of implementation as well as the likely level of support from community. A higher score is allocated for easier implementation.
6. **Ecological benefit:** refers to the anticipated impact on the biodiversity and ecological value of the site. Impact on ecological value directly relates to the ecological value score (see Section 5). A higher score is allocated to a greater positive impact.
7. **Cost:** refers to the estimated financial resources required to complete the action. Where an action refers to undertake a survey of assets or investigating options, the cost does not include implementation of any outcomes/recommendations from the surveys or investigations. A higher score is allocated to lower cost requirements.
8. **Budget plan:** refers to whether the cost required to complete the action is available in existing budgets or if it is as yet, unaccounted for. A higher score is allocated to actions that are already included in existing budgets.

For each action, the sum of scores for the eight criteria produced the multi-criteria assessment score for the action. The highest possible score (and therefore the highest priority actions) is 21, which would be achieved if an action is considered to be:

- Once-off, able to commence immediately, completed within one year, business as usual, readily implemented with high support, contributing to achieving a UEV stretch target score, delivered for a cost less than $50,000, and already included in existing budget plans.

Comparatively, the lowest possible score (and therefore the lowest priority action) is 15, which would be achieved if an action is considered to be:

- Repeated each year or delivered in an ongoing manner, able to be delayed until 2025, completed over 3 years or more once commenced, requiring an external expert/specialist to implement, difficult/complex to implement, not contributing directly to improving the UEV score, delivered for a cost greater than $100,000, and currently unaccounted for in existing and future budget plans.

For the actions scored in this Plan, the highest score achieved was 20, and the lowest was 9. Therefore, action priorities are categorised as follows:

- low priority = score 9-11;
- medium priority = score 12-14;
- high priority = score 15-17; or
- very high priority = score 18-20.

Table 7. Categories and scores allocated for each of eight criteria.

Score	Timeframes		Repeatability	Skills / Capacity Need	Feasibility	Ecological benefit	Budget	Budget Plan
	Commencement	Delivery						
1	Immediately - by the end of 2023.	> 3 years	Annually repeated or ongoing	Require external expert / specialist to undertake action.	Action is difficult to achieve either due to implementation complexity and/or lack of support from community.	Business as usual – the action has does not improve the UEV score.	>$100,000	Cost to implement action is not included in current or future budget bids.
2	Soon – by the end of 2024	2-3 years	Repeat year 3	Capacity provided by Council staff or TFL members with appropriate training/up-skilling.	Action is implemented with some challenges, related to either practical implementation or level of support.	Contributes to achieving the UEV target score.	$50,000 - $100,000	Cost to implement action is partially included in existing budgets or earmarked for future budget bid.
3	Later – by the end of 2025	Up to 1 year	Once-off	Business as usual (skills provided by existing Council staff or TFL members).	Action is readily implemented, with wide support from community.	Contributes to achieving a UEV stretch target score.	< $50,000	Cost to implement action is entirely included in existing budgets.