

INSTRUCTIONS FOR ENVIRONMENTAL REVIEW

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| Proposed scheme amendment: | Metropolitan Region Scheme Amendment 1412 – South-East Baldivis Urban Precinct |
| Responsible Authority: | Western Australian Planning Commission |
| Reference: | APP-0000548 / REC-0000297 |
| Assessment number: | 2379 |
| Location: | Baldivis South – land bound by Sixty Eight Road (north), Baldivis Road (east) and the boundary of lots fronting Wandoo Drive (south). City of Rockingham. |
| Public review period: | Environmental Review Document – timing and procedure in accordance with the <i>Planning and Development Act 2005</i> |

1. Introduction

Environmental Review (ER) Instructions are provided to the Responsible Authority (RA) to define the scope and content of the ER required by section 48C(1)(a) of the *Environmental Protection Act 1986* (EP Act). These instructions have been prepared by the Environmental Protection Authority (EPA) in consultation with interested agencies.

These instructions are available on the EPA website (www.epa.wa.gov.au).

Context

The EPA has determined that the above amendment to the Metropolitan Region Scheme (MRS) is to be assessed under Part IV (section 48A) of the EP Act because the implementation of the scheme through future development within the proposed 'Urban Deferred' zoning has the potential to have a significant effect on the environmental factors including Flora and Vegetation, Terrestrial Fauna and Social Surroundings.

Environmental Values

The amendment is being assessed because the proposed scheme amendment has the potential to have a significant effect on the environmental values within and nearby of the amendment area, including but not limited to:

- Flora and vegetation: Department of Biodiversity Conservation and Attractions Priority Ecological Communities (PECs) and Threatened Ecological Community

(TEC) listed under the *Biodiversity Conservation Act 2016* (BC Act) and Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

- Terrestrial fauna: Habitat for threatened fauna listed under the BC and EPBC Acts.
- Social surroundings: Aboriginal Cultural Heritage values and visual amenity associated with the natural and semi-rural character of the area.
- Inland waters: Impacts to natural surface and groundwater regimes and impacts to water quality.

The preliminary key environmental factors related to these environmental values which are required to be addressed in the ER are identified in Section 3.

Procedure

The EPA requires the RA to undertake the ER according to these instructions.

Next step in the assessment process

The next step in the assessment process is the release of the ER for advertising. Subject to statutory processes, when the EPA is satisfied that the ER document has been prepared in accordance with the instructions, the RA can proceed to advertise the ER and proposed scheme amendment for a public review period as prescribed by the *Planning and Development Act 2005* (PD Act). To facilitate adequate public input, the ER document should be made available as widely as possible and at a reasonable cost. Appendix 1 of this document describes in detail the process for assessment of planning schemes.

Scope and Content

The scope and content of the ER is outlined in sections 2 to 5 of these instructions. The EPA requires the form of the document to be prepared according to the [Environmental Review Document template](#).

Timing

Table 1 sets out the timeline for the assessment of the MRS amendment.

| Key assessment milestones |
|---|
| EPA issues instructions to RA <i>(60 days after referral)</i> |
| RA prepares ER and submits to EPA |
| EPA authorises advertising of ER and scheme amendment for public review <i>(30 days from RA submission of ERD)</i> |
| RA advertises scheme amendment and ER for public review in accordance with sections 39 and 43 of the <i>Planning and Development Act 2005</i> |

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| Close of public review period |
| RA provides to the EPA copies of submissions regarding environmental issues <i>(7 days from close of public review period)</i> |
| RA provides Response to Submissions to EPA <i>(42 days from close of public review period)</i> |
| EPA reports to the Minister for Environment on environmental factors and recommended scheme conditions <i>(60 days after end of public review period or 30 days after receiving RA's Response to Submissions, whichever is longer, but no more than 72 days from the end of the public review period)</i> |

Assessment by the Commonwealth

The EPA notes that the MRS amendment, if approved, could allow future proposals (subdivision, development and provision of infrastructure) that may be considered controlled actions under the EPBC Act, depending on whether Matters of National Environmental Significance (MNES) are adequately protected by the finalised scheme amendment. In general, planning scheme amendments are not considered 'actions' under the EPBC Act (refer section 523) and are not subject to assessment by the Commonwealth. The RA should consider Commonwealth advice and guidance documents in relation to the relevant MNES.

2. The scheme amendment

The subject of these instructions is MRS Amendment 1412, which proposes to transfer approximately 98.3 hectares (ha) of land in Baldvis (south) from the 'Rural' zone to the 'Urban Deferred' zone. The amendment area is located at the intersection of Baldvis and Sixty Eight Roads in the City of Rockingham and affects about 35 lots approximately 2-5 ha in size. The location of the proposed MRS amendment is shown in Figures 1 and 2, and a summary of the MRS amendment is set out in Table 1. The RA for this amendment is the Western Australian Planning Commission (WAPC).

