


Harry Potter Forbidden Forest Experience Jorgensen Park, Western Australia

EPBC Act Self-assessment – Fauna species

Version 0.1 – Draft for Client
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1. Introduction

Practical Ecology Pty Ltd was engaged by Fever to undertake a fauna impact assessment for the proposed 2026 *Harry Potter: Forbidden Forest Experience* at Jorgensen Park, Kalamunda. The purpose of the assessment was to identify fauna values within and adjacent to the proposed event route and to provide clear recommendations to avoid and minimise potential impacts associated with a temporary, immersive audio-visual evening installation. The outcome of this assessment is presented in *Fauna Assessment Report – Harry Potter Forbidden Forest Experience – Jorgensen Park, Western Australia* (Practical Ecology 2026).

As outlined in Practical Ecology (2026), a number of threatened fauna species are either known or considered likely to occur within the Study Area (Map 1), including species listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Accordingly, Practical Ecology recommended that further assessment be undertaken to evaluate the potential impacts of the proposed event on these species and to determine whether referral under the EPBC Act is required.

This Report has been prepared in response to these recommendations and presents a self-assessment under the EPBC Act for fauna species likely to occur within the Study Area and potentially impacted by the Project.

2. Study Area

The Study Area is defined as the areas adjacent (~20m either side) of the event route within Jorgensen Park, which is shown on **Error! Reference source not found.**

Jorgensen Park is located along the southern boundary of Kalamunda National Park, immediately east of the Kalamunda township. The park contains a network of loop trails, as well as visitor facilities including toilets and picnic areas.

Historically, Jorgensen Park was the site of the original Kalamunda Golf Club, which relocated to Forrestfield in 1972. Today, Jorgensen Park has been reconverted into a public recreation area where native vegetation has been reestablished. The Park is a well-recognised birdwatching location and is regularly visited by local residents, nature enthusiasts, wildlife photographers, hikers or even dog walkers.

The Study Area is currently disturbed both through vehicle access and through human activity for dog walking (including off leash dogs), recreation, and to attend the Kalamunda Learning Centre (located on the western boundary of the Study Area). The constant presence of humans and their dogs means that any fauna at site already experience disturbance from dawn to dusk and into the evening.

3. Fauna Habitat within the Study Area

As indicated in *Fauna Assessment Report – Harry Potter Forbidden Forest Experience – Jorgensen Park, Western Australia* (Practical Ecology 2026), the Study Area supports a range of fauna habitats despite being partially modified, with vegetation largely comprising indigenous species and some exotic groundstorey elements. Key habitat features include canopy trees (including a few mature and hollow-bearing trees), dense and open mid- and ground-layer vegetation, bareground, grassed areas, rocks, and existing infrastructure used by wildlife (e.g. water fountain, existing buildings, etc).

Canopy trees provide important resources for arboreal mammals, birds, and microbats, including foraging, roosting, and nesting opportunities. Notably, numerous hollow-bearing trees (particularly older or dead eucalyptus) offer critical habitat for hollow-dependent species, including threatened black-cockatoos and possums. Additional microhabitat features such as cracks, fissures, and ribbon bark further enhance habitat value by supporting microbats and invertebrates.

Dense mid- and ground-layer vegetation provides essential refuge, foraging, and nesting habitat for a range of fauna, while also contributing to ecological connectivity. More open areas, including recently burnt sections, support species adapted to less dense vegetation and provide basking and foraging opportunities, with fallen logs and rocks maintaining some habitat functionality.

Although no waterbodies are present, the Study Area is well connected to extensive surrounding native vegetation, which offers high-quality habitat and facilitates fauna movement. These adjacent areas likely support species that periodically utilise the Study Area and may also act as refuge during

disturbance events. Overall, the Study Area provides a structurally diverse and functionally important habitat for a range of native fauna species.

Refer to *Fauna Assessment Report – Harry Potter Forbidden Forest Experience – Jorgensen Park, Western Australia* (Practical Ecology 2026) for further information on the location of the key fauna habitat features on site.

4. EPBC Act Listed Fauna Species Likely to Occur on site

As indicated in *Fauna Assessment Report – Harry Potter Forbidden Forest Experience – Jorgensen Park, Western Australia* (Practical Ecology 2026), numerous EPBC Act listed fauna species have been recorded in the area and/or are considered likely to occur within five kilometres from the Study Area according to the Department of Climate Change, Energy, the Environment and Water (DCCEEW)'s Protected Matters Search Tool (PMST) report (Appendix 2).

Table 1 below provides a summary of the likelihood of occurrence of these species within the Study Area, as well as the expected level of impact of the project on each species.

It is important to note that no targeted surveys for these species were conducted on site. The likelihood of their occurrence has been assessed based on observations made by Practical Ecology during the site visit (i.e. habitat suitability and incidental fauna records), as well as records from the Atlas of Living Australia (ALA) and Birdlife Australia's Birddata for the surrounding area (noting that NatureMap record dates and locations were unavailable at the time of writing). This assessment is further informed by the findings of previous ecological studies undertaken on the site, including:

- *Environmental Report: Flora and Vegetation Surveys; Tree and Black Cockatoo Habitat Assessment; Fauna Survey – Kalamunda Community Centre, Crescent Road, Jorgensen Park, Kalamunda* (Bushfire Prone Planning 2019);
- *Jorgensen Park Management Plan 2007* (EMRC 2007), and
- *Jorgensen Park Action Plan 2015–2017* (Shire of Kalamunda 2015).

Table 1. Potentially occurring EPBC Act listed fauna

Treaty	EPBC Act	Scientific Name	Common Name	Likelihood of Occurrence	Likelihood Reasoning	Likelihood of Impact from Proposed Development	Impact Reasoning
C,J,R		<i>Actitis hypoleucos</i>	Common Sandpiper	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site
C,J,R		<i>Apus pacificus</i>	Fork-tailed Swift	Moderate	Some recent local records (e.i., 2019 Birdata records). Likely to occur in the airspace above the site, considering local records. However, this species is unlikely to make significant use of the site as it is almost entirely aerial and is a non-breeding visitor in Australia.	Low	Unlikely to make significant use of the site.
	Endangered	<i>Bettongia penicillata ogilbyi</i>	Woylie	Low – moderate	Previous ecological assessments have failed to detect this species. Species not known to occur on site as per Council's representatives' comments.	Low	Unlikely to occur on site
	Endangered	<i>Botaurus poiciloptilus</i>	Australasian Bittern	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site
B, C, J, R	Vulnerable	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site
B, C, J, R	Critically Endangered	<i>Calidris ferruginea</i>	Curlew Sandpiper	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site

Treaty	EPBC Act	Scientific Name	Common Name	Likelihood of Occurrence	Likelihood Reasoning	Likelihood of Impact from Proposed Development	Impact Reasoning
J, R		<i>Calidris melanotos</i>	Pectoral Sandpiper	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site
	Vulnerable	<i>Calyptorhynchus banksii naso</i>	Forest Red-tailed Black-Cockatoo, Karrak	Present	This species has been observed on site during the site assessment.	Low – Moderate	Depending on mitigation measures implemented on site (refer to Section 6)
	Vulnerable	<i>Dasyurus geoffroii</i>	Chuditch, Western Quoll	Low-moderate	Previous ecological assessments have failed to detect this species. Species not known to occur on site as per Council's representatives' comments.	Low	Unlikely to occur on site
	Endangered	<i>Heleioporus australiacus</i>	Giant Burrowing Frog	Low	No suitable waterbodies on site. Furthermore, the Study Area is outside the species' range.	Low	Unlikely to occur on site
C,J,R	Vulnerable	<i>Hirundapus caudacutus</i>	White-throated Needletail	Moderate	Likely to occur in the airspace above the site, considering local records. However, this species is unlikely to make significant use of the site as it is almost entirely aerial and is a non-breeding visitor in Australia.	Low	Unlikely to make significant use of the site.

Treaty	EPBC Act	Scientific Name	Common Name	Likelihood of Occurrence	Likelihood Reasoning	Likelihood of Impact from Proposed Development	Impact Reasoning
	Vulnerable	<i>Leipoa ocellata</i>	Malleefowl	Low-moderate	Previous ecological assessments have failed to detect this species. Species not known to occur on site as per Council's representatives' comments.	Low	Unlikely to occur on site
C,J,R		<i>Motacilla cinerea</i>	Grey Wagtail	Low-moderate	Previous ecological assessments have failed to detect this species. Species not known to occur on site as per Council's representatives' comments. Furthermore, this species is a non-breeding visitor in Australia.	Low	Unlikely to occur on site
	Endangered	<i>Myrmecobius fasciatus</i>	Numbat, Walpuriti	Low-moderate	Previous ecological assessments have failed to detect this species. Species not known to occur on site as per Council's representatives' comments.	Low	Unlikely to occur on site
	Vulnerable	<i>Notechis scutatus</i>	Tiger Snake	Low-moderate	Previous ecological assessments have failed to detect this species. Species not known to occur on site as per Council's representatives' comments.	Low	Unlikely to occur on site.

