



Environmental Protection Authority

EPA REFERRAL
FORM

Referral of a Proposal to the Environmental Protection Authority under Section 38 of the *Environmental Protection Act 1986*.

PURPOSE OF THIS FORM

Section 38 of the *Environmental Protection Act 1986* (EP Act) makes provision for the referral to the Environmental Protection Authority (EPA) of a proposal (significant proposals, strategic proposals and proposals under an assessed scheme) by a proponent, a decision making authority (DMA), or any other person.

The purpose of this form is to ensure that EPA has sufficient information about a proposal to make a decision about the nature of the proposal and whether or not the proposal should be assessed under Part IV of the EP Act. Information provided in the referral form must be brief (no more than 30 pages), sharp and succinct to achieve the purposes of this form.

This form does not prevent the referrer from providing a supplementary referral report. Should a referrer choose to submit a supplementary referral report please ensure the following.

- i. Information is short, sharp and succinct.
- ii. Attachments are below eight megabytes (8 MB) as they will be published on the EPA's website (exemptions apply) for public comment. To minimise file size, "flatten" maps and optimise pdf files.
- iii. Cross-references are provided in the referral form to the appropriate section/s in the supplementary referral report.

This form is to be used for all proposals¹ which can be referred to the EPA under section 38 of the EP Act; i.e. referrals from: **proponents** of proposals (significant proposals, strategic proposals, derived proposals, proposals under an assessed scheme); **DMAs** (significant proposals); and **third parties** (significant proposals).

This form is divided into several sections, including; Referral requirements and Declaration; Part A - Information of the proposal and proponent; and Part B Environmental Factors. Guidance on successfully completing this form is provided throughout the form and is also available in the EPA's *Environmental Assessment Guideline for Referral of a Proposal under s38 of the EP Act* (EAG 16).

Send completed forms to

Office of the Environmental Protection Authority
Locked Bag 10, East Perth WA 6892

or

Email: Registrar@epa.wa.gov.au

Enquiries

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Locked Bag 10, East Perth WA 6892

Telephone: 6145 0800

Fax: 6145 0895

Email: info@epa.wa.gov.au

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¹ Please note that this form consolidates and replaces the following forms: *Referral of a Proposal by the Proponent to the EPA under section 38(1) of the EP Act*; *Referral of a Proposal by a third party to the EPA under section 38(1) of the EP Act*; and *Referral of a development proposal to the EPA by the decision making authority*.

Referral requirements and Declaration

The following section outlines the referral information required from a proponent, decision making authority and third party.

(a) Proponents

Proponents are expected to complete all sections of the form and provide GIS spatial data to enable the EPA to consider the referral. Spatial GIS data is necessary to inform the EPA's decision.

The EPA expects that a proponent will address Part B of the form as thoroughly as possible to demonstrate whether or not the EPA's objectives for environmental factors can be met.

If insufficient information is provided the EPA will request more information and processing of the referral will commence once the information is provided or the EPA decides to make a precautionary determination on the available information.

Proponent to complete before submitting form	
Completed all the questions in Part A (essential)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Completed all the questions in Part B	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Completed all other applicable questions	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Included Attachment 1 – any additional document(s) the proponent wishes to provide	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Included Attachment 2 – confidential information (if applicable)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Enclosed an electronic copy of all referral information, including spatial data and contextual mapping but clearly separating any confidential information	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Completed the Declaration	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
What is the type of proposal being referred? <i>* a referred proposal seeking to be declared a derived proposal</i>	<input checked="" type="checkbox"/> significant <input type="checkbox"/> strategic <input type="checkbox"/> derived* <input type="checkbox"/> under an assessed scheme
Do you consider the proposal requires formal environmental impact assessment?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, what level of assessment? <i>API = Assessment of Proponent Information</i> <i>PER = Public Environmental Review</i>	<input type="checkbox"/> API Category A <input type="checkbox"/> API Category B <input type="checkbox"/> PER


NB: The EPA may apply an Assessment on Proponent Information (API) level of assessment when the proponent has provided sufficient information about:

- the proposal;
- the proposed environmental impacts;
- the proposed management of the environmental impacts; and
- when the proposal is consistent with API criteria outlined in the Environmental Impact Assessment (Part IV Division 1 and 2) Administrative Procedures 2012.