Table 2: Summary of the scheme amendment

| | |
|-------------------------------|---|
| Scheme amendment title | MRS 1412 South-East Baldvis Urban Precinct |
| RA name | WAPC |
| Location | Land generally bound by Sixty Eight Road (north), Baldvis Road (east) and the boundary of lots fronting Wandoo Drive (south), Baldvis, City of Rockingham. |
| Short description | The amendment seeks to transfer approximately 98.3 ha of land from the 'Rural' zone to the 'Urban Deferred' zone under the MRS, to allow for future subdivision, development and use of land for residential and associated purposes. |

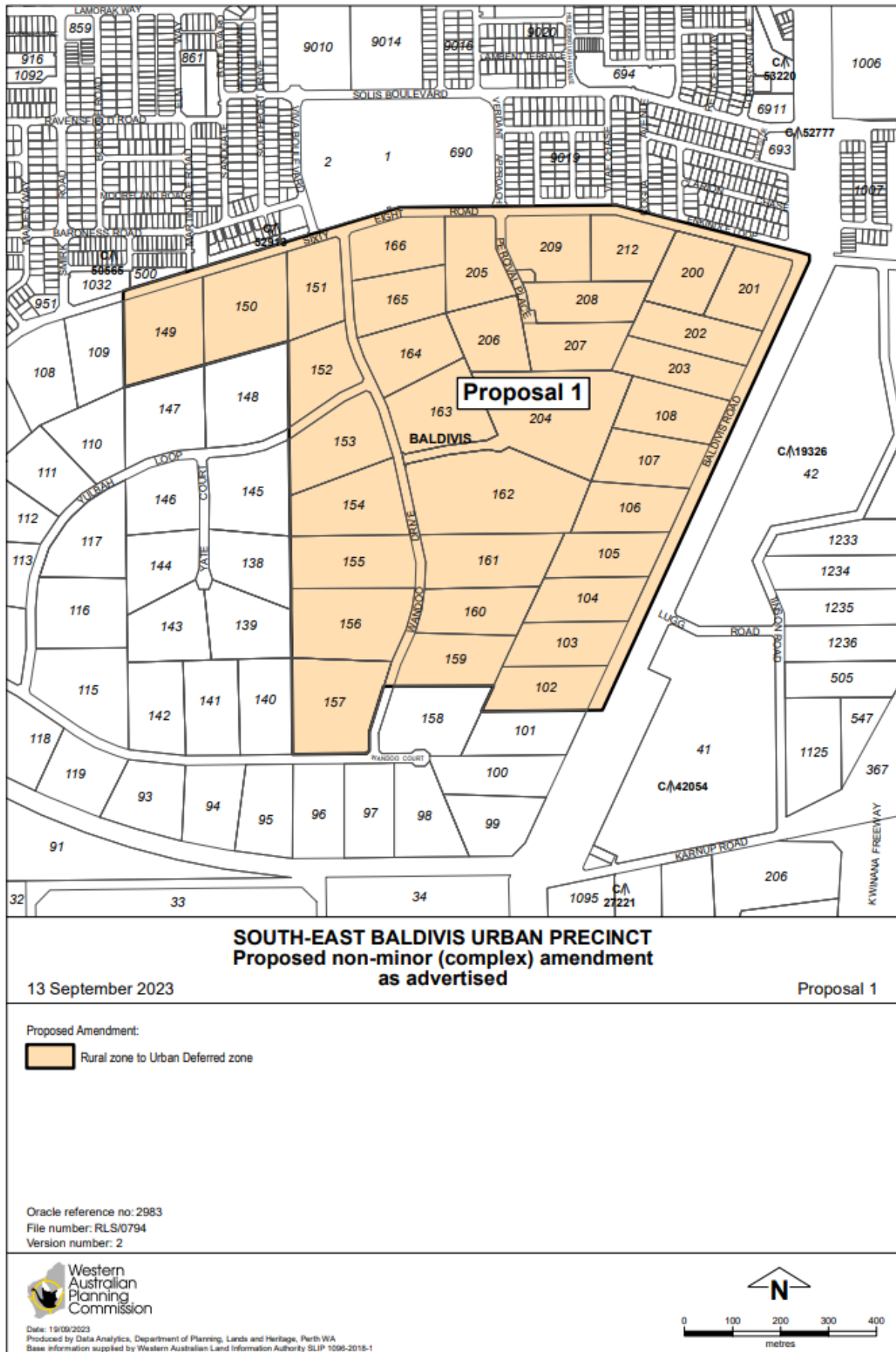


Figure 1: Proposed zoning for MRS 1412 (Source: WAPC)

