[redacted]

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Dear [redacted]

RE: Fauna Survey - Waste Recycling Centre - 21 McCombe Road - Davenport.

1. BACKGROUND

The City of Bunbury (the City) are proposing to upgrade sections of their waste recycling centre located at 21 McCombe Road in Davenport (project area). The proposed works will require the removal of two relatively small areas of vegetation (see Figure 1).

The City will be applying for a clearing permit from the state Department of Water and Environmental Regulation (DWER) but are also in the process of determining if any Matters of National Environmental Significance (MNES) as defined under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (*EPBC Act*) will be compromised by the action proceeding.

An initial assessment of the area general area by the City identified the presence of potential black cockatoo habitat and possible western ringtail possum (WRP - *Pseudocheirus occidentalis*) habitat (in both cases in the fro of marri trees (*Corymbia calophylla*)).

The City has requested some additional information be gathered on the significance of the fauna habitat present so that informed decisions on future development in the area can be made. This letter report summarises the findings of this assessment.

The waste recycling centre in located within Lot 101, 102 and 103 (part). The area surveyed included the two proposed clearing areas (situated within Lot 101 and part of Lot 103) and also other vegetation within the facility which is to be retained.

2. SCOPE

The scope of work was defined by the City of Bunbury as:

1. Carry out a “fauna survey” of the proposed clearing area and some adjoing areas with a focus upon but not limited to black cockatoo and western ringtail possums habitat.

This has involved:

A day time survey to record any evidence of black cockatoo and western ringtail possums habitat onsite (e.g. observed individuals, evidence of their presence onsite such as dreys, scats, chewed fruits, nest hollow bite marks etc.) and their habitat (e.g. breeding, roosting/denning, foraging habitat), consistent with available literature in addition to noting the presence of other species of conservations significance and/or their habitat; and

One nocturnal survey to determine the distribution and abundance of western ringtail possums within the project area.

2. Preparation of a concise report documenting methods, results and legislative requirements including a review against published Commonwealth Department of the Environment and Energy (DotEE) referral guidelines.

3. METHODS

Vegetation within and adjacent to the project area was examined by the Author on 7 December 2020. A nocturnal survey aimed at detecting WRP activity was also undertaken on the 7 December 2020.

3.1 FAUNA HABITATS

Descriptions of broad scale fauna habitats present within the project area are provided. These are based on the vegetation communities, soils and landforms observed during the site survey.

3.2 BLACK COCKATOO HABITAT ASSESSMENT

The following methods were employed to comply with the defined scope of works and are based on guidelines published by the federal Department of the Environment and Energy's (DotEE) (Commonwealth of Australia 2012) which states that surveys for Carnaby's, Baudin's and forest red-tailed black cockatoo habitat should:

- be done by a suitably qualified person with experience in vegetation or cockatoo surveys, depending on the type of survey being undertaken;
- maximise the chance of detecting the species' habitat and/or signs of use;
- determine the context of the site within the broader landscape—for example, the amount and quality of habitat nearby and in the local region (for example, within 10 km);
- account for uncertainty and error (false presence and absences); and
- include collation of existing data on known locations of breeding and feeding birds and night roost locations.

Habitat used by black cockatoos has been placed into three categories by the DotEE (Commonwealth of Australia 2012) these being:

- Breeding Habitat;
- Foraging Habitat; and
- Night Roosting Habitat.

So as to comply with the request scope of works and in line with the published guidelines the following will be carried out.

3.2.1 Breeding Habitat Assessment

The black cockatoo breeding habitat assessment has involved the identification of all suitable breeding trees species within the proposed clearing areas that have a Diameter at Breast Height (DBH) of over 50cm. The DBH of each tree was estimated using a pre-made 50 cm "caliper".

The location of each tree identified as being over the threshold DBH was recorded with a GPS and details on tree species, number and size of hollows (if any) noted. Trees observed to contain hollows (of any size/type) were marked with "H" using spray paint.

Target tree species included tuart, marri and jarrah or any other *Corymbia/Eucalyptus* species of a suitable size that may have been present. Peppermints, banksia, sheoak and melaleuca tree species (for example) were not assessed as they typically do not develop hollows that are used by black cockatoos.

For the purposes of this study a tree containing a potential cockatoo nest hollow has been defined as:

Generally, any tree which is alive or dead that contains one or more visible/possible hollows (cavities within the trunk or branches) potentially suitable for occupation by black cockatoo for the purpose of nesting/breeding. Hollows that had an entrance greater than about 10cm in diameter and would allow the entry of a black cockatoo into a suitably orientated and sized branch/trunk, will be recorded as a "potential nest hollow".

