

Preparation of Fauna Management Plan

1. Introduction

The City of Cockburn ('The City') is situated within the unique biogeographic region of south-western Australia, which is recognised as one of the 36 global biodiversity hotspots (CEPF, 2021). These hotspots are identified on the basis of containing large numbers of endemic species that are found nowhere else on Earth, while also being vulnerable to significant threats (WABSI, 2021). Habitat loss, invasive flora and fauna, pathogens, climate change, and a host of other factors, are putting the unique diversity of plant and animal life in south-western Australia under increasing threat.

A wide range of native animal species reside in natural and urban areas within the City. In order to conserve the City's biodiversity and prevent further losses, it is critical that native fauna are appropriately protected and managed through the development process.

The City has identified that there is currently a lack of guidance material to inform the preparation of a Fauna Management Plan ('FMP'), and other supporting documents that are often required as part of various planning approvals including Subdivisions and Development Approvals.

To assist applicants in the preparation of these documents and to address the objectives of *Council Policy – Environmental Conservation*, the City has prepared this Procedure to outline the City's expectations for FMPs. A well-considered Fauna Management Plan limits the impact that development has on local species and results in improved conservation outcomes.

2. Legislative/Policy Framework

The protection of fauna and fauna habitat is the subject of State and Federal Government legislation including:

- *Environmental Protection Act 1986*;
- *Biodiversity Conservation Act 2016*;
- *Biodiversity Conservation Regulations 2018*;
- *Environment Protection and Biodiversity Conservation Act 1999*;
- *Biosecurity of Agricultural Management Act 2007*.

- *State Planning Policy 2.0 Environmental and Natural Resources*
- *State Planning Policy 2.8 Bushland Policy for the Perth Metropolitan Region*

FMPs (or similar) are often required as conditions of approval for applications approved by the City or the State Government under the *Planning and Development Act 2005*. Implementation of FMPs requires contractors to obtain a license to take or disturb fauna under the *Biodiversity Conservation Regulations 2018*. It is typically the City's responsibility to ensure that submitted FMPs protect local environmental attributes in accordance with the legislation listed above.

Council Policy – Environmental Conservation seeks to guide sustainable planning outcomes for the retention and management of locally significant flora and fauna.

3. Purpose

The purpose of this Procedure is to set out the information required to be provided within a FMP to ensure that impacts to local fauna and fauna habitat are appropriately managed as part of the planning process in line with the City's expectations.

4. Pre-Lodgement

The City actively encourages applicants to liaise closely with its Officers before formally submitting a FMP for approval and the following options are available:

- Meeting with representatives from relevant City Departments (to be arranged by the Environmental Co-ordinator);
- Site meeting with interested representatives;
- Lodgement of preliminary plans and draft technical reports for discussion; and
- Requesting advice via e-mail or over the phone. Where issues are identified, several meetings may be held prior to lodgement.

5. Scope

This section provides a summary of the matters required to be addressed in a FMP. Appendix A provides reference to supporting documentation that needs to be considered in addressing specific requirements.

It is important to note that the following outline is a guide, and that more or less detail may be required depending on the specific application.

5.1. Introduction

5.1.1 SCOPE OF PROPOSED DEVELOPMENT

The location, size, and scope of the proposed development must be detailed. A high resolution, photographic map detailing the study area and any areas of interest must be included.

5.1.2 REASON FOR THE FAUNA MANAGEMENT PLAN

Where applicable, reference must be made to the Western Australian Planning Commission (WAPC) Subdivision Approval number or the Development Approval number and the details of any attached conditions pertinent to fauna management. Should a Local Structure Plan be applicable to the subject site, provision of any details of any environmental investigations undertaken at this stage of planning.

5.1.3 DOCUMENTATION OF RELEVANT LEGISLATION

Federal, state and City legislation relevant to the FMP must be listed.

5.2. Existing Environment

5.2.1 FAUNA HABITAT TYPE AND CONDITION

An assessment of the fauna habitat types found within the study area based on desktop review and field survey. The extent, distribution and condition of the fauna habitat types must be identified.

High resolution, good-quality digital photographs must be taken of each habitat type. Enough photographs should be taken to ensure accurate representation of the habitat and capture any variation that exists or significant features.

5.2.2 POTENTIAL FAUNA SPECIES

A list of all the species likely to occur on the site based on a desktop review of available state databases and historical site survey. This is inclusive of introduced fauna species.

5.2.3 SPECIES OF CONSERVATION SIGNIFICANCE

A detailed evaluation of fauna species of conservation significance must be completed based on the list of fauna species likely to occur within the study area. For each significant species, this should include discussion of:

- its conservation status or the other reasons for its significance;
- its known distribution and habitat preference;
- its likelihood of occurrence in the study area, accounting for local environment, age and location of records, ecological knowledge and regional context;
- any ecological traits or attributes relevant to the proposed works, such as vulnerabilities to specific impacts.