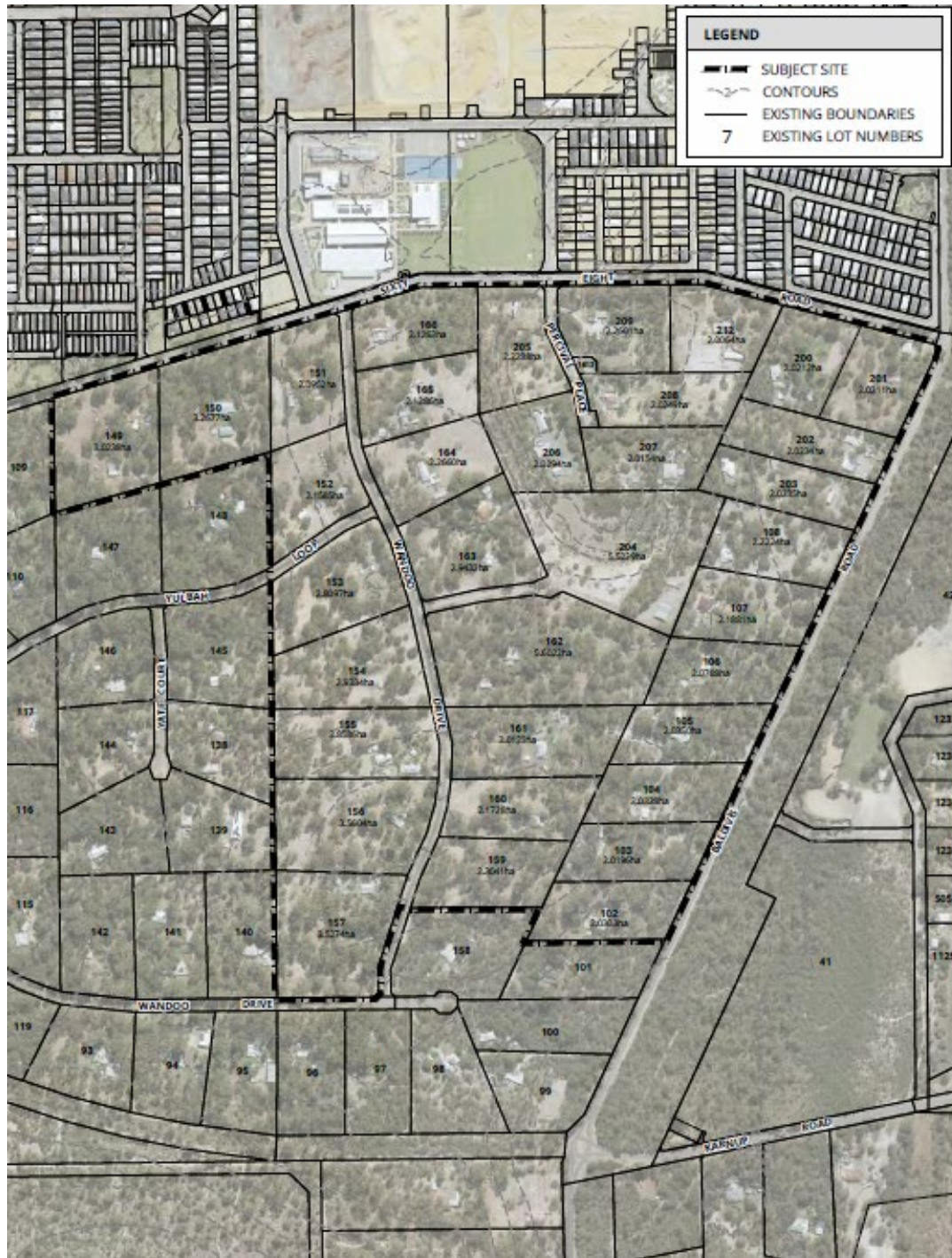


Figure 2: Location of MRS Amendment 1412

3. Preliminary key environmental factors and required work

The preliminary key environmental factors for the environmental review are:

1. Flora and vegetation
2. Terrestrial fauna
3. Social surroundings
4. Inland waters.

Table 3 outlines the work required for each preliminary key environmental factor and contains the following elements for each factor:

- **EPA factor** and **EPA objective** for that factor
- **Relevant activities** – the development activities that may have a significant impact on that factor
- **Potential impacts and risks** to that factor
- **Required work** for that factor
- **Relevant policy and guidance** – EPA (and other) guidance and policy relevant to the assessment.