Identified hollows (if any) were examined using binoculars for evidence of actual use by black cockatoos (e.g. chewing around hollow entrance, scarring and scratch marks on trunks and branches). Trees with possible nest hollows (if any) were also scratched and raked with a large stick/pole in attempt to flush any sitting birds from hollows and calls of chicks were listened for (though it should be noted that the survey may be conducted outside of the main breeding season of all three species of black cockatoo).

3.2.2 Foraging Habitat Assessment

The location and nature of black cockatoo foraging evidence (e.g., chewed fruits around base of trees) observed during the field survey was recorded. The nature and extent of potential foraging habitat present was also documented irrespective of the presence of any actual foraging evidence.

3.2.3 Night Roosting Habitat Assessment

Direct and indirect evidence of black cockatoos roosting within trees on site was noted if observed (e.g. branch clippings, droppings or moulted feathers).

3.3 WESTERN RINGTAIL POSSUM HABITAT ASSESSMENT

3.3.1 Daytime Survey

A single day time surveys to locate and record dreys, obvious tree hollows, scats and individual WRPs was carried out and involved the examination of potential habitat within and near the project area.

3.3.2 Night Time Survey

A single nocturnal survey was carried out to provide an estimate of the distribution and abundance of WRPs in areas of potential habitat identified during the day time survey. Survey work was carried out on foot using an LED head torch.

3.3.3 Habitat Assessment

Description and comments on the amount and quality of WRP habitat within the project area is provided based on observations made during the site surveys.

3.4 OTHER FAUNA SPECIES OF CONSERVATION SIGNIFICANCE

Any evidence of use of each site by other fauna species of conservation significance will be recorded during the course of all day and night time survey work.

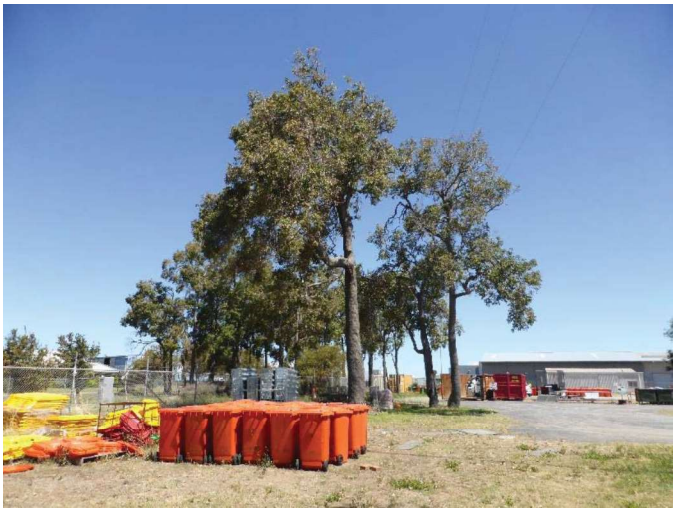
4. RESULTS

4.1 Fauna Habitats

Vegetation remaining within the waste recycling centre is comprised of scattered trees and small groves of trees, most of which are marri (*Corymbia calophylla*). There are also two small, planted exotic trees (species unknown) and a number of planted non-endemic shrubs. The two proposed clearing areas contain a total of about 10 marri trees of various sizes, one small exotic tree and some non-endemic shrubs.

Example images of vegetation present within the proposed clearing areas are shown in Table 1.

Table 1: Example Images of Vegetation within the Proposed Clearing Areas

Vegetation Description	Example Images
Vegetation within the proposed clearing area.	
	

4.2 BLACK COCKATOO HABITAT ASSESSMENT

4.2.1 Breeding Habitat Assessment

The proposed clearing areas were found to contain three habitat trees (DBH of ≥50cm) (Figure 2). These three trees do not appear to contain hollows of any size.

There are an additional four “habitat trees” within sections of the waste recycling centre that are to be retained.

4.2.2 Foraging Habitat Assessment

The proposed clearing areas contains marri trees which is a favoured foraging resource for all three species of black cockatoos. The total extent of this vegetation is less hat 500 m^2. Foraging evidence was found in these areas in the form of a small number of chewed marri fruit which was attributed to feeding Carnaby’s black cockatoo.

4.2.3 Night Roosting Habitat Assessment

No evidence of cockatoos roosting within the survey area was observed and it is considered unlikely that trees in or near the site would ever be used for this purpose.