If an API A formal level of assessment is considered appropriate, please refer to Environmental Assessment Guideline No. 14 *Preparation for an Assessment on Proponent Information (Category A) Environmental Review Document EAG 14 (EAG14)*.

Declaration

I, Mark Webb, (*full name*) declare that I am authorised on behalf of the Department of Agriculture and Food, Western Australia (being the person responsible for the proposal) to submit this form and further declare that the information contained in this form is true and not misleading.

Signature				Name (print) Mark Webb	
Position	Director General		Organisation	Department of Agriculture and Food, Western Australia	
Email	mark.webb@agric.wa.gov.au				
Address	3		Baron-Hay Court		
	South Perth			WA	6151
Date					

(b) Decision-making authority

The EPA expects decision-making authorities to complete applicable sections of Part A of the form and provide the proponent an opportunity to provide additional information in Part B of the form where appropriate.

Wherever possible the DMA should obtain relevant spatial information from the proponent and provide this to the EPA with the referral.

DMA to complete before submitting form	
Completed all the questions in Part A (essential)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Provided Part B to the proponent for completion	<input type="checkbox"/> Yes <input type="checkbox"/> No
Completed all other applicable questions	<input type="checkbox"/> Yes <input type="checkbox"/> No
Included Attachment 1 – any supporting information	<input type="checkbox"/> Yes <input type="checkbox"/> No
Enclosed an electronic copy of all referral information, including spatial data and contextual mapping	<input type="checkbox"/> Yes <input type="checkbox"/> No
Completed the below Declaration	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you consider the proposal requires formal environmental impact assessment?	<input type="checkbox"/> Yes <input type="checkbox"/> No
What is the type of proposal being referred?	<input type="checkbox"/> significant proposal <input type="checkbox"/> significant proposal under an assessed scheme

Declaration

I,, (*full name*) submit this referral to the EPA for consideration of the environmental significance of its impacts.

Signature		Name (print)	
Position		Organisation	
Email			
Address	Street No.	Street Name	
	Suburb	State	Postcode
Date			

(c) Third Party

Third parties are asked to have consideration for the Significance Test outlined in Part A Section 1.5 of this form before referring a significant proposal to the EPA. The EPA will only consider proposals that are likely, if implemented, to have a significant effect on the environment.

Third parties are to provide sufficient information to clearly identify the significant proposal, the proponent, and their reasons for referring the proposal. This can be done by completing as much of Part A of the form as possible, taking into consideration the information available. Third parties may wish to fill in Part B of the form to advance their own views of the significance of the environmental impacts and the need for EPA assessment.

In most cases the EPA will seek additional information from the proponent. This will be to confirm or amend the identity of the proponent, the proposal, and to allow the proponent opportunity to provide its views on the significance of the environmental impacts and the need for EPA assessment.

Third Party to complete before submitting form	
Complete all applicable questions in Part A and B	<input type="checkbox"/> Yes <input type="checkbox"/> No
Completed the Declaration	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you consider the proposal requires formal environmental impact assessment?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Declaration

I,, (*full name*) submit this referral to the EPA for consideration of the environmental significance of its impacts.

Signature		Name (print)	
Email			
Position		Organisation	
Address	Street No.	Street Name	
	Suburb	Slate	Postcode
Date			

PART A: Information on the proposal and the proponent

All fields of Part A must be completed by the proponent and/or decision-making authority for this document to be processed as a referral. Third party referrers are only expected to fill in the fields they have information for.