Treaty	EPBC Act	Scientific Name	Common Name	Likelihood of Occurrence	Likelihood Reasoning	Likelihood of Impact from Proposed Development	Impact Reasoning
B, C, J, R	Critically Endangered	<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site.
B		<i>Pandion haliaetus</i>	Osprey	Low	No waterbodies present on site. This species is more likely to occur along the coast and near large waterbodies. Unlikely to make significant use of the site.	Low	Unlikely to make significant use of the site.
	Critically Endangered	<i>Pseudemydura umbrina</i>	Western Swamp Tortoise	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site
	Critically Endangered	<i>Pseudocheirus occidentalis</i>	Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit	Moderate	No Western Ringtail Possum has been observed on site during the night survey, and this species hasn't been detected on site during the previous ecological surveys. Suitable habitat occurs on site, including suitable tree-hollows and foraging and dispersing habitat. Furthermore, there is a 2021 ALA record (with photo) in Hartfield Park, approximately 6km to the south-west of the Study Area.	Low – Moderate	Depending on mitigation measures implemented on site (refer to Section 6)

Treaty	EPBC Act	Scientific Name	Common Name	Likelihood of Occurrence	Likelihood Reasoning	Likelihood of Impact from Proposed Development	Impact Reasoning
	Endangered	<i>Rostratula australis</i>	Australian Painted Snipe	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site
	Vulnerable	<i>Setonix brachyurus</i>	Quokka	Low-moderate	Previous ecological assessments have failed to detect this species. Species not known to occur on site as per Council's representatives' comments.	Low	Unlikely to occur on site.
	Vulnerable	<i>Stagonopleura (Stagonopleura) guttata</i>	Diamond Firetail	Low-moderate	Previous ecological assessments have failed to detect this species. Species not known to occur on site as per Council's representatives' comments.	Low	Unlikely to occur on site.
	Vulnerable	<i>Synemon plana</i>	Golden Sun Moth	Low	The habitat on site is not suitable for this species. Furthermore, the site is not connected to an area where this species is known to occur.	Low	Unlikely to occur on site.
C,J,R		<i>Tringa glareola</i>	Wood sandpiper	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site
C,J,R	Endangered	<i>Tringa nebularia</i>	Common Greenshank, Greenshank	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site
	Vulnerable	<i>Westralunio carteri</i>	Carter's freshwater mussel	Low	No suitable waterbodies on site.	Low	Unlikely to occur on site

Treaty	EPBC Act	Scientific Name	Common Name	Likelihood of Occurrence	Likelihood Reasoning	Likelihood of Impact from Proposed Development	Impact Reasoning
	Endangered (listed as Calyptorhynchus baudinii)	<i>Zanda baudinii</i>	Baudin's Cockatoo, Baudin's Black-Cockatoo, Long-billed Black-cockatoo	Present	Zanda spp. were observed on site during the current assessment. Furthermore, this species taxon has also been recorded previously during earlier ecological surveys of the site.	Low – Moderate	Depending on mitigation measures implemented on site (refer to Section 6)
	Endangered (listed as Calyptorhynchus latirostris)	<i>Zanda latirostris</i>	Carnaby's Black Cockatoo, Short-billed Black-cockatoo	Present	Zanda spp. were observed on site during the current assessment. Furthermore, this species taxon has also been recorded previously during earlier ecological surveys of the site.	Low – Moderate	Depending on mitigation measures implemented on site (refer to Section 6)

As detailed in Table 1 above, four species occur on site or are likely to occur on site and are likely to be impacted by the project: Forest Red-tailed Black-Cockatoo, Western Ringtail Possum, Long-billed Black-cockatoo, and Short-billed Black-cockatoo. Further information regarding the potential impacts to these species is provided in Section 6.

5. Event Infrastructure and Experience Design

The *Harry Potter: Forbidden Forest Experience* is an immersive, after-dark experience that has been held at different locations across the world. It is a ticketed outdoor event that invites visitors to explore a themed walking trail inspired by the Harry Potter saga. The experience typically features a curated route through a forested setting, incorporating light installations, visual effects, soundscapes, and interactive elements based on characters and scenes from the Harry Potter films. The event is designed to operate during evening hours over a defined seasonal period, with visitors progressing along a trail in staggered groups to manage visitor flow and enhance the immersive experience.

At Jorgensen Park, the event is proposed to take place along an approximately 1,000 m walking loop trail, as well as an approximately 200 m access path from the site entrance to the start of the trail. The route will utilise only existing trails and tracks within the park. As such, no new pathways will need to be constructed, and no additional routes will be created beyond those already present. Some track reprofiling and vegetation trimming will, however, be required to improve site accessibility.

Installation activities are expected to commence on 11 May 2026, approximately four weeks prior to the planned public opening in June 2026. The works will involve placing equipment such as lights, speakers, and props along the existing trail, primarily during daylight hours and completed before dark. Only limited programming and fine-tuning will occur at night in the final days, within restricted hours. Vehicle access will be limited to existing paths and daytime use, resulting in minimal environmental impact. The event will then operate for a duration of 9.5 weeks, starting on 12 June 2026 and concluding on 16 August 2026.

It has been indicated that various lighting and audio equipment, as well as IP-themed props, will be installed within the village and trail areas, which are the primary areas where guests will travel. No high-intensity or bright lighting is proposed. Many installations are expected to incorporate accompanying audio recordings and video components; however, no animal calls are proposed to be used as part of the event, other than the call of an owl species that does not naturally occur in Australia. Installation activities are expected to occur predominantly during daytime hours, between 8:00 am and 5:00 pm. Some limited night-time work may be required for programming purposes over a period of approximately one to two weeks toward the end of the installation phase.

Once installation is complete, event sessions are planned to operate between 5:00 pm and 11:00 pm. Event staff will be on site starting early afternoon to do the preparation work.

The site is intended to be fully vacated and all lighting switched off by 11:00 pm each night. However, depending on the time required for guests to exit the site after the final session, lighting may remain

on slightly later to facilitate safe departure. In all cases, lighting will be switched off no later than midnight.

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Proposed Mitigation Measures

As outlined in *Fauna Assessment Report – Harry Potter Forbidden Forest Experience – Jorgensen Park, Western Australia* (Practical Ecology 2026), the event provider will implement a suite of mitigation measures to avoid and minimise impacts of the event on fauna and flora at Jorgensen Park. These measures cover overall event footprint planning, lighting and sound design, event layout, installation methods, nightly operations and waste management, and are grounded in the temporary, seasonal nature of the event.

The event footprint has been planned to make use of existing open areas and established trails and paths that are already frequently used by local visitors, rather than creating new tracks or reclaiming undisturbed vegetation, and no new trails will be constructed as part of the installation. All infrastructure and temporary works will be removed at the end of the operating period, with no equipment left on site, and the site will be returned to normal night-time darkness outside agreed event hours. Waste management during installation, operation and de-rig will strictly follow all applicable local council requirements and venue management directions, including appropriate sorting, storage, removal and disposal of all waste streams.

Lighting and sound will be designed and operated to minimise disturbance while maintaining the intended visitor experience. Lighting will follow the *National Light Pollution Guidelines for Wildlife* (DCCEEW 2023), with operation limited to the shortest practicable nightly window within standard event times. Lights will be designed to keep in style and ambience with the dark forest theme, focused on individual scenes and the defined trail, and will avoid unnecessary illumination of vegetation outside the route. Beam angles, shielding and baffles will be used to confine light to the immediate path and features and to limit upward spill into the canopy and surrounding remnant vegetation. No powerful skyward beams will be used, and all event lighting will be switched off before midnight.

Sound design and audio equipment will be managed to minimise impacts by keeping speakers as small and low as practicable, orienting them into the trail and scene areas rather than outward into surrounding vegetation, limiting overall sound levels to those necessary for the visitor experience, avoiding high-impact, sudden or very low-frequency effects near sensitive areas, and not using animal calls from locally occurring species. Sound checks and nightly operation will be confined to agreed hours to avoid unnecessary noise outside the event window.

Specific measures will be implemented to protect key habitat features and flora/fauna values identified on site in Practical Ecology (2026). To protect hollow-dependent fauna, all large and mature trees will be treated as potentially containing important hollows, cracks or fissures. No fixtures will be mounted directly on hollow-bearing stems or branches, and lighting will not be aimed at hollow entrances or known roost sites. The same conservative approach will apply to dense understorey patches and “dark refuge” areas that fauna may rely on to move away from the event, which will be retained unlit wherever possible. Multiple pre-event walk-throughs with the park management team

have been undertaken to identify sensitive or protected plants, hollow-bearing trees and other important habitat features, and to inform the detailed layout and design. If new nests or dens are discovered during installation or operations, consultation will occur with the venue management team to agree on appropriate practices and buffers before works continue in that area.

Event layout, fencing and other temporary structures will be arranged to maintain fauna movement and access to refuges. Barriers will be designed to avoid forming continuous, fauna-proof walls so that small mammals, reptiles and bandicoots can pass beneath or through. No elements will be installed in a way that could trap or entangle animals. Dense understorey and unlit refuge areas will be deliberately retained along and around the route, and vegetation will only be trimmed where strictly necessary for safe visitor access. Timing of works will be managed to avoid sensitive periods as far as practicable: installation and de-rig activities will occur mainly during daylight hours, with minimal use of work lights at night, and the event window has been selected to sit outside key breeding seasons several listed fauna; the provider will not extend into higher-risk periods without updated ecological advice.

Installation methods and day-to-day operations will follow a “stop and check” approach. Event-related trail and ground-surface remediation works are undertaken by the venue management team, who hold extensive knowledge of the site’s fauna and flora, and any further trimming during installation will be carefully consulted with the park management team. Cabling, fixings and anchors will be adjusted where needed to avoid root zones of significant trees, log piles and key shelter structures. Staff will receive a briefing on how to recognise potential fauna issues or sensitive habitat features, and on when and how to notify and consult with local expertise if such issues are observed. If invasive predators such as foxes or cats are observed using lit or trafficked areas, the provider will notify the land manager and support agreed predator control actions within their operational role.

Contractors, vehicles, and installation crews will adhere to best-practice hygiene protocols throughout the works, with a particular focus on preventing the spread of weeds and diseases such as *Phytophthora dieback*, which is known to occur in the area (Appendix 3). This includes undertaking basic washdown and cleaning measures for boots, tyres, vehicles, and equipment when entering or leaving relevant work areas to minimise the risk of transferring contaminated soil or plant material. The site team maintains readily available cleaning materials, such as spray bottles, methylated spirits, and scrubbing brushes, to facilitate routine cleaning of boots and equipment and to manage potential spread risks during site activities.

6. EPBC Act Requirements

The EPBC Act is the Australian Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places defined in the Act as MNES. There are nine matters of national environmental significance to which the EPBC Act applies, these are:

- World heritage sites
- National heritage places
- Wetlands of international importance (often called 'Ramsar' wetlands after the international treaty under which such wetlands are listed)
- Nationally threatened species and ecological communities
- Migratory species
- Commonwealth marine areas
- Nuclear actions
- The Great Barrier Reef Marine Park
- a water resource, in relation to coal seam gas development and large coal mining development.

If a project is likely to have a significant impact on one of the nine matters of national environmental significance, the action or proposal must be referred to the Commonwealth DoEE. This 'referral' is, then released to the public for comment. A '*significant impact is defined under the EPBC Act as an impact that is important, notable, or of consequence, having regard to its context or intensity*' (DoE 2013).

Under the EPBC Act, actions that are likely to have a significant impact upon MNES require approval from the Environment Minister to undertake those actions. An action includes any project, development, undertaking, activity or series of activities.

Relevance to proposal

As outlined in Table 1, the following EPBC Act listed fauna species are likely to occur on site:

- Fork-tailed Swift;
- White-throated Needle-tail;
- Forest Red-tailed Black-Cockatoo;
- Long-billed Black-cockatoo;
- Short-billed Black-cockatoo; and
- Western Ringtail Possum.