4.3 WESTERN RINGTAIL POSSUM HABITAT ASSESSMENT

4.3.1 Daytime Survey

No evidence of western ringtail possums using propose clearing areas or the balance of the area surveyed was observed during the day survey.

4.3.2 Night Time Survey

No western ringtail possums were observed within or near the project area during the single night survey.

4.3.3 Habitat Assessment

The vegetation within the two prosed clearing areas is largely comprised of marri trees. There is no native midstorey or groundcover vegetation and the trees present have no canopy connectivity with other vegetation in adjoining areas.

Based on the observations made it is the Authors opinion that thee proposed clearing areas do not represent western ringtail possum habitat of any value and it is unlikely to ever be utilised by the species for any purpose except possibly on very rare occasions (i.e. by transient individuals).

4.4 OTHER FAUNA SPECIES OF CONSERVATION SIGNIFICANCE

No evidence of any other fauna species of conservation significance was observed during the survey period. The nature of the habitats present and their limited extent would suggest that the area is unlikely to not represent habitat for any other that fauna species of concern.

5. ENVIRONMENTAL APPROVALS AND REFERRALS

5.1 ENVIRONMENT PROTECTION ACT 1986

The purpose of the Environmental Protection Act (1986) (*EP Act*) is "*...to provide for an Environmental Protection Authority, for the prevention, control and abatement of pollution and environmental harm, for the conservation, preservation, protection enhancement and management of the environment and for matters incidental to or connected with the foregoing*".

The powers of the *Environmental Protection Act 1986* are administered by the Department of Biodiversity, Conservation and Attractions (DBCA), which in relevant cases advises to the DWER and other government departments.

Legislation proclaimed on 8 July 2004 protects all native vegetation in Western Australia. Under the law, clearing native vegetation for mining is prohibited, unless a clearing permit is granted by DWER, or the clearing is for an exempt purpose. These exemptions ensure that low impact day to day activities involving clearing can be undertaken. People that wish to clear are required to submit an application if an exemption does not apply.

Any future clearing at the subject site, not covered by an exemption, will require a clearing permit, approval of which includes an assessment against the ten clearing principles related to native vegetation in the *EP Act*. These principles provide a guide for when native vegetation should not be cleared. DWER must consider these principles in making a decision on whether or not to issue a clearing permit. The DBCA has set out the minimum requirements and standards for addressing each of the ten principles in detail in its assessment methodology:

Native vegetation should not be cleared if

(a) it comprises a high level of biological diversity;

(b) it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia;

(c) it includes, or is necessary for the continued existence of, rare flora;

(d) it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community;

(e) it is significant as a remnant of native vegetation in an area that has been extensively cleared;

(f) it is growing in, or in association with, an environment associated with a watercourse or wetland;

(g) the clearing of the vegetation is likely to cause appreciable land degradation;

(h) the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area;

(i) the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water; or

(j) clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

One purpose of the assessment reported on here is to provide information relevant to principle (a) & (b).

Native vegetation should not be cleared if it comprises a high level of biological diversity

While the assessment has not included a detailed fauna survey it is quite apparent that the project area has very low fauna values. The project area is highly degraded and would

only be utilised by a very small range of fauna species given their very low habitat values. As a consequence of their degraded state the project area cannot be regarded as representing an area of high biological diversity.

Any clearing of native vegetation from either area is therefore extremely unlikely to be classified as being in variance to this principle by the DWER.

Native vegetation should not be cleared if It comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia

As previously mentioned, the project area is highly degraded and the clearing required will only involve the removal of a very small number of trees. Despite the recorded use of the area by black cockatoos for foraging it would seem unlikely that this small number of trees would "comprise the whole or a part of, or is necessary for the maintenance of, a significant habitat" for WRPs (or any other fauna) and therefore, it is again anticipated that DWER would be unlikely to classify any proposed clearing as being in variance to this principle.

DWER will need to consider all available information relating to all 10 clearing principles including those relating to fauna. The results of any vegetation and flora surveys provided by the proponent will therefore also be taken into consideration.

5.2 ENVIRONMENT PROTECTION & BIODIVERSITY CONSERVATION ACT 1999

If an action (i.e., the proposed clearing within the project area) is deemed to have a potential "significant impact" on listed species a referral to the Department of Agriculture, Water and the Environment (DAWE) is required to ensure compliance with the *EPBC Act*. Currently, "significant impact" is defined within one document, this being:

- Commonwealth of Australia (2013). Matters of National Environmental Significance. Significant Impact Guidelines 1.1, *EPBC Act 1999*.

