

## INSTRUCTIONS FOR ENVIRONMENTAL REVIEW

<b>Proposed scheme amendment:</b>	<b>Metropolitan Region Scheme Amendment 1344/57 – Maida Vale Urban Precinct</b>
<b>Responsible Authority:</b>	<b>Western Australian Planning Commission</b>
<b>Assessment number:</b>	<b>2175</b>
<b>Location:</b>	<b>Maida Vale – land generally bounded by Hawtin Road, Sultana Road East, Roe Highway, Lot 104, Lot 102, Reserve 12564, Lot 33 and Lot 32 Oxford Court, Lot 101 Brewer Road, and Harold Road.</b>
<b>Local Government Area:</b>	<b>City of Kalamunda</b>
<b>Public review period:</b>	<b>Environmental Review Document – timing and procedure in accordance with the <i>Planning and Development Act 2005</i></b>

Environmental Review Instructions (Instructions) are provided to the responsible authority (RA) to define the scope and content of the Environmental Review (ER) required by s.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](http://www.epa.wa.gov.au))

### 1. Introduction

The EPA has determined that the above Metropolitan Region Scheme (MRS) amendment is to be assessed under Division 3 of Part IV of the EP Act.

This MRS amendment is being assessed because development permitted by the proposed urban zoning has the potential to have a significant effect on the environmental values known to exist within the amendment area, including:

- Poorly represented vegetation complexes (Forrestfield and Southern River);
- Threatened Ecological Communities (TECs) listed as Critically Endangered and Endangered under the *Wildlife Conservation Act 1950* (WC Act) and Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act);
- *Conospermum undulatum* (listed as Vulnerable flora under the WC and EPBC Acts);
- Habitat for threatened species of fauna; and
- Two waterways, known as Crumpet Creek and Poison Gully, that support some of the above vegetation.

### ***Procedure***

The EPA requires the responsible authority to undertake the environmental review according to these instructions.

### **Scope and Content**

The scope and content of the environmental review is outlined in sections 2 to 6 of these instructions. The EPA requires that the attached Environmental Review Document template to be used to complete the report on the environmental review required under s. 48C(1)(a) of the EP Act.

### **Timing**

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

**Table 1            Assessment timeline**

<b>Key assessment milestones</b>
EPA issues instructions to the responsible authority (60 days after referral)
Responsible authority submits Environmental Review to EPA
EPA authorises advertising of Environmental Review and scheme for public review (30 days from RA submission of ERD)
Responsible authority advertises scheme and Environmental Review for public review in accordance with the <i>Planning and Development Act 2005</i>
Close of public review period
Responsible authority provides copies of submissions related to environmental issues to the EPA (7 days from close of public review period)
Responsible authority provides Response to Submissions to EPA (42 days from close of public review period)
EPA reports to the Environment Minister on environmental factors and recommended scheme conditions (60 days after end of public review period or 30 days after receiving RA's Response to Submissions, whichever is longer)

## **2. The scheme amendment**

The subject of these instructions is the WAPC's proposed amendment to the MRS to rezone approximately 178 ha of land in Maida Vale from the Rural zone to the Urban Deferred zone. The land is currently developed for rural residential purposes. The proposed Urban Deferred zone will allow for future residential development and areas of public open space following the lifting of Urban Deferment, a local scheme amendment, structure planning and subdivision approval.

The location of the scheme amendment is shown in Figure 1 and a summary of the scheme amendment is set out in Table 2.

**Table 2 Summary of the scheme amendment**

<b>Scheme amendment</b>	Metropolitan Region Scheme Amendment 1344/57
<b>Responsible authority</b>	Western Australian Planning Commission
<b>Location</b>	Land in Maida Vale generally bounded by Hawtin Road, Sultana Road East, Roe Highway, Lot 104, Lot 102, Reserve 12564, Lot 33 and Lot 32 Oxford Court, Lot 101 Brewer Road, and Harold Road.
<b>Short description</b>	Rezoning of approximately 178 hectares of land from the Rural zone to the Urban Deferred zone to allow for future urban development which includes residential development, associated infrastructure and areas of public open space.