A discussion of potential impacts to each species is described below.

Fork-tailed Swift and White-throated Needletail

As mentioned in Table 1, the proposed event is unlikely to have a significant impact on these species, as they are not expected to make substantial use of the site. Both species are largely aerial and occur in Australia as non-breeding visitors, further limiting their reliance on on-site habitats.

Accordingly, a referral under the EPBC Act is not considered necessary in relation to potential impacts on these species.

Forest Red-tailed Black-Cockatoo

As Forest Red-tailed Black-Cockatoo habitat will be impacted by the project, a review against the *Matters of National Environmental Significance – Significant Impact Guidelines* (DEWHA 2013) was undertaken. The outcome of this assessment is presented in Table 2 below.

Table 2. Significant impact guideline for Forest Red-tailed Black-Cockatoo, listed as vulnerable under the EPBC Act (DEWHA 2013)

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
Lead to a long-term decrease in the size of an important population of a species	<p>According to <i>Commonwealth Listing Advice on <i>Calyptorhynchus banksii naso</i> (Forest Red-tailed Black Cockatoo)</i> (DEWHA 2009), this subspecies is recognised as a single population. As such, any individuals recorded are considered part of that same population, and consequently, the population occurring on site is regarded as an important population under this classification.</p> <p>Suitable habitat occurs on the site, including numerous hollow-bearing trees in which this species could breed. Furthermore, a large number of Forest Red-tailed Black-Cockatoos were observed on site. According to Birdlife Australia, the breeding season of this species is generally from late July to October (Birdlife Australia 2026a).</p> <p>As the event is proposed to run from 12 June 2026 to 16 August 2026, the first few weeks of the breeding season will be impacted by the project. As the event will start before the start of the species breeding season, animals usually breeding in the Study Area will be discouraged from using the hollow near the event area and will most likely be forced to seek alternative breeding hollows in the adjoining landscape where large extents of suitable habitat occur. Should some individual attempt to breed near the event area and nest abandonment occurs during the event period, it is more likely that eggs will be abandoned rather than dependent juvenile birds, meaning that the risk of casualties is reduced. In fact, the incubation period for this species is 29-31 days, and the nestling period is 75-85 days (DEC 2008).</p> <p>Considering the above, while the 2026 breeding season of this species may be disrupted by the event, as the event is temporary and mitigation measures will be put in place to avoid illumination of hollows, a long-term decrease in the size of the local population is unlikely.</p>	Unlikely

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
Reduce the area of occupancy of an important population of the species	<p>In 2006, the extent of occurrence was estimated to be approximately 66 500 km² (CALM 2006). Even if the entire Study Area (18.43 ha) were impacted by the project, this would represent only around 0.00028% of the species' extent of occurrence, and this disturbance would be temporary in nature.</p> <p>Considering this, and the fact that no permanent habitat removal is proposed (limited shrub trimming only), the project is unlikely to result in any meaningful reduction in the area of occupancy of an important population of the species.</p>	Unlikely
Fragment an existing important population into two or more populations	The event is unlikely to fragment the local population into two or more populations, as this species is highly mobile.	Unlikely
Adversely affect habitat critical to the survival of a species	As per Criterion 1, while the event is likely to impact the species to some extent, its limited scale and duration, together with the local context (including the large extent of suitable habitat that will remain unaffected), mean that no significant long-term impacts are expected. Therefore, it is unlikely that the project will adversely affect the habitat critical to the survival of Forest Red-tailed Black-Cockatoo as a species.	Unlikely
Disrupt the breeding cycle of an important population	<p>The Study Area is located in Jarrah Forest Region, within which the Forest Red-tailed Black-Cockatoo, Long-billed Black-Cockatoo and Short-billed Black-Cockatoo are known to breed (DAWE 2022). These three species demonstrate site and hollow fidelity, returning to known breeding areas and often reusing established nest hollows over successive years.</p> <p>The event will occur during the first few weeks of the species' breeding season. Therefore, the event will disrupt the breeding season of the local population to some extent, as it may reduce the number of suitable hollows in the area and increase the hollow access competition within the surrounding landscape.</p> <p>While this is the case, the event commencing prior to the breeding season is likely to reduce the risk of casualties and may encourage birds to utilise alternative breeding locations.</p> <p><i>According to Referral guideline for 3 WA threatened black cockatoo species (DAWE 2022), suitable nest hollows are only found in live trees with a Diameter at Breast Height DBH of at least 500 mm. Completely avoiding illumination of these trees would further reduce the likelihood of a significant impact on this species.</i></p>	<p>Possible – if trees with a DBH \geq 50cm (and their surrounding area) are used by the event (illuminated, impacted by noise and/or infrastructure installed near them.</p> <p>Negligible – if trees with a DBH \geq 50cm and are protected with an adequate exclusion buffer (50m minimum) for illumination and noise.</p>
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	While the event may temporarily reduce the availability and quality of habitat, it is unlikely to impact birds to an extent that would result in a decline in the species.	Unlikely
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	<p>If invasive predators such as foxes or cats are observed using lit or high-traffic areas, the provider will notify the land manager and support agreed predator control measures within their operational role.</p> <p>Weed species are already present on site; however, the event is unlikely to increase the current level of infestation, as all activity will</p>	Unlikely

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
	<p>be confined to existing tracks that are already regularly used by the local community, including dog walkers with off-leash dogs. Furthermore, the event crew will follow the best hygiene practices.</p>	
<p>Introduce disease that may cause the species to decline</p>	<p>Phytophthora dieback is already present on site and has already impacted the species' habitat to some extent (Appendix 3). Biosecurity management measures will be implemented for contractors, vehicles, and installation crews to minimise the risk of further spread within the site and to prevent its transfer to surrounding areas. These measures will include basic washdown and cleaning protocols for boots, tyres, vehicles, and equipment when entering or leaving work areas. The site team maintains readily available cleaning materials, such as spray bottles, methylated spirits, and scrubbing brushes, to support these practices. No specific mitigation measures are proposed for visitors.</p> <p>The Forest Red-tailed Black Cockatoo can be affected by Psittacine Beak and Feather Disease. The risk of disease transmission will be minimised by avoiding disturbance to trees with a DBH \geq 50 cm, which are more likely to contain hollows and be used by roosting or nesting individuals.</p>	<p>Possible – if no biosecurity management measures are implemented on site for visitors and/or if trees with a DBH \geq 50cm (and their immediate adjoining area) are impacted by the project.</p> <p>Negligible – otherwise</p>
<p>Interfere substantially with the recovery of the species</p>	<p><i>Forest Black Cockatoo (Baudin's Cockatoo Calyptorhynchus baudinii and Forest Redtailed Black Cockatoo Calyptorhynchus banksii naso) Recovery Plan (DEC 2008) indicates that 'the threatening processes for Baudin's Cockatoo and the Forest Red-tailed Black Cockatoo are killing by illegal shooting, feral Honeybees Apis mellifera, habitat loss, nest hollow shortage and competition for available nest hollows. Climate change is an additional threat that is likely to exacerbate the threatening processes as a result of changes to biodiversity and ecosystem function (Chambers et al. 2005). As Baudin's Cockatoo and the Forest Red-tailed Black Cockatoo occur in single populations, the entire populations are affected by these threats.'</i> Considering this, the project may interfere to some extent with the recovery of the species, at least temporarily, if trees with a DBH \geq 50 cm (and their immediate adjoining areas) are impacted by the project and/or if appropriate biosecurity management measures are not implemented to prevent the spread of Phytophthora dieback on site.</p>	<p>Possible – if no biosecurity management measures are implemented on site for visitors, if trees with a DBH \geq 50cm (and their immediate adjoining area) are impacted by the project, and/or if vehicle speed is not kept low.</p> <p>Negligible – otherwise</p>

According to the above, the project could have a significant impact on the Forest Red-tailed Black Cockatoo if no biosecurity management measures are implemented on site for visitors and/or if trees with a DBH \geq 50cm (and their immediate adjoining area) are impacted by the project.

Table 3 below details the assessment made for this species against the referral thresholds for black cockatoos listed in *Referral guideline for 3 WA threatened black cockatoo species* (DAWE 2022).

Table 3. Assessment against the referral thresholds for Forest Red-tailed Black Cockatoo

Attribute	Referral Threshold	Response
Breeding	Any loss of / impact upon known, suitable or potential nesting trees, and the habitat around these trees, is highly likely to require a referral to the minister. Loss of any potential nesting habitat is likely to require a referral to the minister.	Potential nesting trees and adjoining habitat may be temporarily impacted by the project, especially if trees with a DBH \geq 50cm and are not protected with an adequate exclusion buffer (50m minimum) for illumination and noise.
High-quality native foraging habitat	Loss of greater than or equal to 1 ha of foraging habitat scoring 5–10 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool (see Appendix A) and takes into account context i.e. proximity of the impact site to important attributes.	No foraging habitat will be lost as a result of the project. While some vegetation trimming may occur, it will be limited to routine maintenance activities undertaken by the Council. This will include minor pruning only, no clearing of hollow-bearing trees, and minimal removal of <i>Banksia sessilis</i> where required to maintain clearance along existing limestone paths. Furthermore, as the event will occur during the evening and night-time, birds will still be able to forage as normal during daylight hours.
Lower-quality native foraging habitat	Loss of greater than or equal to 10 ha of foraging habitat scoring 0–4 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool (see Appendix A) and takes into account context i.e. proximity of the impact site to important attributes.	Same as above.
Exotic foraging habitat	Loss of greater than or equal to 1 ha of predominantly exotic habitat (e.g. Cape Lilac trees and pine trees) known to be utilised by black cockatoos is likely to require a referral to the minister.	Same as above
Night roosting habitat	Removal of any part of a known night roosting site is likely to require referral to the minister.	As indicated in Practical Ecology (2026), two night roost locations for Long-billed Black-Cockatoo and Short-billed Black-Cockatoo are listed as occurring within the Park and in the adjacent Piesse Brook area, including (but not limited to) night roosts [redacted] and [redacted] (refer to Map 2 of Practical Ecology (2026)). No Forest Red-tailed Black Cockatoo night roosting trees are known to occur within the Study Area or its immediate vicinity. However, the presence of roosting individuals on site should be monitored prior to and during event installation to ensure that any newly identified roosting trees are avoided.