The DotEE have also released referral guidelines for black cockatoos and western ringtail possums which detail what scale of actions potentially constitute "significant impact" and therefore require referral, these being:

- Commonwealth of Australia (2012). *EPBC Act* Referral guidelines for three threatened black cockatoo species: Carnaby's cockatoo (endangered) *Calyptorhynchus latirostris*, Baudin's cockatoo (vulnerable) *Calyptorhynchus baudinii*, Forest red-tailed black cockatoo (vulnerable) *Calyptorhynchus banksii naso*.

- Commonwealth of Australia (2008). Background Paper to the *EPBC Act* Policy Statement 3.10 – Nationally Threatened Species and Ecological Communities. "Significant Impact Guidelines for the vulnerable western ringtail possum (*Pseudocheirus occidentalis*) in the southern Swan Coastal Plain, Western Australia"; and

- Commonwealth of Australia (2009). *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* Policy Statement 3.10 "Significant Impact

Guidelines for the vulnerable western ringtail possum (*Pseudocheirus occidentalis*) in the southern Swan Coastal Plain, Western Australia.

An assessment of the need to refer the project to DAWE using criteria within the relevant referral guidelines are provided below.

5.2.1 Black Cockatoos

The following points provide general guidance on what, in DotEE's view, may constitute a high or low risk of "significant impact" on black cockatoos as well as providing some guidance on uncertainty.

<u>Actions that have a high risk of significant impacts</u>

- Clearing of any known nesting tree.
- Clearing or degradation of any part of a vegetation community known to contain breeding habitat.
- Clearing of more than 1 ha of quality foraging habitat.
- Clearing or degradation (including pruning the top canopy) of a known night roosting site.
- Creating a gap of greater than 4 km between patches of black cockatoo habitat (breeding, foraging or roosting).

<u>Actions that have and uncertain risk of significant impacts</u>

- Degradation (such as through altered hydrology or fire regimes) of more than 1 ha of foraging habitat. Significance will depend on the level and extent of degradation and the quality of the habitat.
- Clearing or disturbance in areas surrounding black cockatoo habitat that has the potential to degrade habitat through introduction of invasive species, edge effects, hydrological changes, increased human visitation or fire.
- Actions that do not directly affect the listed species but that have the potential for indirect impacts such as increasing competitors for nest hollows.
- Actions with the potential to introduce known plant diseases such as Phytophthora spp. to an area where the pathogen was not previously known.

<u>Actions that have a low risk of significant impacts</u>

- Actions that do not affect black cockatoo habitat or individuals.
- Actions whose impacts occur outside the modelled distribution of the three black cockatoos

Given the presence of only three habitat trees, the absence of any actual breeding hollows, the limited extent of foraging habitat and no identified roost trees, no criteria listed in the referral guidelines will be compromised by clearing of vegetation within the project area. As such the DotEE would not consider the proposed removal of these trees to be a "controlled action".

This conclusion is based on the small number of trees involved, the fact that none would have ever been used as actual breeding habitat by black cockatoos, the location of the trees adjacent to a road in an existing light industrial area and the limited extent of quality foraging habitat. It is therefore considered highly unlikely that the clearing of the vegetation in question would have a "significant impact" on the status of any species of black cockatoo frequenting the area.

5.2.2 Western Ringtail Possums

The DAWE document titled "Significant Impact Guidelines for the vulnerable western ringtail possum (*Pseudocheirus occidentalis*) in the southern Swan Coastal Plain, Western Australia" (Commonwealth of Australia 2009) summarises what scale of actions would be considered likely to have a significant impact on WRPs in the Bunbury area.

Within the policy statement an action is deemed likely to have a significant impact on the WRP in the southern Swan Coastal Plain Region if it:

- reduces the ability of the region to support the persistence of the western ringtail possum; or
- modifies, destroys, removes or isolates important remnant habitat patches, or decreases the availability or quality of remnant habitat patches; or
- adversely affects connections between important areas; or
- interferes substantially with the ability of the area to effectively contribute to the recovery of the species.

The guidelines have also categorised certain areas between Bunbury and Dunsborough as "Core Habitat", "Primary Corridors" or "Supporting Habitat". The project area is situated in the zone defined as "Supporting Habitat" (also referred to as Area 3). As defined in the guidelines a significant impact on WRPs is deemed as "likely" if there is a real chance or possibility that an action within in the defined Area 3 will result in:

- any clearing of a remnant habitat patch that is greater than 0.5 hectares in size;
- the clearing of more than 50% of a remnant habitat patch that is between 0.2 and 0.5 hectares in size;
- the fragmentation of any existing habitat linkages.