### 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. 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.

**Table 3 Preliminary key environmental factors and required work**

Flora and Vegetation	
<b>EPA objective</b>	To protect flora and vegetation so that biological diversity and ecological integrity are maintained.
<b>Relevant activities</b>	Clearing of vegetation for urban development.
<b>Potential impacts and risks</b>	<ul style="list-style-type: none"> <li>• Clearing of poorly represented vegetation complexes (Forrestfield and Southern River);</li> <li>• Clearing of TECs FCT20a and 20b (both Endangered on the list of TECs endorsed by the WA Minister for environment), TEC FCT20c (ranked Critically Endangered in WA and may also meet the description of the umbrella type 'Banksia woodlands of the Swan Coastal Plain', ranked Endangered under the EPBC Act);</li> </ul>

	<ul style="list-style-type: none"> <li>• Direct and indirect impacts to <i>Conospermum undulatum</i> (Vulnerable flora under the WC and EPBC Acts) including direct loss of individual plants; and</li> <li>• Direct and indirect impacts to other significant flora species or ecological communities found during survey to be present.</li> </ul>
<b>Required work</b>	<ol style="list-style-type: none"> <li>1. Identify and describe the vegetation and flora species present and likely to be present within the amendment area. Demonstrate how surveys are consistent with current EPA policy and guidance set out below. Include a summary of survey findings and an analysis of the significance of flora and vegetation in local and regional contexts as appropriate in accordance with relevant guidance set out below.  <b>Note:</b> if 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 environmental review. Ensure species database searches and taxonomic identifications are current.</li> <li>2. Provide a map depicting the recorded locations of significant flora, ecological communities and vegetation in relation to the amendment area in accordance with the relevant guidelines set out below. Clearly show any areas/lots unable to be surveyed.</li> <li>3. Provide a map depicting areas of vegetation and flora to be retained and protected from future urban development. Assess the potential direct and indirect impacts of future urban 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.</li> <li>4. Describe any proposed avoidance, mitigation and management measures to reduce the potential impacts of urban development. Include any proposed management and/or monitoring plans that will be implemented pre- and post-construction to ensure residual impacts are not greater than predicted.</li> <li>5. Identify, describe and quantify the potential residual impacts (direct, indirect and cumulative) that may occur following completion of urban development after considering and applying avoidance and minimisation measures.</li> </ol>
<b>Relevant policy and guidance</b>	<p><b><i>EPA Policy and Guidance</i></b></p> <p><i>Statement of Environmental Principles, Factors and Objectives</i>, EPA, 2016</p> <p><i>Environmental Factor Guideline – Flora and vegetation</i>, EPA, December 2016</p> <p><i>Technical Guidance: Flora and vegetation surveys for environmental impact assessment</i>, EPA, December 2016</p> <p><i>Instructions and Form: IBSA Data Packages</i>, EPA, June 2018</p>

Terrestrial Fauna	
<b>EPA objective</b>	To protect terrestrial fauna so that biological diversity and ecological integrity are maintained.
<b>Relevant activities</b>	<ul style="list-style-type: none"> <li>• Clearing of fauna habitat for future urban development, including for the construction of roads and other infrastructure;</li> <li>• Movement of machinery and vehicles; and</li> <li>• Increased presence of artificial light, noise and human activity.</li> </ul>
<b>Potential impacts and risks</b>	<ul style="list-style-type: none"> <li>• Permanent loss of fauna habitat, including up to 36 hectares of black cockatoo habitat and 485 potential black cockatoo breeding trees identified on site;</li> <li>• Fragmentation of fauna habitat and loss of ecological connectivity;</li> <li>• Degradation of habitat and habitat modification from the introduction and increased spread of weeds and/or disease, altered surface water flows and edge effects; and</li> <li>• Altered fauna behavior due to noise, lighting and human presence.</li> </ul>
<b>Required work</b>	<p>6. In accordance with the requirements of EPA Guidance:</p> <ol style="list-style-type: none"> <li>(a) conduct a Level 1 (basic) terrestrial fauna survey, including a desktop study that incorporates existing regional terrestrial fauna surveys and databases; and</li> <li>(b) as required based on the outcomes of the Level 1 (basic) survey undertake terrestrial fauna surveys, including targeted surveys for significant species, to identify and characterise terrestrial fauna and fauna habitat, at a local and regional scale, that may be impacted directly and indirectly by urban development. This should include sampling inside and outside the impact areas and consideration of cumulative impacts. For significant species, this must include information on: <ol style="list-style-type: none"> <li>I. the abundance, distribution, ecology and habitat preferences, together with baseline information and mapping of local and regional occurrences.</li> <li>II. a population size and importance of the population from a local and regional perspective; and</li> <li>III. information on conservation value of each habitat type (e.g. breeding, migration, feeding, resting) from a local and regional perspective, including the percentage representation of each habitat site in relation to its local and regional extent.</li> </ol> </li> </ol> <p><b>Note:</b> Surveys should include both Terrestrial Vertebrate Fauna and Short-range Endemic (and/or other significant) Invertebrate Fauna. Survey results and a demonstration of how the requirements have been met are to be included in the ER. If multiple surveys have been undertaken to support the assessment, a consolidated report should be provided including the integrated results of the surveys. Where</p>