Considering the above, a referral under the EPBC Act is recommended to be submitted to DCCEEW if the mitigation measures below are not implemented on site:

- **Exclusion of any suitable breeding trees from the event areas** – Trees with a DBH \geq 50 cm will need to be measured and identified on site by a suitably qualified arborist. An exclusion buffer of (minimum) 50m* for illumination and noise will need to be established around these trees and maintained during the entire event duration to ensure that impacts are minimised as much as possible. *Note that while many hollow-bearing trees were recorded on site during the site assessment undertaken for (Practical Ecology 2026) (refer to Map 2 of this report), many of these trees will have a DBH <50 cm.*
- **Implementation of biosecurity mitigation measures for visitors** to minimise the risk of further spread of Phytophthora dieback within the site and to prevent its transfer to surrounding areas. This could be implemented by installing biosecurity foot mats (disinfectant footbaths) at entry and exit points along the event route.
- **Ensuring that vehicle speeds are kept low** (e.g. 20 km/h) on site to reduce the risk of fauna collisions

**Note that, while no fixed buffer distances are prescribed under the EPBC Act Referral Guidelines for WA black cockatoos, the guidelines identify disturbance to nesting trees and surrounding breeding habitat (including noise, visitation and edge effects) as a potential significant impact. In practice, environmental assessments in Western Australia commonly apply precautionary exclusion buffers (typically 50–300 m depending on disturbance intensity) to avoid indirect disturbance to active nesting hollows. This approach is also commonly accepted in EPBC Act referral assessments by DCCEEW as a precautionary method for managing potential disturbance impacts in the absence of prescribed statutory buffer distances. Considering the nature of the project, it is recommended that a 50 m exclusion buffer for illumination and noise be established around suitable breeding trees.*

Long-billed Black-cockatoo

As Long-billed Black-cockatoo habitat will be impacted by the project, a review against the *Matters of National Environmental Significance – Significant Impact Guidelines* (DEWHA 2013) was undertaken. The outcome of this assessment species is presented in Table 4 below.

Table 4. Significant impact guideline for Forest Long-billed Black-cockatoo, listed as endangered under the EPBC Act (DEWHA 2013)

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
Lead to a long-term decrease in the size of a population	<p>Suitable habitat occurs on the site, including numerous hollow-bearing trees in which this species could breed. Furthermore, a large number of <i>Zanda sp.</i> (either Long-billed Black-cockatoo and/or Short-billed Black-cockatoo) were observed on site during the site visit in 2026. Furthermore, previous ecological surveys confirmed that both species occur on the site. According to Birdlife Australia, the breeding season of this species is generally between October and February (Birdlife Australia 2026b).</p> <p>As the event is proposed to run from 12 June 2026 to 16 August 2026, it does not overlap with the breeding season for this species. While suitable breeding hollows may be present within the Study Area, these are unlikely to be in active use by this species during this period. In fact, Long-billed Black-cockatoos are more likely to be found actively using night roosting trees during the event's operational period. No casualties are, therefore, expected to occur during the event duration.</p> <p>Considering the above, and given that mitigation measures are proposed to protect known roosting locations on site and in the surrounding area, and that the event is temporary in nature, a long-term decrease in the size of the local population is unlikely.</p>	Unlikely
Reduce the area of occupancy of the species	<p><i>Forest Black Cockatoo (Baudin's Cockatoo Calyptorhynchus baudinii and Forest Redtailed Black Cockatoo Calyptorhynchus banksii naso) Recovery Plan</i> (DEC 2008) indicate that '<i>Baudin's Cockatoo is endemic to a 2,000 km² area</i>'. Even if the entire Study Area (18.43 ha) were impacted by the project, this would represent only around 0.0092% of the species' extent of occurrence, and this disturbance would be temporary in nature.</p> <p>Considering this, and the fact that no permanent habitat removal is proposed (limited shrub trimming only), the project is unlikely to result in any meaningful reduction in the area of occupancy of an important population of the species.</p>	Unlikely
Fragment an existing population into two or more populations	The event is unlikely to fragment the local population into two or more populations, as this species is highly mobile.	Unlikely
Adversely affect habitat critical to the survival of a species	As per Criterion 1, while the event is likely to impact the species to some extent, its limited scale and duration, together with the local context (including the large extent of suitable habitat that will remain unaffected), mean that no significant long-term impacts are expected. Therefore, it is unlikely that the project will adversely affect the habitat critical to the survival of Long-billed Black-cockatoo as a species.	Unlikely

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
<p>Disrupt the breeding cycle of a population</p>	<p>As previously mentioned, the Study Area is located in Jarrah Forest Region, within which the Forest Red-tailed Black-Cockatoo, Long-billed Black-cockatoo and Short-billed Black-cockatoo are known to breed (DAWE 2022).</p> <p>While this is the case, as the species breeds between October and February (Birdlife Australia 2026a), the event will not impact the breeding cycle of this species.</p>	<p>Unlikely</p>
<p>Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline</p>	<p>While the event may temporarily reduce the availability and quality of habitat, it is unlikely to impact birds to an extent that would result in a decline in the species.</p>	<p>Unlikely</p>
<p>Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat</p>	<p>If invasive predators such as foxes or cats are observed using lit or high-traffic areas, the provider will notify the land manager and support agreed predator control measures within their operational role.</p> <p>Weed species are already present on site; however, the event is unlikely to increase the current level of infestation, as all activity will be confined to existing tracks that are already regularly used by the local community, including dog walkers with off-leash dogs. Furthermore, the event crew will follow the best hygiene practices.</p>	<p>Unlikely</p>
<p>Introduce disease that may cause the species to decline, or</p>	<p>Phytophthora dieback is already present on site and has already impacted the species' habitat to some extent (Appendix 3). Biosecurity management measures will be implemented for contractors, vehicles, and installation crews to minimise the risk of further spread within the site and to prevent its transfer to surrounding areas. These measures will include basic washdown and cleaning protocols for boots, tyres, vehicles, and equipment when entering or leaving work areas. The site team maintains readily available cleaning materials, such as spray bottles, methylated spirits, and scrubbing brushes, to support these practices. No specific mitigation measures are proposed for visitors.</p> <p>The Long-billed Black-cockatoo can be affected by Psittacine Beak and Feather Disease. The risk of disease transmission will be minimised by avoiding disturbance to trees with a DBH \geq 50 cm, which are more likely to contain hollows and be used by roosting or nesting individuals.</p>	<p>Possible – if no biosecurity management measures are implemented on site for visitors and/or if trees with a DBH \geq 50cm (and their immediate adjoining area) are impacted by the project.</p> <p>Negligible – otherwise</p>
<p>Interfere with the recovery of the species.</p>	<p><i>Forest Black Cockatoo (Baudin's Cockatoo Calyptorhynchus baudinii and Forest Redtailed Black Cockatoo Calyptorhynchus banksii naso) Recovery Plan (DEC 2008) indicates that 'the threatening processes for Baudin's Cockatoo and the Forest Red-tailed Black Cockatoo are killing by illegal shooting, feral Honeybees Apis mellifera, habitat loss, nest hollow shortage and competition for available nest hollows. Climate change is an additional threat that is likely to exacerbate the threatening processes as a result of changes to biodiversity and ecosystem function (Chambers et al. 2005). As Baudin's Cockatoo and the Forest Red-tailed Black Cockatoo occur in single populations, the entire populations are affected by these threats.'</i> Considering this, the project may interfere to some extent with the recovery of the species, at least temporarily, if trees with a</p>	<p>Possible – if no biosecurity management measures are implemented on site for visitors, if trees with a DBH \geq 50cm (and their immediate adjoining area) are impacted by the project, and/or if vehicle speed is not kept low.</p>

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
	DBH \geq 50 cm (and their immediate adjoining areas) are impacted by the project and/or if appropriate biosecurity management measures are not implemented to prevent the spread of <i>Phytophthora dieback</i> on site.	Negligible – otherwise

As with the Forest Red-tailed Black-Cockatoo, the project could have a significant impact on the Long-billed Black-cockatoo if appropriate biosecurity management measures are not implemented on site for visitors and/or if trees with a DBH \geq 50 cm (and their immediate surrounding area) are affected by the project.

Table 5 below details the assessment made for this species against the referral thresholds for black cockatoos listed in *Referral guideline for 3 WA threatened black cockatoo species* (DAWE 2022).

Table 5. Assessment against the referral thresholds for Long-billed Black Cockatoo

Attribute	Referral Threshold	Response
Breeding	Any loss of / impact upon known, suitable or potential nesting trees, and the habitat around these trees, is highly likely to require a referral to the minister. Loss of any potential nesting habitat is likely to require a referral to the minister.	The event is unlikely to disturb the breeding cycle of this species as it will occur outside the species' breeding season.
High-quality native foraging habitat	Loss of greater than or equal to 1 ha of foraging habitat scoring 5-10 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool (see Appendix A) and takes into account context i.e. proximity of the impact site to important attributes.	No foraging habitat will be lost as a result of the project. While some vegetation trimming may occur, it will be limited to routine maintenance activities undertaken by the Council. This will include minor pruning only, no clearing of hollow-bearing trees, and minimal removal of <i>Banksia sessilis</i> where required to maintain clearance along existing limestone paths. Furthermore, as the event will occur during the evening and night-time, birds will still be able to forage as normal during daylight hours.
Lower-quality native foraging habitat	Loss of greater than or equal to 10 ha of foraging habitat scoring 0-4 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool (see Appendix A) and takes into account context i.e. proximity of the impact site to important attributes.	Same as above.
Exotic foraging habitat	Loss of greater than or equal to 1 ha of predominantly exotic habitat (e.g. Cape Lilac trees and pine trees) known to be utilised by black cockatoos is likely to require a referral to the minister.	Same as above
Night roosting habitat	Removal of any part of a known night roosting site is likely to require referral to the minister.	As indicated in Practical Ecology (2026), two night roost locations for Long-billed Black-cockatoo and Short-billed Black-cockatoo are listed as occurring within the Park and in the adjacent Piesse Brook area, including (but not limited to) night roosts

Attribute	Referral Threshold	Response
		<p>█ and █ (refer to Map 2 of Practical Ecology (2026)). A referral may be required if the known night roosting sites, as well as any newly identified sites recorded within the Study Area, are not adequately protected and excluded from the event area.</p>

Considering the above, a referral under the EPBC Act is recommended to be submitted to DCCEEW if the mitigation measures below are not implemented on site:

- **Exclusion of any known and newly identified night roosting habitat from the event area** – a 50m exclusion buffer for illumination and noise should also be applied around these trees to ensure their protection.
- **Implementation of biosecurity mitigation measures for visitors** to minimise the risk of further spread of Phytophthora dieback within the site and to prevent its transfer to surrounding areas.
- **Ensuring that vehicle speeds are kept low** (e.g. 20 km/h) on site to reduce the risk of fauna collisions
- **Ensuring that no tree hollows are impacted** by the project.