Please note, all survey reports and data should be submitted via IBSA Submissions with the IBSA number provided for verification.

Table 3 Preliminary key environmental factors and required work

| Flora and vegetation | |
|------------------------------------|--|
| EPA objective | To protect flora and vegetation so that biological diversity and ecological integrity are maintained. |
| Relevant activities | Clearing of vegetation, addition of fill, and alteration of natural landscape for future urban development and associated infrastructure. |
| Potential impacts and risks | Direct and indirect loss of significant flora and vegetation, including threatened and priority ecological communities Tuart (<i>Eucalyptus Gomphocephala</i>) Woodlands and Forests of the Coastal Plain. Potential impacts include: <ul style="list-style-type: none"> • direct loss through clearing • loss of fauna habitat (vegetation loss) short and long term • spread or intensification of weeds and <i>Phytophthora</i> dieback • fragmentation. |
| Required work | 1. Identify and characterise the flora and vegetation present and likely to be present within the amendment area, in accordance with EPA (2016) Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EIA). |

Flora and vegetation

For existing flora and vegetation surveys completed for the amendment area, demonstrate (provide justification) how surveys are relevant, current representative and demonstrate consistency with current EPA policy and guidance.

Include a summary of survey findings for the amendment area and an analysis of the significance of flora and vegetation in local and regional context in accordance with relevant EPA guidelines.

Note: Ensure species database searches and taxonomic identifications are current. IBSA data packages should be provided in accordance with EPA guidance.

2. Identify and describe the vegetation present in the amendment area. Describe significant vegetation, and provide an analysis of local and regional context, (refer to the Environmental factor guideline – Flora and vegetation for definition of significant vegetation).
3. Provide maps/figures depicting:
 - a. survey effort (including tracklogs) in relation to the amendment area, recorded locations of significant flora, ecological communities, and vegetation in relation to the amendment area in accordance with the relevant guidelines set out below
 - b. vegetation condition mapping
 - c. Identify and describe the characteristics of the flora and vegetation, including Floristic Community Type and quality, that may be impacted directly and indirectly by the amendment, including development and provision of associated infrastructure. Describe the significance of these values in a local and regional context.
 - d. clearly show any areas unable to be surveyed and indicate likelihood of occurrence of PEC/TECs and threatened and priority flora within these areas.
4. Undertake TEC identification and analysis in accordance with the most current version of DBCA's Methods for survey and identification of Western Australian threatened ecological communities. Draft for consultation, currently Draft version 4.2: 12 July 2023 (DBCA Methods 2023).
 - a. Individual quadrat data should be analysed to determine the FCT present using single site insertions against the Gibson et al. (1994) and Keighery et al. (2012 - Bush Forever) datasets, to minimise disruption.
 - b. A combination of methods including cluster, nearest neighbours and similarity indices are also advised. Critical

Flora and vegetation

analysis of the logic of the outcomes of analysis is then required.

- c. The typical broad habitat features such as soil and landform, and hydrological status of quadrats established for Gibson et al. (1994) should also be explicitly discussed and compared in reporting.
5. If multiple surveys have been undertaken to support the assessment, a consolidated report should be provided including the integrated results of the surveys, including the following:
 - a. For areas on the Swan Coastal Plain (SCP), a detailed survey of all flora is required for floristic community type (FCT) analysis
 - b. FCT statistical analysis should follow DBCA Methods 2023
 - c. Reference should be to contemporary vegetation complex mapping for the SCP (Hedde et al. 1980 and Government of WA 2019)
 - d. Survey results should be summarised for a quantitative impact assessment.
 6. Identify and assess the potential direct, indirect and cumulative impacts of future development on the identified environmental values. Include a quantitative assessment of levels of impact on significant flora, listed ecological communities and all vegetation units. Describe and assess the extent of any cumulative impacts within local and regional contexts as appropriate.
 7. Provide a quantitative assessment of impacts to flora and vegetation values. For significant flora this includes:
 - number of individuals and populations in a local and regional context
 - numbers and proportions of individuals and populations directly or potentially indirectly impacted, and
 - numbers/proportions/populations currently protected within the conservation estate (where known).