Individual records for each fauna species observed during pre-clearing field surveys, with an emphasis on significant fauna, including habitat, location, abundance, and detection method must be listed.

5.3. Fauna Impacts

A detailed evaluation of all the potential impacts that the proposed works may have on the fauna likely to occur within the study area. This may include but is not limited to, discussion on the following impacts:

- Loss of fauna habitat;
- Habitat fragmentation;
- Increased site access for feral predators;
- Injury or mortality during the clearing process;
- Feral and pest fauna;
- Displacement of fauna into adjacent areas.

5.4. Management Actions and Implementation

5.4.1. LICENSES

Detail of the relevant licenses required to interact with fauna species must be provided. Copies of these licenses are required to be sent to the City prior to any trapping commencing onsite.

5.4.2. RESPONSIBILITIES

The personnel involved in the surveys must be listed and their roles, qualifications and experience must be outlined. If third parties contributed to the report or analysis, e.g. site surveys and expert advice for a fauna group, their details and roles must also be included.

5.4.3. PRE-CLEARING

Pre-clearing activities shall be performed by a qualified and experienced Zoologist. Species-specific (or broader groups of similar fauna species) management measures must be detailed, which may include but is not limited to the following:

5.4.3.1. Trapping programs

Where applicable, trapping programs must be detailed and include:

- The targeted fauna species or species;
- Trapping methodology (timing, types of traps to be used, number of traps to be used, trap checking schedule etc.)
- Relocation methodology (release site).

5.4.3.2. Active foraging

Where applicable, detail must be provided on pre-clearing active foraging to search for reptiles, amphibians, or other fauna, and the management measures for any captured fauna must be outlined.

5.4.3.3. Bird nests and tree hollows

Where applicable, detail must be provided on pre-clearing site inspections for bird nests and tree hollows. Management and relocation measures for any identified active bird nests or tree hollows, including management of protected Black Cockatoo chicks found in nests must be outlined.

5.4.3.4. Feral animals

When clearing large areas of vegetation, applicants must implement feral animal control measures to mitigate increased predation pressure on native fauna at adjacent sites. Clearing can lead to feral animals being displaced into adjacent natural areas. This

increases predation by feral predators (e.g. foxes and cats) and causes population increases for herbivorous species such as rabbits, which can cause significant habitat degradation.

Control measures should include actions prior to clearing and immediately after clearing.

The protocol for the capture and management of any introduced fauna must be detailed in the FMP, noting that the City supports captured feral animals, excluding cats, being humanely euthanized by a suitably qualified Zoologist. All captured cats, feral or not, are to be delivered to the City's Animal Pound for processing.

5.4.3.5. Domestic animals

All captured domestic animals (namely domestic cats and dogs) must be delivered to the City's Animal Pound immediately upon capture. This must be detailed in the report.

5.4.3.6. Kangaroos

The protocol for encountering kangaroos in the study area must be detailed. The City acknowledges that the relocation of kangaroos is seldom successful and is therefore supportive of alternative solutions.

5.4.3.7. Beehives

Detail must be provided on pre-clearing site inspections for active beehives within the study area. Management measures for any identified beehives must be outlined.

5.4.4. DURING CLEARING

A comprehensive Management Plan must be designed to identify, relocate and prevent harm to the native fauna remaining in the study area during vegetation clearing. Species-specific (or broader groups of similar fauna species) management plans may be necessary.

Adaptive management measures for dealing with unexpected fauna as well as measures for dealing with injured fauna within the study area must be addressed.

A qualified and experienced Zoologist must be present on-site throughout the vegetation clearing process.

5.4.5. ANIMAL WELFARE

Welfare of fauna, both native and feral species, is a primary concern prior to and during clearing. Consideration for animal welfare must be addressed throughout the management plan and may include discussion on, but is not limited to:

- Animal injury;
- Checking and emptying traps at appropriate times of the day and at adequate frequencies;
- Ensuring captured animals have adequate access to food;
- Ensuring appropriate thermal trap conditions;
- Ant management for traps;
- Biosecurity;
- Planning for unexpected changes in weather.

5.5. Compliance Management

5.5.1. TRAINING

A qualified and experienced Zoologist must be responsible for implementation of the Fauna Management Plan. The training of other staff involved in inspections, surveys, or vegetation clearing, may be necessary.

Training and qualifications of key personnel must be addressed in detail and discuss how training will minimise the potential to injure native fauna.

5.5.2. REPORTING

The City must be advised that any pre-clearing actions have been undertaken prior to commencement of site works.

A letter summarising all fauna relocation actions undertaken, including the activities undertaken, the dates when the fauna relocation program was in operation, the number of each species relocated, the relocation locations, and the number of each species killed or injured, shall be provided to the City within 30 days of the conclusion of the vegetation clearing program.