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Short-billed Black-cockatoo

As Short-billed Black-cockatoo habitat will be impacted by the project, a review against the *Matters of National Environmental Significance – Significant Impact Guidelines* (DEWHA 2013) was undertaken. The outcome of this assessment is presented in Table 6 below.

Table 6. Significant impact guideline for Short-billed Black-cockatoo, listed as endangered under the EPBC Act (DEWHA 2013)

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
Lead to a long-term decrease in the size of a population	<p>Suitable habitat occurs on the site, including numerous hollow-bearing trees in which this species could breed. Furthermore, a large number of <i>Zanda sp.</i> (either Long-billed Black-cockatoo and/or Short-billed Black-cockatoo) were observed on site during the site visit in 20206. Furthermore, previous ecological surveys confirmed that both species occur on the site. According to Birdlife Australia, the breeding season of this species is generally from late July to January (Birdlife Australia 2026c).</p> <p>As the event is proposed to run from 12 June 2026 to 16 August 2026, the first few weeks of the breeding season will be impacted by the project. As the event will start before the start of the species breeding season, animals usually breeding in the Study Area will be discouraged from using the hollow near the event area and will most likely be forced to seek alternative breeding hollows in the adjoining landscape where large extents of suitable habitat occur. Should some individual attempt to breed near the event area and nest abandonment occurs during the event period, it is more likely that eggs will be abandoned rather than dependent juvenile birds, meaning that the risk of casualties is reduced. In fact, the incubation period for this species is 28 days, and the nestling period is 70 days (Birdlife Australia 2026c).</p> <p>Considering the above, while the 2026 breeding season of this species may be disrupted by the event, as the event is temporary and mitigation measures will be put in place to avoid illumination of hollows, a long-term decrease in the size of the local population is unlikely.</p>	Unlikely
Reduce the area of occupancy of the species	<p>The extent of occurrence is estimated to be approximately 60,525 km² (DPW 2013). Even if the entire Study Area (18.43 ha) were impacted by the project, this would represent only around 0.0003% of the species' extent of occurrence, and this disturbance would be temporary in nature.</p> <p>Considering this, and the fact that no permanent habitat removal is proposed (limited shrub trimming only), the project is unlikely to result in any meaningful reduction in the area of occupancy of an important population of the species.</p>	Unlikely
Fragment an existing population into two or more populations	<p>The event is unlikely to fragment the local population into two or more populations, as this species is highly mobile.</p>	Unlikely
Adversely affect habitat critical to the survival of a species	<p>As per Criterion 1, while the event is likely to impact the species to some extent, its limited scale and duration, together with the local context (including the large extent of suitable habitat that will remain unaffected), mean that no significant long-term impacts are</p>	Unlikely

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
	<p>expected. Therefore, it is unlikely that the project will adversely affect the habitat critical to the survival of Shot-billed Black-Cockatoo as a species.</p>	
<p>Disrupt the breeding cycle of a population</p>	<p>The Study Area is located in Jarrah Forest Region, within which the Forest Red-tailed Black-Cockatoo, Long-billed Black-cockatoo and Short-billed Black-cockatoo are known to breed (DAWE 2022). These three species demonstrate site and hollow fidelity, returning to known breeding areas and often reusing established nest hollows over successive years.</p> <p>The event will occur during the first few weeks of the species' breeding season. Therefore, the event will disrupt the breeding season of the local population to some extent, as it may reduce the number of suitable hollows in the areas and increase the hollow access competition, even if such hollows may be available in the broad landscape as they may already be occupied.</p> <p>While this is the case, the event commencing prior to the breeding season is likely to reduce the risk of casualties and may encourage birds to utilise alternative breeding locations.</p> <p><i>According to Referral guideline for 3 WA threatened black cockatoo species</i>(DAWE 2022), suitable nest hollows are only found in live trees with a Diameter at Breast Height DBH of at least 500 mm. Completely avoiding these trees would further reduce the likelihood of a significant impact on this species.</p>	<p>Possible – if trees with a DBH \geq 50cm (and their surrounding area) are used by the event (illuminated, impacted by noise and/or infrastructure installed near them, etc).</p> <p>Negligible – if trees with a DBH \geq 50cm and are protected with an adequate exclusion buffer (50m minimum) for illumination and noise.</p>
<p>Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline</p>	<p>While the event may temporarily reduce the availability and quality of habitat, it is unlikely to impact birds to an extent that would result in a decline in the species.</p>	<p>Unlikely</p>
<p>Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat</p>	<p>If invasive predators such as foxes or cats are observed using lit or high-traffic areas, the provider will notify the land manager and support agreed predator control measures within their operational role.</p> <p>Weed species are already present on site; however, the event is unlikely to increase the current level of infestation, as all activity will be confined to existing tracks that are already regularly used by the local community, including dog walkers with off-leash dogs. Furthermore, the event crew will follow the best hygiene practices.</p>	<p>Unlikely</p>
<p>Introduce disease that may cause the species to decline, or</p>	<p>Phytophthora dieback is already present on site and has already impacted the species' habitat to some extent (Appendix 3). Biosecurity management measures will be implemented for contractors, vehicles, and installation crews to minimise the risk of further spread within the site and to prevent its transfer to surrounding areas. These measures will include basic washdown and cleaning protocols for boots, tyres, vehicles, and equipment when entering or leaving work areas. The site team maintains readily available cleaning materials, such as spray bottles, methylated spirits, and scrubbing brushes, to support these practices. No specific mitigation measures are proposed for visitors.</p>	<p>Possible – if no biosecurity management measures are implemented on site for visitors and/or if trees with a DBH \geq 50cm (and their immediate adjoining area) are impacted by the project.</p>

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
	<p>The Short-billed Black Cockatoo can be affected by Psittacine Beak and Feather Disease, avian polyomavirus, and chlamydophilosis (DEWHA 2005). The risk of disease transmission will be minimised by avoiding disturbance to trees with a DBH \geq 50 cm, which are more likely to contain hollows and be used by roosting or nesting individuals.</p>	<p>Negligible – otherwise</p>
<p>Interfere with the recovery of the species.</p>	<p><i>Referral guideline for 3 WA threatened black cockatoo species (DAWE 2022) indicates that 'There are multiple reasons for the decline of Carnaby's cockatoo. The decline to date has been brought about primarily by the extensive clearing of nesting and feeding habitat during the 20th century. Continuing threats mostly relate to loss of habitat due to clearing or degradation, competition for nest sites, and loss of individuals due to illegal activities, collisions with motor vehicles and disease. Key aspects of their ecology, such as long generation time (> 15 years), mean that the effect of many of these threats will not be immediately evident. For example threats that reduce breeding success, or result in high mortality of chicks or young birds will not change the number of adult birds for many years.'</i> Considering this, the project may interfere to some extent with the recovery of the species, at least temporarily, if trees with a DBH \geq 50 cm (and their immediate adjoining areas) are impacted by the project and/or if appropriate biosecurity management measures are not implemented to prevent the spread of Phytophthora dieback on site.</p>	<p>Possible – if no biosecurity management measures are implemented on site for visitors, if trees with a DBH \geq 50cm (and their immediate adjoining area) are impacted by the project, and/or if vehicle speed is not kept low.</p> <p>Negligible – otherwise</p>

According to the above, the project could have a significant impact on the Short-billed Black-cockatoo if no biosecurity management measures are implemented on site for visitors and/or if trees with a DBH \geq 50cm (and their immediate adjoining area) are impacted by the project.

Table 7 below details the assessment made for this species against the referral thresholds for black cockatoos listed in *Referral guideline for 3 WA threatened black cockatoo species (DAWE 2022)*.

Table 7. Assessment against the referral thresholds for Short-billed Black Cockatoo

Attribute	Referral Threshold	Response
Breeding	Any loss of / impact upon known, suitable or potential nesting trees, and the habitat around these trees, is highly likely to require a referral to the minister. Loss of any potential nesting habitat is likely to require a referral to the minister.	Potential nesting trees and adjoining habitat may be temporarily impacted by the project, especially if trees with a DBH \geq 50cm are not protected with an adequate exclusion buffer (minimum 50m) for illumination and noise are not implemented.
High-quality native foraging habitat	Loss of greater than or equal to 1 ha of foraging habitat scoring 5–10 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool (see Appendix A) and takes into account context i.e. proximity of the impact site to important attributes.	No foraging habitat will be lost as a result of the project. While some vegetation trimming may occur, it will be limited to routine maintenance activities undertaken by the Council. This will include minor pruning only, no clearing of hollow-bearing trees, and minimal removal of <i>Banksia sessilis</i> where required to maintain clearance along existing limestone paths. Furthermore, as the event will occur during the evening and night-time, birds will still be able to forage as normal during daylight hours.
Lower-quality native foraging habitat	Loss of greater than or equal to 10 ha of foraging habitat scoring 0–4 using the foraging quality scoring tool is likely to require referral to the minister. Foraging habitat quality is determined using the foraging quality scoring tool (see Appendix A) and takes into account context i.e. proximity of the impact site to important attributes.	Same as above.
Exotic foraging habitat	Loss of greater than or equal to 1 ha of predominantly exotic habitat (e.g. Cape Lilac trees and pine trees) known to be utilised by black cockatoos is likely to require a referral to the minister.	Same as above
Night roosting habitat	Removal of any part of a known night roosting site is likely to require referral to the minister.	As indicated in Practical Ecology (2026), two night roost locations for Long-billed Black-cockatoo and Short-billed Black-cockatoo are listed as occurring within the Park and in the adjacent Piesse Brook area, including (but not limited to) night roosts [redacted] and [redacted] (refer to Map 2 of Practical Ecology (2026)). A referral may be required if the known night roosting sites, as well as any newly identified sites recorded within the Study Area, are not adequately protected and excluded from the event area.