For all vegetation units (noting threatened and priority ecological communities and significant vegetation) this includes:

 - area (in hectares) and proportions directly or potentially indirectly impacted, and
 - proportions/hectares of the vegetation unit currently protected within conservation estate (where known).
 8. Describe the ongoing management requirements to ensure retained areas of vegetation within the amendment area are managed appropriately and identify which planning or other

| Flora and vegetation | |
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| | <p>mechanisms are required to ensure this management is implemented.</p> <p>9. Describe any proposed avoidance, mitigation and management measures that demonstrate the EPA objectives can be met with reference to Guidance for planning and development: Protection of naturally vegetated areas in urban and peri-urban areas design guidance.</p> <p>10. Identify, describe, and quantify the potential residual impacts (direct, indirect, and cumulative) that may occur after considering and applying the mitigation hierarchy.</p> <p>11. Based on the components of the amendment, determine and quantify any significant residual impacts by applying the Residual Impact Significance Model (page 11) and WA Offset Template (Appendix 1) in the WA Environmental Offsets Guidelines (2014). Where significant residual impacts remain, propose an appropriate offsets strategy. Spatial data defining the area of significant residual impacts for each environmental value should be provided (e.g. vegetation type, vegetation condition, specific fauna species habitat).</p> <p>12. Describe the planning mechanisms that are to be applied to ensure impacts are managed to meet the EPA objectives.</p> |
| Relevant policy and guidance | <p><i>EPA Policy and Guidance</i></p> <p>EPA 2021, <i>Statement of Environmental Principles, Factors, Objectives and Aims of EIA</i></p> <p>EPA 2016, <i>Environmental Factor Guideline – Flora and vegetation</i></p> <p>EPA 2016, <i>Technical Guidance: Flora and vegetation surveys for environmental impact assessment</i></p> <p>EPA 2021, <i>Instructions and Form: IBSA Data Packages</i></p> <p>EPA 2021, <i>Guidance for planning and development: Protection of naturally vegetated areas in urban and peri-urban areas. In accordance with section 16(k) of the Environmental Protection Act 1986</i></p> <p><i>Other policy and guidance</i></p> <p>DWER WA environmental offset calculator and guideline (procedure for environmental offsets metric inputs)</p> <p><i>State Planning Policy 2.8: Bushland Policy for the Perth Metropolitan Region</i></p> <p><i>Environment Protection and Biodiversity Conservation Act 1999 and approved conservation advice notices on any relevant MNES</i></p> |

| Flora and vegetation | |
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| | DCCEEW Survey guidelines for Australia's threatened species: various Guidelines for surveying for species listed as threatened under the EPBC Act |
| Terrestrial fauna | |
| EPA objective | To protect terrestrial fauna so that biological diversity and ecological integrity are maintained. |
| Relevant activities | <ul style="list-style-type: none"> • Clearing of fauna habitat and alteration of natural landscape for future development and associated infrastructure. • Movement of machinery and vehicles. • Increased presence of artificial light, noise and human activity. |
| Potential impacts and risks | <ul style="list-style-type: none"> • Loss of significant fauna habitat including black cockatoo habitat – potential breeding, roosting and foraging. • Direct or indirect impacts or loss of other significant fauna and fauna habitat. • Fragmentation of fauna habitat and loss of ecological connectivity. • Degradation of fauna habitat and habitat modification from future development, introduction and increased spread of weeds and/or disease and edge effects. • Fauna mortality as a result of construction activities. • Altered fauna behavior due to noise, lighting and human presence. • Change in feral animal abundance and/or movement. |
| Details of required work | <p>13. In accordance with the requirements of EPA guidance conduct a desktop study to identify and characterise the fauna (including short range endemics (SRE)) and fauna habitats for the amendment area to inform local and regional context. Based on the results of the desktop study undertake the appropriate level of survey and habitat assessment.</p> <p>This should include survey/assessment within the amendment area and consideration of cumulative impacts. For identified significant (Threatened and Priority) fauna, this must include information on:</p> <ol style="list-style-type: none"> a. the abundance, distribution, ecology, and habitat preferences, together with baseline information and mapping of local and regional occurrences b. population size and importance of the population from a local and regional perspective c. information on conservation value of each habitat type (e.g. breeding, migration, feeding, roosting etc.) from a local and |

Terrestrial fauna

regional perspective, including the percentage representation of each habitat site in relation to its local and regional extent.

Note: The desktop study and habitat assessment can subsequently be used to determine if surveys are required. Required surveys should include both Terrestrial Vertebrate Fauna and SRE (if required from outcomes of risk assessment) (and/or other significant) Invertebrate Fauna. Survey design should ensure that adequate local and regional contextual data are collected and should consider cumulative impacts. If multiple surveys have been undertaken to support the assessment, a consolidated report should be provided including the integrated results of the surveys. Where surveys were undertaken at the referral stage, survey results and a demonstration of how the guidance has been followed are to be included in the ERD. Ensure species database searches and taxonomic identifications are current.