5.6. Supporting Information

The following information is to be attached to the Fauna Management Plan:

- Relevant license/s to take, relocate, and/or euthanize fauna;
- A map showing the overall clearing footprint, inclusive of the following detail:
 - o A tree survey including all trees >100 millimetres diameter at breast height (DBH), with all potential Black Cockatoo breeding trees to be indicated (>500 metre DBH); and
 - o A map showing which of the abovementioned trees are to be retained. All other documents prepared in support of the subdivision or site plan are expected to be consistent with this map.

6. References

- Critical Ecosystem Partnership Fund (CEPF) (2021). Explore the Biodiversity Hotspots. Available at <https://www.cepf.net/node/1996>
- The Western Australian Biodiversity Science Institute (WABSI) (2021). Western Australia's unique biodiversity. Available at <https://wabsi.org.au/our-work/wa-unique-biodiversity>

7. Related Legislation and Documents

Fauna Relocation Management Plan	
Information required	Supporting legislation or guidelines
<i>Site context</i>	
Purpose of the Fauna Relocation Management Plan	<ul style="list-style-type: none"> - WAPC Subdivision Approval No. (if applicable) - Development Approval No. (if applicable) - Council Policy – Environmental Conservation - Local Structure Plan (if applicable)
Documentation of relevant federal, state, and local legislation	<ul style="list-style-type: none"> - <i>Environment Protection and Biodiversity Conservation Act 1999</i> - <i>Environmental Protection Act 1986</i> - <i>Biodiversity Conservation Act 2016</i> - <i>Biodiversity Conservation Regulations 2018</i> - <i>Biosecurity of Agricultural Management Act 2007</i> - <i>Planning and Development Act 2005</i> - <i>Planning and Development (Local Planning Scheme) Regulations 2015</i> - State Planning Policy 2.0 – Environment and Natural Resources Policy - State Planning Policy 2.8 - Bushland Policy for the Perth Metropolitan Region
<i>Existing environment</i>	

Fauna habitat types	<ul style="list-style-type: none"> - Technical Guidance - Terrestrial vertebrate Fauna Surveys for Environmental Impact Assessment. Environmental Protection Authority (2020) - Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment. Environmental Protection Authority (2016)
Potential fauna species	<ul style="list-style-type: none"> - Guidelines for Detecting Mammals (or Reptiles, Bats, Birds, Frogs) Listed as Threatened under the EPBC Act (1999) - Technical Guidance - Terrestrial vertebrate Fauna Surveys for Environmental Impact Assessment. Environmental Protection Authority (2020) - Standard Operating Procedures (SOPs). Department of Biodiversity, Conservation and Attractions (2020) - EPBC Act Referral guidelines for three threatened black cockatoo species: Carnaby's cockatoo, Baudin's cockatoo and Forest red-tailed black cockatoo. Department of Agriculture, Water and Environment (2022)
Conservation Significant species	<ul style="list-style-type: none"> - <i>Environment Protection and Biodiversity Conservation Act 1999</i> - <i>Biodiversity Conservation Act 2016</i> - <i>Biodiversity Conservation Regulations 2018</i> - Priority fauna list (Department of Biodiversity, Conservation and Attractions 2021)
<i>Management actions and implementation</i>	
Licenses	<ul style="list-style-type: none"> - <i>Biodiversity Conservation Regulations 2018</i>
Pre-clearing	<ul style="list-style-type: none"> - Technical Guidance - Terrestrial vertebrate Fauna Surveys for Environmental Impact Assessment. Environmental Protection Authority (2020)
During clearing	<ul style="list-style-type: none"> - Standard Operating Procedures (SOPs). Department of Biodiversity, Conservation and Attractions (2020)
Adaptive management	<ul style="list-style-type: none"> - EPBC Act Referral guidelines for three threatened black cockatoo species: Carnaby's cockatoo, Baudin's cockatoo and Forest red-tailed black cockatoo. Department of Agriculture, Water and Environment (2022)
Animal welfare	<ul style="list-style-type: none"> - <i>Animal Welfare Act 2002</i> - The Australian Code for the Care and Use of Animals for Scientific Purposes. National Health and Medical Research Council (2013) - Standard Operating Procedures (SOPs). Department of Biodiversity, Conservation and Attractions (2020) - Technical Guidance - Terrestrial vertebrate Fauna Surveys for Environmental Impact Assessment. Environmental Protection Authority (2020)

8. Feedback

8.1. City employees may provide feedback about this document by emailing SustainabilityandEnvironmentBU@cockburn.wa.gov.au

9. Approval and Review Details

Approval and Review	Details
Approval Authority	Carol Catherwood
Approval By	Acting Chief of Built and Natural Environment
Procedure Owner Unit	Environmental Policy and Planning
Originator (TITLE)	Environmental Co-ordinator
Next Review Date	9/07/2024

Approval and Amendment History	Details
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Notes	