Considering the above, as for the Long-billed Black Cockatoo, a referral under the EPBC Act is recommended to be submitted to DCCEEW if the mitigation measures below are not implemented on site:

- **Exclusion of any suitable breeding trees from the event area** – Trees with a DBH \geq 50 cm will need to be measured and identified on site by a suitably qualified arborist. An exclusion buffer of (minimum) 50m for illumination and noise will need to be established around these trees and maintained during the entire event duration to ensure that impacts are minimised as much as possible.
- **Exclusion of any known and newly identified night roosting habitat from the event area** – a 50m exclusion buffer for illumination and noise should also be applied around these trees to ensure their protection.
- **Implementation of biosecurity mitigation measures for visitors** to minimise the risk of further spread of Phytophthora dieback within the site and to prevent its transfer to surrounding areas.
- **Ensuring that vehicle speeds are kept low** (e.g. 20 km/h) on site to reduce the risk of fauna collisions.

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Western Ringtail Possum

As Western Ringtail Possum habitat will be impacted by the project, a review against the *Matters of National Environmental Significance – Significant Impact Guidelines* (DEWHA 2013) was undertaken. The outcome of this assessment species is presented in Table 8 below.

Table 8. Significant impact guideline for Western Ringtail Possum, listed as critically endangered under the EPBC Act (DEWHA 2013)

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
Lead to a long-term decrease in the size of a population	<p>While no Western Ringtail Possums have been recorded on site previously, the 2021 ALA record (with photo) in Hartfield Park, approximately 6km to the south-west of the Study Area, suggests that this species could potentially occur within the Study Area, as there is habitat connectivity between this park and the Study Area.</p>	Unlikely
	<p>While this is the case, as no animals have been recorded in the past on site, it is unlikely that a large population of Western Ringtail Possum occurs on site. Furthermore, this species is known to mostly occur in long unburnt mature remnants of peppermint (<i>Agonis flexuosa</i>) woodlands with high canopy continuity and high foliage nutrients (high in nitrogen and low toxin levels); jarrah (<i>Eucalyptus marginata</i>)/marri (<i>Corymbia calophylla</i>) forests and woodlands with limited anthropogenic disturbance (DPW 2017). This further decreases the likelihood that the western ringtail possum would make significant use of the site (e.i. breed on site). However, this does not preclude the possibility that hollows or other suitable structures within the site may be occasionally used as refuge or shelter by the species. Should animals be present on site, they will most likely disperse in the broader landscape where a large extent of more suitable habitat occurs.</p>	
	<p>The breeding seasons of this species occur between April and July and September to November (DPW 2017). As the event is proposed to run from 12 June 2026 to 16 August 2026, one of the two breeding seasons of the species will be impacted by the project, should any animals be present on site.</p>	
	<p>As the event is temporary and mitigation measures will be put in place to avoid illumination of hollows, and given that the chance that individual(s) made significant use of the site is minimal, a long-term decrease in the size of the local population is unlikely.</p>	
Reduce the area of occupancy of the species	<p>The total extent of occurrence is estimated to be approximately 11,350.63 km² (DPW 2017). Even if the entire Study Area (18.43 ha) were impacted by the project, this would represent only around 0.0016% of the species' extent of occurrence, and this disturbance would be temporary in nature.</p>	Unlikely
	<p>Considering this, and the fact that no permanent habitat removal is proposed (limited shrub trimming only), the project is unlikely to result in any meaningful reduction in the area of occupancy of an important population of the species.</p>	

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
Fragment an existing population into two or more populations	The event is unlikely to fragment the local population into two or more subpopulations, as no extensive vegetation clearing is proposed and habitat connectivity will be maintained.	Unlikely
Adversely affect habitat critical to the survival of a species	As per Criterion 1, while the event is likely to impact the species to some extent, its limited scale and duration, together with the local context (including the large extent of suitable habitat that will remain unaffected), mean that no significant long-term impacts are expected. Therefore, it is unlikely that the project will adversely affect the habitat critical to the survival of Western Ringtail possum as a species.	Unlikely
Disrupt the breeding cycle of a population	<p><i>Western Ringtail Possum (Pseudocheirus occidentalis) Recovery Plan (DPW 2017) indicates that 'Vegetation communities critical to the species include long unburnt mature remnants of peppermint (Agonis flexuosa) woodlands with high canopy continuity and high foliage nutrients (high in nitrogen and low toxin levels); jarrah (Eucalyptus marginata)/marri (Corymbia calophylla) forests and woodlands with limited anthropogenic disturbance (unlogged or lightly logged, and a low intensity and low frequency fire history), that are intensively fox-baited and have low indices of fragmentation; coastal heath, jarrah/marri woodland and forest, peppermint woodlands, myrtaceous heaths and shrublands, Bullich (Eucalyptus megacarpa) dominated riparian zones and karri forest. Any habitat where western ringtail possums occur naturally are considered critical and worthy of protection'.</i></p> <p>Considering the existing anthropogenic disturbances on the site, it is unlikely that the Western Ringtail Possum would make significant use of the Study Area (e.i. breed on site). The Study Area is most likely to be used primarily as foraging and dispersal habitat. However, this does not preclude the possibility that hollows or other suitable structures within the site may be occasionally used as refuge or shelter by the species. Should animals be present on site, they will most likely disperse in the broader landscape where a large extent of more suitable habitat occurs.</p>	Negligible
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	While the event may temporarily reduce the availability and quality of habitat, it is unlikely to impact Western Ringtail Possum to an extent that would result in a decline in the species.	Unlikely
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	<p>If invasive predators such as foxes or cats are observed using lit or high-traffic areas, the provider will notify the land manager and support agreed predator control measures within their operational role.</p> <p>Weed species are already present on site; however, the event is unlikely to increase the current level of infestation, as all activity will be confined to existing tracks that are already regularly used by the local community, including dog walkers with off-leash dogs. Furthermore, the event crew will follow the best hygiene practices.</p>	Unlikely
Introduce disease that may cause the species to decline, or	Th species habitat can be impacted by a range of plant diseases such as the canker pathogen <i>Neofusicoccum</i> , <i>Armillaria luteobubalina</i> , Myrtle rust (<i>Puccinia psidii</i> s.l.) or even <i>Phytophthora dieback</i> . <i>Phytophthora dieback</i> is already present on site and has already impacted the species' habitat to some extent (Appendix 3).	Possible – if no biosecurity management measures are implemented on site

Significant Impact Criteria	Relevance to the site	Likelihood of a Significant Impact
	<p>Biosecurity management measures will be implemented for contractors, vehicles, and installation crews to minimise the risk of further spread within the site and to prevent its transfer to surrounding areas. These measures will include basic washdown and cleaning protocols for boots, tyres, vehicles, and equipment when entering or leaving work areas. The site team maintains readily available cleaning materials, such as spray bottles, methylated spirits, and scrubbing brushes, to support these practices. No specific mitigation measures are proposed for visitors.</p> <p>The risk of disease transmission between animals will be minimised by avoiding illumination of hollows.</p>	<p>for visitors and/or if trees hollows are impacted by the project.</p> <p>Negligible – otherwise</p>
<p>Interfere with the recovery of the species.</p>	<p><i>Western Ringtail Possum (Pseudocheirus occidentalis) Recovery Plan (DPW 2017)</i> indicates that the threatening processes operating on the western ringtail possum include habitat loss and fragmentation, predation, climate change, timber harvesting, fire, competition for tree hollows, habitat tree decline, un-regulated relocation of orphaned, injured and rehabilitated western ringtail possums, disease and gaps in knowledge.</p> <p>Considering this, the project may interfere to some extent with the recovery of the species, at least temporarily, if trees hollows are impacted by the project and/or if appropriate biosecurity management measures are not implemented to prevent the spread of Phytophthora dieback on site.</p>	<p>Possible – if no biosecurity management measures are implemented on site for visitors and/or if trees hollows are impacted by the project.</p> <p>Negligible – otherwise</p>

According to the above, the project could have a significant impact on the Western Ringtail Possum if no biosecurity management measures are implemented on site for visitors and/or if tree hollows are impacted by the project.

Considering the above, a referral under the EPBC Act is recommended to be submitted to DCCEEW if the two mitigation measures below are not implemented on site:

- **Implementation of biosecurity mitigation measures for visitors** to minimise the risk of further spread of Phytophthora dieback within the site and to prevent its transfer to surrounding areas.
- **Ensuring that no tree hollows are impacted** by the project, regardless of the tree size.

7. Conclusion

As detailed in this Report, a significant impact on Forest Red-tailed Black-Cockatoo, Long-billed Black-cockatoo, Short-billed Black-cockatoo, and Western Ringtail Possum is possible if any of the following mitigation measures are not implemented on site:

- **Exclusion of any suitable breeding trees from the event area** – Trees with a DBH \geq 50 cm will need to be measured and identified on site by a suitably qualified arborist. An exclusion buffer of (minimum) 50m for illumination and noise will need to be established around these trees and maintained during the entire event duration to ensure that impacts are minimised as much as possible.
- **Exclusion of any known and newly identified night roosting habitat from the event area** – a 50m exclusion buffer for illumination and noise should also be applied around these trees to ensure their protection.
- **Implementation of biosecurity mitigation measures for visitors** to minimise the risk of further spread of Phytophthora dieback within the site and to prevent its transfer to surrounding areas.
- **Ensuring that vehicle speeds are kept low (e.g. 20 km/h)** on site to reduce the risk of fauna collisions.
- **Ensuring that no tree hollows are impacted** by the project, regardless of the tree size.

Should any of these mitigation measures not be implemented on site, a referral under the EPBC Act to the DCCEEW may be required.