1 PROPONENT AND PROPOSAL DESCRIPTION

1.1 The proponent of the proposal

Proponent and/or DMA to complete	
Name of the proponent	Department of Agriculture and Food, Western Australia (DAFWA)
Joint Venture parties (if applicable)	N/A
Australian Company Number(s) (if applicable)	ABN: 18951343745
Postal Address <i>(Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State)</i>	Department of Agriculture and Food, Western Australia Locked Bag 4 Bentley Delivery Centre WA 6983
Key proponent contact for the proposal <i>Please include: name; physical address; phone; and email.</i>	Matt Stadler Manager, R4R State Barrier Fence and Wild Dog Management 444 Albany Hwy, Albany WA 6330 (08) 9892 8446 Matthew.Stadler@agric.wa.gov.au
Consultant for the proposal (if applicable) <i>Please include: name; physical address; phone; and email.</i>	N/A

1.2 Proposal

Proposal is defined under the EP Act to mean a "project, plan, programme policy, operation, undertaking or development or change of land use, or amendment of any of the foregoing, but does not include scheme". Before completing this section please refer to Environmental Protection Bulletin 17 – Strategic and derived proposals (EPB 17) and Environmental Assessment Guideline for Defining the Key Characteristics of a proposal (EAG 1).

Proponent and/or DMA to complete	
Title of the proposal	State Barrier Fence, Esperance Extension (SBFEE)
What project phase is the proposal at?	<input type="checkbox"/> Scoping <input type="checkbox"/> Feasibility <input checked="" type="checkbox"/> Detailed design <input type="checkbox"/> Other _____
Proposal type <i>More than one proposal type can be identified, however for filtering purposes it is recommended that only the primary proposal type is identified.</i>	<input type="checkbox"/> Power/Energy Generation <input type="checkbox"/> Hydrocarbon Based – coal <input type="checkbox"/> Hydrocarbon Based – gas <input type="checkbox"/> Waste to energy <input type="checkbox"/> Renewable – wind <input type="checkbox"/> Renewable – wave

Proponent and/or DMA to complete

- ☐ Renewable – solar
- ☐ Renewable – geothermal

☐ **Mineral / Resource Extraction**

- ☐ Exploration – seismic
- ☐ Exploration – geotechnical
- ☐ Development

☐ **Oil and Gas Development**

- ☐ Exploration
- ☐ Onshore – seismic
- ☐ Onshore – geotechnical
- ☐ Onshore – development
- ☐ Offshore – seismic
- ☐ Offshore – geotechnical
- ☐ Offshore – development

☐ **Industrial Development**

- ☐ Processing
- ☐ Manufacturing
- ☐ Beneficiation

☐ **Land Use and Development**

- ☐ Residential – subdivision
- ☐ Residential – development
- ☐ Commercial – subdivision
- ☐ Commercial – development
- ☐ Industrial – subdivision
- ☐ Industrial – development
- ☐ Agricultural – subdivision
- ☐ Agricultural – development
- ☐ Tourism

☒ **Linear Infrastructure**

- ☐ Rail
- ☐ Road
- ☐ Power Transmission
- ☐ Water Distribution
- ☐ Gas Distribution
- ☐ Pipelines
- ☒ Fence

☐ **Water Resource Development**

- ☐ Desalination
- ☐ Surface or Groundwater
- ☐ Drainage
- ☐ Pipelines
- ☐ Managed Aquifer Recharge