- d. Provide a map of the survey effort applied in relation the fauna habitat, the study area and amendment area illustrating the known recorded locations of conservation significant species, other significant fauna and fauna habitat in relation to the amendment area. Clearly show any areas/lots unable to be surveyed. Mapping should also identify the direct and indirect impact areas.

14. If multiple surveys have been undertaken to support the assessment, a consolidated report should be provided including the integrated results of the surveys, including the following:

- a. Desktop studies should use all recent available data and information including Dandjoo (NatureMap), as well as IBSA, Atlas of Living Australia and specific databases such as the Birdlife Australia Great Cocky Count database, and invertebrate databases of the WA Museum for short-range endemic and listed invertebrate fauna. On the Swan Coastal Plain, Bush Forever (2000) should also be considered for other significant, non-listed fauna.
- b. A description of fauna habitats, their significance to fauna and mapping in relation to the development envelope, clearing areas and locations of significant fauna should be included.
- c. The desktop study should present a consolidated listed of all fauna from the desktop study and surveys and discuss the likelihood of occurrence based on the fauna habitat assessment. basic and targeted vertebrate fauna surveys are recommended. No basic surveys have been undertaken and targeted surveys were limited to black cockatoos and

Terrestrial fauna

rainbow bee-eater. Depending on the outcomes of the desktop study and habitat assessment, additional surveys for priority and/or threatened listed vertebrate fauna may be required.

- d. Invertebrate fauna should be considered in the desktop study and surveys for significant invertebrates, including SRE invertebrate fauna. Surveys for invertebrate fauna should be undertaken where suitable habitat exists. Note that even in fragmented and degraded areas, SREs and other significant invertebrate fauna may persist in remnant habitat patches.
 - e. IBSA data packages should be provided in accordance with EPA guidance.
15. Identify and describe the characteristics of the fauna and fauna habitat that may be impacted directly and indirectly by the amendment, including development and provision of associated infrastructure. Describe the significance of these values in a local and regional context.
 16. Describe significant habitats, including but not limited to: refugia, breeding areas, key foraging habitat, movement corridors and linkages. Habitats that are important to significant species, and the reasons for their importance, should be identified. Discussions of habitats should quantify the absolute and relative areas of the habitats in question, and these discussions should be supported by tables and figures that illustrate the extents of habitats.
 17. Identify significant fauna and describe in detail their known ecology, likelihood of occurrence, habitats, and known threats. Map the locations of significant fauna records in relation to the fauna habitats, the study area, the scheme amendment area, and potential direct, indirect, and cumulative impact areas.
 18. Provide a map depicting areas of fauna habitat to be retained and protected from future subdivision, development and provision of associated infrastructure.
 19. Detail and quantify areas of fauna habitat not proposed to be retained.
 20. Describe and assess the extent of direct and indirect impacts to terrestrial fauna as a result of the proposed change in land use, taking into consideration cumulative impacts and the significance of fauna and fauna habitat. This should include an assessment of the risk posed to any significant species as a result of future development and associated infrastructure.
 21. For significant species, describe and assess the extent of direct and indirect impacts on a species-by-species basis.

| Terrestrial fauna | |
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| | <p>Note: the likelihood of SRE fauna occurring within a given development area should be considered early in the environmental scoping stage. Preliminary SRE fauna risk assessments can then be used to set the context for a given assessment and as a reasoned basis to identify the extent of any surveys required. Apply the mitigation hierarchy.</p> <p>22. Describe any proposed avoidance, mitigation and management measures that demonstrate the EPA’s objectives can be met. Including (but not limited to):</p> <ol style="list-style-type: none"> a. planning or other mechanisms that will ensure significant fauna habitat identified for retention will be protected. b. ongoing management requirements to ensure retained areas of significant fauna habitat within the amendment area are managed appropriately and identify which planning or other mechanisms are required to ensure this management is implemented c. Framework (outcome) of management plans <p>23. Identify, describe, and quantify the potential residual impacts (direct, indirect, and cumulative) to fauna assemblages, habitats and significant species, that may occur following implementation of the amendment after considering and applying avoidance and minimisation measures, in a local and regional context.</p> <p>24. Based on the components of the amendment, determine and quantify any significant residual impacts by applying the Residual Impact Significance Model (page 11) and WA Offset Template (Appendix 1) in the WA Environmental Offsets Guidelines (2014). Where significant residual impacts remain, propose an appropriate offsets strategy.</p> <p>25. Describe the planning mechanisms that are to be applied to ensure impacts are managed to meet the EPA’s objectives.</p> |
| Relevant policy and guidance | <p><i>EPA Policy and Guidance</i></p> <p>EPA 2021, <i>Statement of Environmental Principles, Factors, Objectives and Aims of EIA</i></p> <p>EPA 2016, <i>Environmental Factor Guideline – Terrestrial Fauna</i></p> <p>EPA 2016, <i>Technical Guidance: Sampling methods for terrestrial vertebrate fauna</i></p> <p>EPA 2016, <i>Technical Guidance: Terrestrial fauna surveys</i></p> <p>EPA 2016, <i>Technical Guidance: Sampling of short range endemic invertebrate fauna</i></p> <p>EPA 2021, <i>Instructions and Form: IBSA Data Packages</i></p> |