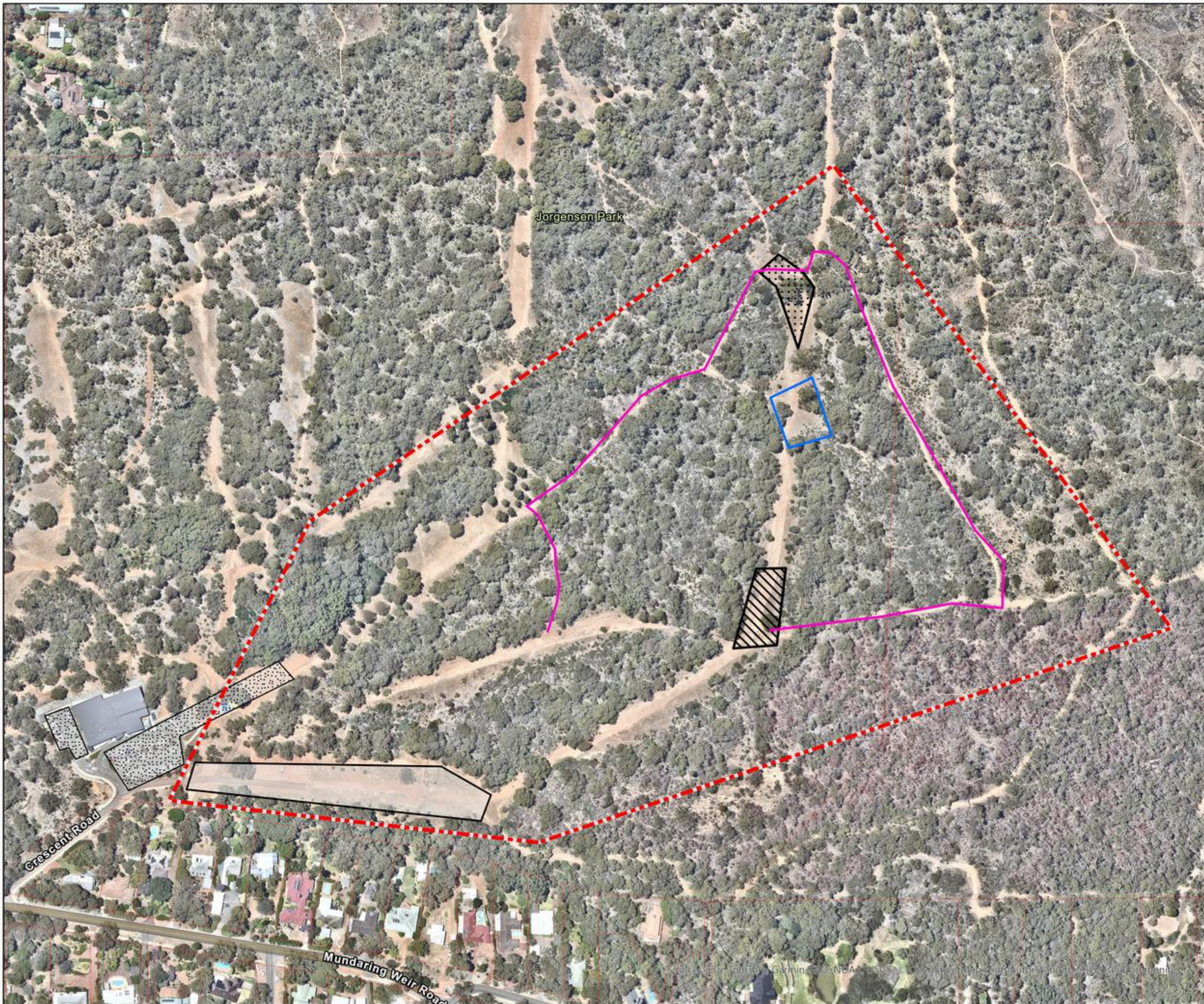
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- Birdlife Australia (2026c) *Bird profiles - Carnaby's Black-Cockatoo*. Accessed via: <https://birdlife.org.au/bird-profiles/carnabys-black-cockatoo/>
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Appendix 1. Maps

Maps commence on the following page.


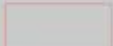




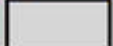
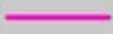
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Map 1. Study Area

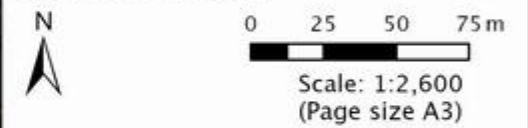
Jorgensen Park: Crescent Road, Kalamunda WA

Legend

-  Study area
-  Parcels
- Proposed developments**
-  Village
-  Mid Trail Village
-  Kalamunda Community Center Car Park
-  Back of House
-  Car Park
-  Proposed event route

Details

Mapping by: Nina Matheis and Julian Drummond
 Project code: 04059 KZE
 Date: 27/01/2026
 Aerial imagery: Nearmap (28/11/2025)
 Basemap data: Vicmap Basemap © State Government of Victoria

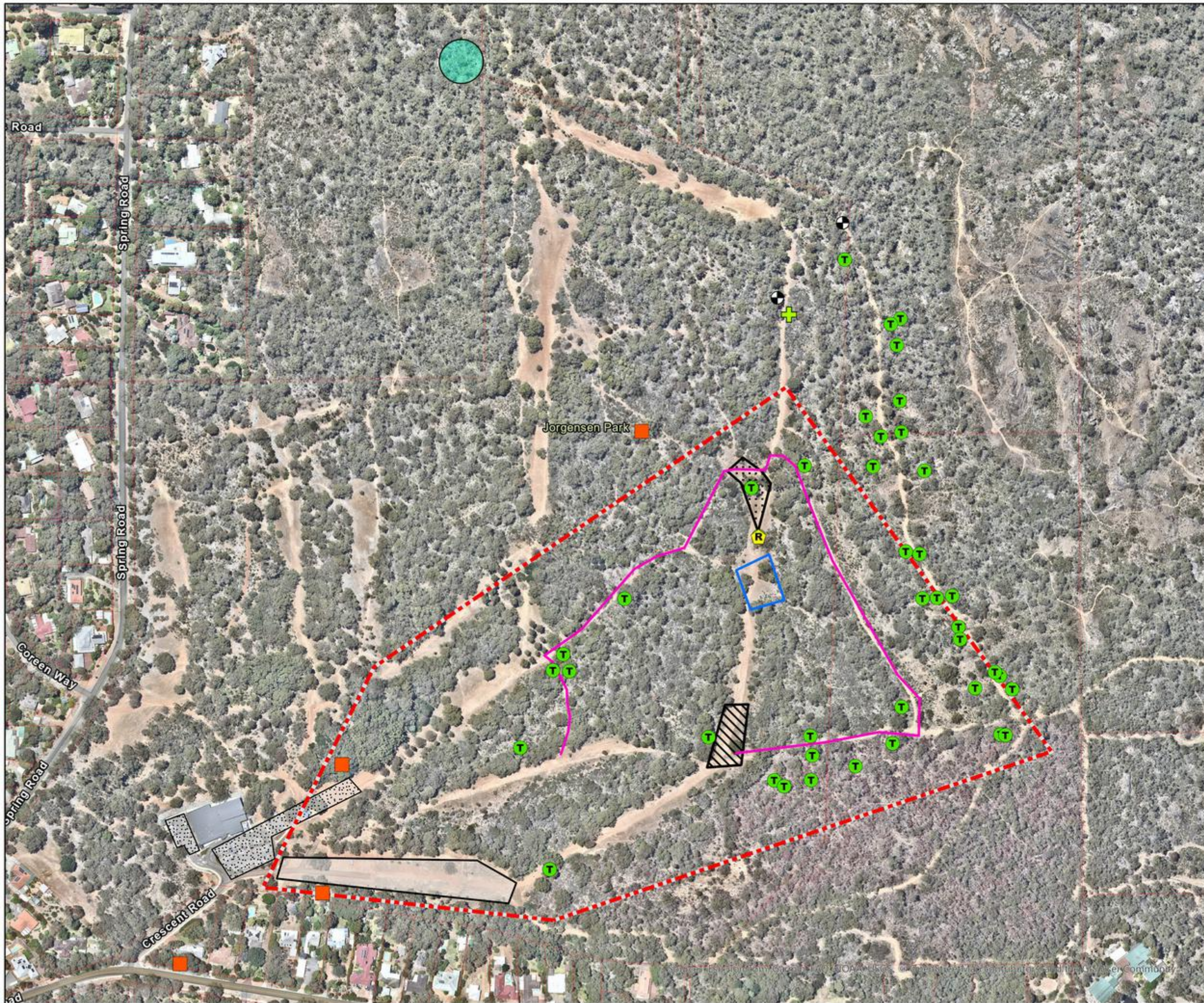


GDA2020 MGA Zone 50



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Disclaimer:
 Practical Ecology bears no responsibility for the accuracy and completeness of this information and any decisions or actions taken on the basis of the map. While information appears accurate at publication, nature and circumstances are constantly changing.



Map 2. Fauna Habitat

Jorgensen Park: Crescent Road, Kalamunda WA

Legend

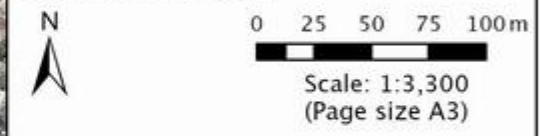
- Study area
- Parcels
- Proposed developments**
- Village
- Mid Trail Village
- Kalamunda Community Center Car Park
- Back of House
- Car Park
- Proposed event route

Fauna habitat

- Night roost locations for Long-billed Black-cockatoo and Short-billed Black-cockatoo
- + Burrows
- ⊕ Bird nests
- T Trees with Hollows and/or cracks
- R Ribbon-barked tree
- Kite nest areas (20m)

Details

Mapping by: Nina Matheis and Julian Drummond
 Project code: 04059 KZE
 Date: 27/01/2026
 Aerial imagery: Nearmap (28/11/2025)
 Basemap data: Vicmap Basemap © State Government of Victoria



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Appendix 2. Protected Matters Search Tool report

The report starts on the next page.