☐ **Marine Developments**

- ☐ Port
- ☐ Jetties
- ☐ Marina

Proponent and/or DMA to complete	
	<input type="checkbox"/> Canal <input type="checkbox"/> Aquaculture <input type="checkbox"/> Dredging <i>If other, please state below:</i> <input type="checkbox"/> Other _____
Proponent and/or DMA to complete	
Description of the proposal – describe the key characteristics of the proposal in accordance with <u>EAG 1</u> .	<p>The proposal is to construct a circa 660km long, 1.35m high barrier fence to help protect agricultural enterprises in the Shires of Ravensthorpe and Esperance from the impact of wild dogs, emus and kangaroos coming from the rangelands and adjacent woodlands.</p> <p>The fence would be located in the middle of a 15-20m wide clearing, resulting in a maximum clearing footprint of 843ha, including 6ha for the construction of water turnouts for erosion control. Of the 837 ha clearing footprint for the proposed SBFEE alignment, 648ha has been previously cleared (chained) for a fire break and an additional 65ha has been graded or contains existing cleared tracks.</p> <p>A summary table of existing vegetation treatments, proposed impact types and areas are provided in Attachment 1.</p>
Timeframe in which the proposal is to occur (including start and finish dates where applicable).	DAFWA is seeking to commence construction in 2016-17. Clearing and fence construction is expected to take approximately 18 months to two years from commencement.
Details of any staging of the proposal.	N/A
What is the current land use on the property, and the extent (area in hectares) of the property?	<p>The fence would be located on Unallocated Crown Land (UCL) and Shire road reserves (546km) and freehold agricultural land (113km) in the Shires of Ravensthorpe and Esperance.</p> <p>Refer to Attachment 1 for sectional distances of the project area by land type and maximum clearing footprints. A map showing the location of the sectional distances is provided at Attachment 2.</p> <p>Shapefiles have also been provided.</p>
Have pre-referral discussions taken place with the OEPA? If yes, please provide the case number. If a case number was not provided, please state the date of	<p>Yes, 15 December 2015 and 24 March 2016.</p> <p>CMS15049</p>

Proponent and/or DMA to complete	
the meeting and names of attendees.	
DMA (Responsible Authority) to complete	
<p>For a proposal under an assessed scheme (as defined in section 3 of the EP Act, applicable only to the proponent and DMA) provide details (in an attachment) as to whether:</p> <ul style="list-style-type: none"> • <i>The environmental issues raised by the proposal were assessed in any assessment of the assessed scheme.</i> • <i>The proposal complies with the assessed scheme and any environmental conditions in the assessed scheme.</i> 	

1.3 Strategic / derived proposals

Complete this section if the proposal being referred is a strategic proposal or you are seeking the proposal to be declared a derived proposal. Note: Only a proponent may refer a strategic proposal and seek a proposal to be declared a derived proposal.

Proponent to complete	
Is this referred proposal a strategic proposal?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are you seeking that this proposal be declared a derived proposal?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If you are seeking that this proposal be declared a derived proposal, what is the Ministerial Statement number (MS #) of the associated strategic proposal?	MS #: _____

1.4 Location

Proponents and DMAs must provide spatial data. Please refer to EAG 1 for more detail.

Proponent, DMA and Third Party to complete	
Name of the Local Government Authority in which the proposal is located.	The Shires of Ravensthorpe and Esperance.
Location: a) street address; lot number; suburb; and nearest road intersection; or b) if remote the nearest town; and distance and direction from that town to the proposal site.	The proposal is to extend the State Barrier Fence 660km from its current termination point 25km east of Ravensthorpe, north around Salmon Gums and ending east of Esperance near Cape Arid National Park (Attachment 3). The proposed SBFEE in relation to the existing State Barrier Fence is shown at Attachment 4.
Have maps and figures been included with the referral (consistent with <u>EAG 1</u> where appropriate)? <i>The types of maps and figures which need to be provided (depending on the nature of the proposal) include:</i> <ul style="list-style-type: none"> maps showing the regional location and context of the proposal; and figures illustrating the proposal elements. 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Proponent and DMA to complete	
Have electronic copies of spatial data been included with the referral? NB: <i>Electronic spatial (GIS or CAD) data, geo-referenced and conforming to the following parameters:</i> <ul style="list-style-type: none"> GIS: polygons representing all activities and named; CAD: simple closed polygons representing all activities and named; datum: GDA94; projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA); format: ESRI geodatabase or shapefile, MapInfo Interchange Format, Microstation or AutoCAD.. 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1.5 Significance test and environmental factors

Proponent, DMA and Third Party to complete	
What are the likely significant environmental factors for this proposal?	<input type="checkbox"/> Benthic Communities and Habitat <input type="checkbox"/> Coastal Processes <input type="checkbox"/> Marine Environmental Quality <input type="checkbox"/> Marine Fauna <input checked="" type="checkbox"/> Flora and Vegetation <input type="checkbox"/> Landforms <input type="checkbox"/> Subterranean Fauna <input type="checkbox"/> Terrestrial Environmental Quality