| Terrestrial fauna | |
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| | <p>EPA 2019, <i>EPA Advice: Carnaby's Cockatoo in Environmental Impact Assessment in the Perth and Peel Region</i>. In accordance with section 16(j) of the Environmental Protection Act 1986</p> <p>Other policy and guidance</p> <p>DWER WA environmental offset calculator and guideline (procedure for environmental offsets metric inputs)</p> <p><i>Environment Protection and Biodiversity Conservation Act 1999</i></p> <p>Relevant recovery plans, conservation advice and/or threat abatement plans for conservation significant species that are known to occur, or are likely to occur in the vicinity of the amendment area.</p> <p>DCCEEW Survey guidelines for Australia's threatened species: various Guidelines for surveying for species listed as threatened under the EPBC Act</p> |

| Social surroundings | |
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| EPA objective | To protect social surroundings from significant harm. |
| Relevant activities | <ul style="list-style-type: none"> • Clearing of vegetation and site works and provision of associated infrastructure. • Physical presence of future development and associated infrastructure. |
| Potential impacts and risks | <ul style="list-style-type: none"> • Disturbance to Aboriginal heritage places and/or cultural association within the area. • Changes to environment which may impact on Aboriginal heritage places. • Impacts to the natural, social and historical heritage values of the amendment area. • Impacts to the visual amenity associated with the natural and semi-rural character of the area. |
| Required work | <p>26. Characterise the Aboriginal cultural heritage values within the amendment area to identify sites of significance and their relevance within a wider regional context.</p> <p>27. Provide evidence of reasonable consultation with Traditional Owners to identify areas of significance and any concerns in regard to environmental impacts as they affect heritage and cultural matters.</p> |

| Social surroundings | |
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| | <p>28. Provide a description and figure(s) of the heritage and cultural values and proposed direct and indirect impacts within and adjacent to the amendment area.</p> <p>29. Assess the direct and indirect impacts on known heritage sites, values and/or cultural associations, associated with the changes in land use which may impact on cultural and heritage significance.</p> <p>30. Predict the residual impacts on heritage sites, values and/or cultural associations, for direct, indirect and cumulative impacts after consideration of the mitigation hierarchy.</p> <p>31. Outline the mitigation and management measures to ensure impacts to heritage site, values and /or cultural association (direct and indirect) are minimised, and not greater than predicted.</p> <p>32. Identify and discuss the potential visual amenity impact from the change in land use on residents within and adjacent to the amendment area, and broader area.</p> <p>33. Describe the planning mechanisms that are to be applied to ensure impacts are managed to meet the EPA objective.</p> |
| Relevant policy and guidance | <p><i>EPA Policy and Guidance</i></p> <p>EPA 2021, <i>Statement of Environmental Principles, Factors, Objectives and Aims of EIA</i></p> <p>EPA 2023, <i>Environmental Factor Guideline – Social Surroundings</i></p> <p>EPA 2023, <i>Technical Guidance Environmental impact assessment of Social Surroundings – Aboriginal cultural heritage</i></p> <p><i>Other policy and guidance</i></p> <p>Department of Aboriginal Affairs and Department of Premier and Cabinet 2013, <i>Due Diligence Guidelines, Version 3.0</i>. Perth, Western Australia</p> <p>Western Australian Planning Commission 2007, <i>Visual Landscape Planning in Western Australia: a manual for evaluation, assessment, siting and design</i>.</p> |

| Inland waters | |
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| EPA objective | To maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected. |
| Relevant activities | <ul style="list-style-type: none"> • Clearing of vegetation and alteration of natural drainage regimes for urban development. |