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Australian Government

Department of Climate Change, Energy,
the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 29-Apr-2026

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	4
Listed Threatened Species:	42
Listed Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	4
Commonwealth Heritage Places:	None
Listed Marine Species:	13
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	8
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	18
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[\[Resource Information \]](#)

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area	In feature area
Corymbia calophylla - Kingia australis woodlands on heavy soils of the Swan Coastal Plain	Endangered	Community known to occur within area	In buffer area only
Shrublands and Woodlands of the eastern Swan Coastal Plain	Endangered	Community known to occur within area	In buffer area only
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community may occur within area	In buffer area only

Listed Threatened Species

[\[Resource Information \]](#)

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area
Zanda baudinii listed as Calyptorhynchus baudinii Baudin's Cockatoo, Baudin's Black-Cockatoo, Long-billed Black-cockatoo [87736]	Endangered	Roosting known to occur within area	In feature area
Zanda latirostris listed as Calyptorhynchus latirostris Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat known to occur within area	In feature area
MAMMAL			
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat may occur within area	In buffer area only
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Setonix brachyurus Quokka [229]	Vulnerable	Species or species habitat likely to occur within area	In feature area
OTHER			
Westralunio carteri Carter's Freshwater Mussel, Ambiguous Mussel [86266]	Vulnerable	Species or species habitat known to occur within area	In feature area
PLANT			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Acacia anomala Grass Wattle, Chittering Grass Wattle [8153]	Vulnerable	Species or species habitat known to occur within area	In feature area
Acacia aphylla Leafless Rock Wattle [13553]	Vulnerable	Species or species habitat known to occur within area	In feature area
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area	In buffer area only
Anthocercis gracilis Slender Tailflower [11103]	Vulnerable	Species or species habitat known to occur within area	In feature area
Banksia mimica Summer Honeypot [82765]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Calytrix breviseta subsp. breviseta Swamp Starflower [23879]	Endangered	Species or species habitat may occur within area	In buffer area only
Chamelaucium lullfitzii listed as Chamelaucium sp. Gingin (N.G.Marchant 6) Gingin Wax [92777]	Endangered (listed as Chamelaucium sp. Gingin)	Species or species habitat may occur within area	In buffer area only
Conospermum undulatum Wavy-leaved Smokebush [24435]	Vulnerable	Species or species habitat known to occur within area	In feature area
Darwinia apiculata Scarp Darwinia [8763]	Endangered	Species or species habitat known to occur within area	In feature area
Diplolaena andrewsii [6601]	Endangered	Species or species habitat likely to occur within area	In feature area
Diuris drummondii Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat likely to occur within area	In feature area
Drakaea elastica Glossy-leafed Hammer Orchid, Glossy-leafed Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat may occur within area	In buffer area only
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Eremophila glabra subsp. chlorella [84927]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Eucalyptus x balanites Cadda Road Mallee, Cadda Mallee [87816]	Endangered	Species or species habitat may occur within area	In buffer area only
Goodenia arthrotricha [12448]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Grevillea curviloba subsp. incurva Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat may occur within area	In buffer area only
Grevillea flexuosa Zig Zag Grevillea [2957]	Vulnerable	Species or species habitat may occur within area	In feature area
Macarthuria keigheryi Keighery's Macarthuria [64930]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Morelotia australiensis listed as Tetraria australiensis Southern Tetraria [92784]	Vulnerable	Species or species habitat may occur within area	In feature area
Synaphea sp. Fairbridge Farm (D.Papenfus 696) Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
Thelymitra dedmaniarum Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat may occur within area	In feature area
Thelymitra stellata Star Sun-orchid [7060]	Endangered	Species or species habitat known to occur within area	In feature area
Thelymitra variegata Queen of Sheba [12582]	Critically Endangered	Species or species habitat may occur within area	In feature area

Listed Migratory Species [\[Resource Information \]](#)

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands [\[Resource Information \]](#)

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Australian Communications and Media Authority (ACMA) Lot 5 D033199 [AGPR6674]	WA	In buffer area only
Australian Postal Corporation Lot 130 P210547 [AGPR7221]	WA	In buffer area only
Lot 1 D027758 [AGPR7275]	WA	In buffer area only
Department of Defence Kalamunda Communications Facility [DD_0092]	WA	In buffer area only

Listed Marine Species [\[Resource Information \]](#)

Scientific Name	Threatened Category	Presence Text	Buffer Status
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Beelu	National Park	WA	In buffer area only
Gooseberry Hill	National Park	WA	In buffer area only
Helena River	Management Area	WA	In buffer area only
Kalamunda	National Park	WA	In feature area
Korung	National Park	WA	In buffer area only
Lesmurdie Falls	National Park	WA	In buffer area only
Unnamed WA23076	Nature Reserve	WA	In buffer area only
Unnamed WA24657	Conservation Park	WA	In buffer area only

Regional Forest Agreements [Resource Information]

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

RFA Name	State	Buffer Status
South-West Forest Region of Western Australia	Western Australia	In feature area

EPBC Act Referrals [Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Eradication of the European House Borer, Perth metropolitan area, WA	2009/5027		Completed	In feature area
Residential subdivision of Lot 126 Lawnbrook Road, Walliston	2021/9105		Completed	In buffer area only

Controlled action

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Bushmead Residential Development, Hazelmere, WA	2015/7414	Controlled Action	Post-Approval	In buffer area only
Construction of Residential Dwelling, Ozone Terrace, Kalamunda	2006/3147	Controlled Action	Post-Approval	In buffer area only
Development of an Integrated Aged Care Facility, Kalumunda, WA	2013/6990	Controlled Action	Completed	In buffer area only
National Lifestyle Village, Lot 97 Adelaide Street	2009/5141	Controlled Action	Post-Approval	In buffer area only
Nava-1 Cable System	2001/510	Controlled Action	Completed	In feature area
Roe Highway and Kalamunda Road Interchange upgrade, WA	2018/8316	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Community Centre Project, Kalamunda, WA	2019/8473	Not Controlled Action	Completed	In feature area
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Pipeline Extension, Hazelmere and Helena Valley, WA	2018/8239	Not Controlled Action	Completed	In buffer area only
Residential Development - Lot 608 Dixon Road, Kalamundah, WA	2014/7389	Not Controlled Action	Completed	In feature area
Residential development of Lots 302, 308, 320 and part of Lot 9502, Hawtin Rd, Forrestfield, WA	2016/7770	Not Controlled Action	Completed	In buffer area only
Ridge Hill Road intersection modification and offsite water main installation, Gooseberry Hill, WA	2020/8842	Not Controlled Action	Completed	In buffer area only
Roe Highway Noise Wall, High Wycombe, WA	2014/7149	Not Controlled Action	Completed	In buffer area only
To develop a residential development at Glyde Road, Lesmurdie, WA	2013/7096	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action (particular manner)				

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on the contents of this report.

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded breeding sites; and
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact us](#) page.

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Appendix 3. **Phytophthora Dieback Occurrence within the Area**

The map starts on the next page.

DRAFT

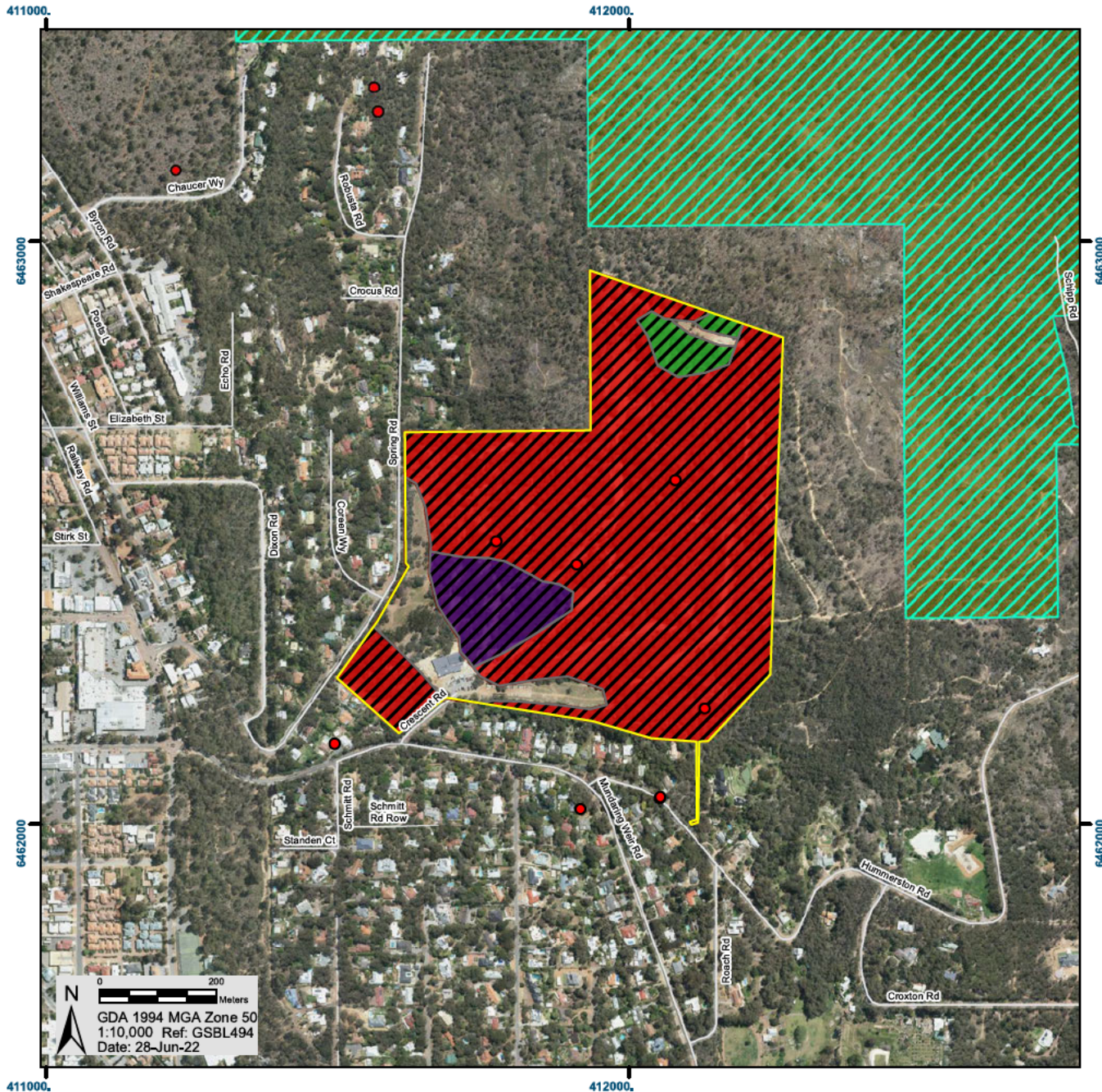


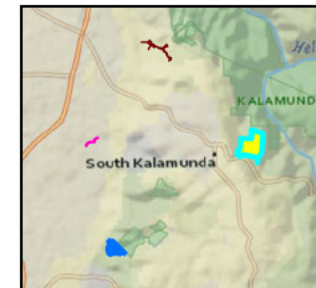
Figure 2-1: Phytophthora Dieback Occurrence showing Sample Locations - Jorgenson Park LNA 00027

Status

- Infested
- Uninfested
- Uninterpretable
- Excluded
- Unprotectable

Result

- ◆ *P. multivora*
- ◆ Negative
- Historic *P. cinnamomi*
- DWER Environmentally Sensitive Areas
- DBCA Legislated Lands
- Study Area



Phytophthora Dieback Occurrence Survey - City of Kalamunda LNA Reserves 2022, report prepared for the City of Kalamunda, June 2022



**GREAT SOUTHERN
BIO LOGIC**

Phytophthora Dieback occurrence as at June 2022. Recheck required from June 2023.

Great Southern Bio Logic does not guarantee that this map is without flaw of any kind and disclaims all liability for any errors, loss or other consequence which may arise from relying on any information depicted.