	<p>surveys were undertaken prior to scoping, justification should be provided to demonstrate that they are relevant and consistent with EPA Guidance. IBSA data packages should be provided in accordance with EPA guidance. Multiple surveys should be combined in one report. Separate reports are required for Short-range Endemic Invertebrate Fauna and Vertebrate Fauna.</p> <ol style="list-style-type: none"> <li>7. Describe the values and significance of fauna and fauna habitat that maybe impacted directly and indirectly by urban development and describe the significance of these values in a local and regional context. 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 that these discussions should be supported by tables and figures that illustrate the extents of habitats.</li> <li>8. Provide a map 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.</li> <li>9. Provide a map depicting areas of fauna habitat to be retained and protected from future urban development. Describe and assess the extent of direct and indirect impacts as a result of future urban development to terrestrial fauna 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 urban development. For significant species, this should be done on a species-by-species basis. Significant species discussed should include short-range endemic and other significant invertebrates.</li> <li>10. Predict the residual impacts to terrestrial fauna after considering and applying avoidance and minimisation measures.</li> <li>11. Discuss proposed management, monitoring and mitigation methods to be implemented to ensure residual impacts (direct and indirect) are not greater than predicted.</li> </ol>
<b>Relevant policy and guidance</b>	<p><b><i>EPA Policy and Guidance</i></b></p> <p><i>Statement of Environmental Principles, Factors and Objectives</i>, EPA, 2016</p> <p><i>Environmental Factor Guideline – Terrestrial Fauna</i>, EPA, December 2016</p> <p><i>Technical Guidance: Sampling methods for terrestrial vertebrate fauna</i>, EPA, December 2016</p> <p><i>Technical Guidance: Terrestrial fauna surveys</i>, EPA, December 2016</p> <p><i>Technical Guidance: Sampling of short range endemic invertebrate fauna</i>, EPA, December 2016</p> <p><i>Instructions and Form: IBSA Data Packages</i>, EPA, June 2018</p>

	<p><b><i>Other policy and guidance</i></b></p> <p>Relevant recovery plans, conservation advices 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>
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<b>Inland Waters</b>	
<b>EPA objective</b>	To maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected.
<b>Relevant activities</b>	Clearing of vegetation and alteration of natural drainage regimes for urban development.
<b>Potential impacts and risks</b>	<ul style="list-style-type: none"> <li>• Loss of foreshore vegetation;</li> <li>• Impacts to natural surface and groundwater regimes; and</li> <li>• Impacts to water quality.</li> </ul>
<b>Required work</b>	<p>12. 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>13. 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, surface water and waterways.</p> <p>14. 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>15. Prepare a foreshore area report to determine the extent of the waterway foreshore areas to be protected, in accordance with Operational policy 4.3: Identifying and establishing waterways foreshore areas (DoW, 2012).</p> <p>16. Based on the outcomes of the above and taking into consideration the principles of avoidance and minimisation, identify an environmentally acceptable area for development.</p> <p>17. Provide a summary of residual impacts of future urban development within the amendment area.</p> <p>18. Describe any proposed avoidance, mitigation and management measures that demonstrate the EPA's objectives can be met.</p> <p>19. Prepare a district water management strategy in accordance with the Guidelines for district water management strategies (DoW, 2013).</p>

<b>Relevant policy and guidance</b>	<p><b><i>EPA Policy and Guidance</i></b></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><b><i>Other policy and guidance</i></b></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> <p><i>Treatment and management of soil and water in acid sulphate soil landscapes</i>, Department of Environment Regulation, June 2015</p>
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These preliminary key environmental factors must be addressed by the ER for the public to consider the impacts of future urban development resulting from the scheme amendment, and proposed management, and make comment to the EPA. All technical reports, modelling and referenced documents (not currently in the public domain) used in the preparation of the ER document should be included as appendices to the ER document. Documents used in the preparation of the ER must not contain disclaimers that preclude their public availability. The EPA anticipates addressing these factors in its report to the Minister for Environment.

#### **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 environmental review 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.



**Figure 1 – Location**