| Inland waters | |
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| Potential impacts and risks | <ul style="list-style-type: none"> • Impacts to natural surface and groundwater regimes. • Impacts to water quality. |
| Required work | <p>34. Identify and assess the values and significance of hydrological and soil characteristics within the amendment area and immediate adjacent area and describe these values in a local and regional context.</p> <p>35. Describe and assess the potential impacts (direct and indirect) as a result of future urban development on water quantity and quality in relation to ground water and surface water.</p> <p>36. Predict the extent, severity and duration of potential impacts, including changes to local and regional groundwater flows and levels, drawdown, local water quality and impacts to other groundwater users as a result of urban development.</p> <p>37. Provide a summary of residual impacts of future urban development within the amendment area.</p> <p>38. Describe any proposed avoidance, mitigation and management measures that demonstrate the EPA objectives can be met.</p> <p>39. Prepare an updated district water management strategy consistent with Better Urban Water Management (WAPC, 2008) to be endorsed by DWER, generally addressing groundwater resources allocation, public open space/school irrigation requirements, native vegetation retention and stormwater infiltration. Written evidence should also be provided from Water Corporation demonstrating the site can be serviced with reticulated systems.</p> |
| Relevant policy and guidance | <p><i>EPA Policy and Guidance</i></p> <p><i>Statement of Environmental Principles, Factors and Objectives</i>, EPA, 2016</p> <p><i>Environmental Factor Guideline – Inland Waters</i>, EPA, June 2018</p> <p><i>Environmental Protection (Peel inlet – Harvey Estuary) Policy</i>, 1992</p> <p><i>Other policy and guidance</i></p> <p><i>Better Urban Water Management</i>, Western Australian Planning Commission, October 2008</p> <p><i>Guidelines for district water management strategies</i>, Department of Water, December 2013</p> <p><i>Identification and investigation of acid sulphate soils and acidic landscapes</i>, Department of Environment Regulation, June 2015</p> <p><i>Operational policy 4.3: Identifying and establishing waterways foreshore areas</i>, Department of Water, September 2012.</p> |

| Inland waters | |
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| | <i>Treatment and management of soil and water in acid sulphate soil landscapes</i> , Department of Environment Regulation, June 2015 |

4. Other environmental factors or matters

It is important that the responsible authority be aware that other factors or matters may be identified during the course of the ER that were not apparent at the time that these instructions were prepared. If this situation arises, the responsible authority must consult with the EPA to determine whether these factors and/or matters are to be addressed in the ER, and if so, to what extent.

The EPA has identified the following other environmental factors or matters relevant to the proposal that must be addressed during the environmental review and discussed in the ERD:

1. Greenhouse gas emissions

The implementation of the amendment has the potential to generate Greenhouse gas (GHG) emissions through clearing and decomposition of vegetation. Estimate the expected Scope 1 (direct), Scope 2 (indirect) and Scope 3 net greenhouse gas emissions (i.e. quantity of carbon dioxide equivalent (CO₂-e) on an annual basis and over the life of the scheme amendment inclusive of changes to land use (clearing of vegetation). Breakdown estimated emissions by source (e.g. changes to land use, clearing of vegetation). Detail the methods used to estimate the net GHG emissions.

Describe the considered and proposed mitigations that demonstrate all reasonable and practicable measures have been applied at each step of the mitigation hierarchy to avoid, reduce and/or offset GHG emissions over the life of the scheme amendment.

Where Scope 1 or Scope 2 emissions are estimated to exceed 100,000 tonnes CO₂-e, develop a GHG Management Plan in accordance with the EPA's Environmental Factor Guideline: Greenhouse Gas Emissions and demonstrate how the EPA's objective for this factor can be met.

5. Relevant Ministers and interested agencies

At this stage, the EPA has identified the Minister and agencies listed in Table 4 as being either the Responsible Minister or a Minister or agency concerned with the outcome of the scheme amendment. Additional Ministers and agencies may be identified during the course of the assessment.

Table 4 Relevant Ministers and interested agencies

| Minister/agency | Interest |
|--|---|
| Minister for Planning | <i>Planning and Development Act 2005</i> - scheme amendments |
| Minister for Environment | <i>Biodiversity Conservation Act 2016</i> - s. 40 authority to take or disturb threatened species - s. 45 authority to modify occurrence of a threatened ecological community |
| Minister for Aboriginal Affairs | <i>Aboriginal Heritage Act 1972</i> s. 18 consent to impact a registered Aboriginal heritage site |
| Minister for Water | <i>Rights in Water and Irrigation Act 1914</i> - s. 5C licence to take water |
| Chief Executive Officer - City of Rockingham | <i>Planning and Development Act 2005</i> - planning approval/development approval |
| Chief Executive Officer - Department of Biodiversity, Conservation and Attractions | <i>Biodiversity Conservation Act 2016</i> - authority to take flora and fauna (other than threatened species) |
| Department of Water and Environmental Regulation | Part V of the <i>Environmental Protection Act 1986</i> |
| Department of Planning Lands and Heritage | <i>Planning and Development Act 2005.</i> |