Proponent, DMA and Third Party to complete	
	<input checked="" type="checkbox"/> Terrestrial Fauna <input type="checkbox"/> Hydrological Processes <input type="checkbox"/> Inland Waters Environmental Quality <input type="checkbox"/> Air Quality & Atmospheric Gases <input type="checkbox"/> Amenity <input checked="" type="checkbox"/> Heritage <input type="checkbox"/> Human Health <input type="checkbox"/> Offsets <input type="checkbox"/> Rehabilitation and Decommissioning
<p>Having regard to the Significance Test (refer to Section 7 of the <i>EIA Administrative Procedures 2012</i>) in what ways do you consider the proposal may have a significant effect on the environment and warrant referral to the EPA?</p>	<p><i>Please outline in two paragraphs or less.</i></p> <p>The proposal involves clearing a maximum of 843ha of native vegetation, 648ha of which is located on an existing chained/cleared fire break. Approximately 120ha of uncleared vegetation will be impacted – of this 80ha will be chained and 40ha will be graded. Three threatened flora taxa and 63 priority flora may be impacted, most of which occur within the existing cleared fire break sections.</p> <p>The barrier fence will have some impacts on wildlife associated primarily with direct loss of habitat, and potential for collisions and restriction of movement of emus, kangaroos and wild dogs.</p>

1.6 Confidential information

All information will be made publically available unless authorised for exemption under the EP Act or subject to the Freedom of Information Act 1992.

Proponent to complete	
<p>Does the proponent request that the EPA treat any part of the referral information as confidential?</p> <p><i>Ensure all confidential information is provided in a separate attachment in hard copy.</i></p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Esperance Tjaltjraak Native Title Aboriginal Corporation and Ngadju Cultural Heritage Survey Reports are not made publicly available at the request of Traditional Owners and as per the confidentiality clauses of the Esperance Nyungar Government Standard Heritage Agreement.</p>

2 REGULATORY CONSIDERATIONS

This section applies to the Local, State and Commonwealth regulatory considerations for the referred proposal.

2.1 Government approvals

2.1.1 State or Local Government approvals

DMA to complete

What approval(s) is (are) required from you as a decision-making authority?	
Is rezoning of any land required before the proposal can be implemented? If yes, please provide details.	<input type="checkbox"/> Yes <input type="checkbox"/> No

2.1.2 Regulation of aspects of the proposal

Complete the following to the extent possible.

Proponent to complete	
<p>Do you have legal access required for the implementation of all aspects of the proposal?</p> <p><i>If yes, provide details of legal access authorisations / agreements / tenure.</i></p> <p><i>If no, what authorisations / agreements / tenure is required and from whom?</i></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>The barrier fence would be erected under Regulation 47 of the <i>Biosecurity and Agriculture Management Regulations 2013</i> by the Director General and remain the property of the State.</p> <p>Letters of agreement are required between private land holders and DAFWA where the barrier fence is erected on freehold land.</p> <p>Acquirement of UCL by the State under the Native Title 'Future Act' process is required to create a barrier fence reserve, where the reserve is proposed on Esperance Nyungar or Ngadju determined lands.</p> <p>Partial Shire road reserve closures will be required to create the barrier fence reserve, where the fence reserve is located within Esperance or Ravensthorpe Shire road reserves.</p>

Outline both the existing approvals and approvals that will be / are being sought as a part of this proposal.

Proponent to complete			
Aspects* of the proposal	Type of approval	Legislation regulating this activity	Which State agency /entity regulate this activity?
Clearing: impacts to threatened flora and fauna	Native Vegetation Clearing Permit	WA <i>Environmental Protection Act 1986</i> – Part V. and <i>Environmental Protection (Clearing of Native Vegetation) Regulations 2004</i>	WA Department of Environment and Regulation and Department of Parks and Wildlife
	Minister for Environment permit to take threatened flora		
	Listed threatened species and communities	<i>Environment Protection and Biodiversity Conservation Act 1999</i>	Commonwealth Department of the Environment

Acquiring UCL	'Future Act' Native Title process	Native Title Act 1993	WA Department of Lands and National Native Title Tribunal
Shire Road Reserve closures	Approval for partial closure of road reserves.	Land Administration Act 1997	WA Department of Lands, Shire of Ravensthorpe and Shire of Esperance

*e.g. mining, processing, dredging

2.1.3 Commonwealth Government Environment Protection and Biodiversity Conservation Act 1999 approvals

Refer to the assessment bilateral agreement between the Commonwealth of Australia and the State of Western Australia for assistance on this section.