The vegetation within the project area is not being utilised by western ringtail possums and it does not represent western ringtail possum habitat of any quality and therefore the likelihood of “significant impact” as defined within the DotEE guidelines occurring can be regarded as being very low/non-existent.

Based on available information, it is therefore the Authors opinion, that the DotEE would not consider the proposal to be a “controlled action” with respect to impact on the western ringtail possum or its habitat.

6. CONCLUSION AND RECOMMENDATIONS

Based on the results of this assessment it is the Authors opinion none of the 10 principles (as they relate to fauna) used by DWER when assessing a permit application will be compromised.

In addition, no significant impact on threatened fauna species listed under the *EPBC Act* is considered likely to occur as a consequence of clearing of vegetation from within either area. This would suggest that, if the proponent were to refer the proposed development to the DAWE for review, clearing of the vegetation in question would be assessed as “not a controlled action” and therefore would not require further assessment or approval under the *EPBC Act* before it could proceed.

In both instances this conclusion is primarily based on the limited amount of vegetation that will be affected and/or its relatively poor habitat value.

Based on these conclusions it is recommended that an application to clear be applied for from DWER to ensure compliance with the state *EP Act*.

Given that the proposal is very unlikely to have any significant impact on any *EPBC Act* listed threatened species a referral to the DAWE is considered unnecessary as considered highly likely to be deemed “not a controlled action” by the DotEE.

It should be note that these conclusions relate to fauna only. Impacts on flora and vegetation may also need to be considered.

If you have any questions or queries relating the information provided here please contact [redacted]

References Cited:

Commonwealth of Australia (2008). Background Paper to the *EPBC Act* Policy Statement 3.10 – Nationally Threatened Species and Ecological Communities. "Significant Impact Guidelines for the vulnerable western ringtail possum (*Pseudocheirus occidentalis*) in the southern Swan Coastal Plain, Western Australia".

Commonwealth of Australia (2009). *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)* Policy Statement 3.10 "Significant Impact Guidelines for the vulnerable western ringtail possum (*Pseudocheirus occidentalis*) in the southern Swan Coastal Plain, Western Australia.

Commonwealth of Australia (2012). *EPBC Act* Referral guidelines for three threatened black cockatoo species: Carnaby's cockatoo (endangered) *Calyptorhynchus latirostris*, Baudin's cockatoo (vulnerable) *Calyptorhynchus baudinii*, Forest red-tailed black cockatoo (vulnerable) *Calyptorhynchus banksii naso*.

Commonwealth of Australia (2013). Matters of National Environmental Significance. Significant Impact Guidelines 1.1, *EPBC Act 1999*.

Legend

Survey Area

Proposed Clearing Areas

N

0 5 10 15 20

Metres

Fauna Survey

Drawn: [redacted]

Date: Dec 2020

Scale: 1:500

Projection/Coordinate System: UTM/MGA Zone 50

Waste Recycling Centre
21 McCombe Road - Davenport

Aerial Photograph

Figure: 1

Legend

- Survey Area
- Proposed Clearing Areas
- Habitat Tree - No Hollows
- Habitat Tree - One or More Hollows

N

0 5 10 15 20

Metres

Fauna Survey

Drawn: [redacted]

Date: Dec 2020

Scale: 1:500

Projection/Coordinate System: UTM/MGA Zone 50

Waste Recycling Centre
21 McCombe Road - Davenport

Habitat Trees (DBH >50cm)

Figure: 1

Habitat Trees
Datum = GDA94
Entrance Size Ranges - Small = >5cm, Medium = 5 -10cm, Large = >10cm

Waypoint Number	Zone	mE	mN	Tree Species	Tree Height (m)	DBH (cm)	Number of Hollows	Estimated Hollow Entrance Size Range	Occupancy	Chew Marks	Potential Cockatoo Nest Hollow	Comments	In Clearing Area
wpt001	50H	376476	6308064	Marri	15-20	>50	0						No
wpt002	50H	376480	6308072	Marri	15-20	>50	2+	Small-Large (cockatoo)	Bees	Galahs	Yes	Evidence of use by galahs - one hollow occupied by bees. One hollow possibly large enough fo black cockatoos - no evidence of use	No
wpt003	50H	376479	6308084	Marri	15-20	>50	0						No
wpt004	50H	376493	6308115	Marri	15-20	>50	0						Yes
wpt005	50H	376505	6308116	Marri	15-20	>50	0						Yes
wpt006	50H	376522	6308087	Marri	20+	>50	0						No
wpt007	50H	376542	6308043	Marri	20+	>50	0						No