Proponent to complete	
1. Does the proposal involve an action that may be or is a controlled action under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If no continue to Part A section 2.3.4.</i>
2. What is the status of the decision on whether or not the action is a controlled action?	<input checked="" type="checkbox"/> Proposal not yet referred <input type="checkbox"/> Proposal referred, awaiting decision <input type="checkbox"/> Assessed – controlled action <input type="checkbox"/> Assessed – not a controlled action
3. If the action has been referred, when was it referred and what is the reference number (Ref #)?	Date: _____ Ref #: _____
4. If the action has been assessed, provide the decision in an attachment. Has an attachment been provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Do you request this proposal to be assessed under the bilateral agreement?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Complete the following to the extent possible for the Public Comment of EPBC Act referral documentation.

Proponent to complete	
6. Have you invited the public to comment on your referral documentation?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
7. How was the invitation published?	<input type="checkbox"/> newspaper <input type="checkbox"/> website
8. Did the invitation include all of the following?	
(a) brief description of the action	<input type="checkbox"/> Yes <input type="checkbox"/> No

Proponent to complete	
(b) the name of the action	<input type="checkbox"/> Yes <input type="checkbox"/> No
(c) the name of the proponent	<input type="checkbox"/> Yes <input type="checkbox"/> No
(d) the location of the action	<input type="checkbox"/> Yes <input type="checkbox"/> No
(e) the matters of national environmental significance that will be or are likely to be significantly impacted	<input type="checkbox"/> Yes <input type="checkbox"/> No
(f) how the relevant documents may be obtained	<input type="checkbox"/> Yes <input type="checkbox"/> No
(g) the deadline for public comments	<input type="checkbox"/> Yes <input type="checkbox"/> No
(h) available for public comment for 14 calendar days	<input type="checkbox"/> Yes <input type="checkbox"/> No
(i) the likely impacts on matters of national environmental significance	<input type="checkbox"/> Yes <input type="checkbox"/> No
(j) any feasible alternatives to the proposed action	<input type="checkbox"/> Yes <input type="checkbox"/> No
(k) possible mitigation measures	<input type="checkbox"/> Yes <input type="checkbox"/> No
9. Were any submissions received during the public comment period?	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. Have public submissions been addressed? If yes provide attachment.	<input type="checkbox"/> Yes <input type="checkbox"/> No

2.1.4 Other Commonwealth Government Approvals

Proponent, DMA and Third Party to complete			
Is approval required from other Commonwealth Government/s for any part of the proposal?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, please complete the table below.</i>	
Agency / Authority	Approval required	Application lodged?	Agency / Local Authority contact(s) for proposal
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	

3. SUPPORTING INFORMATION

Please attach copies of any relevant information on the proposal, supporting evidence and / or existing environmental surveys, studies or monitoring information undertaken and list the documents below.

Proponent, DMA and Third Party to complete			
Attachment	Title	Author	Document Description
(1)	Clearing impact areas spreadsheet.	Department of Agriculture and Food WA (2016)	Summary table of existing vegetation treatments, proposed impact types and impact areas.
(2)	Map of sectional distances of alignment	Department of Agriculture and Food WA (2016)	Map depicting vegetation treatments and proposed impact types.
(3)	Proposed Esperance extension alignment.	Department of Agriculture and Food WA (2016)	Map of the proposed Esperance extension.
(4)	Current State Barrier Fence and Proposed Esperance Extension	Department of Agriculture and Food WA (2016)	Map of the proposed Esperance extension in relation to existing State Barrier Fence.
(5)	Alternative Options Considered to the Proposed Esperance Extension	Department of Agriculture and Food WA (2016)	Discussion of alternatives options to fence considered but not preferred.
(6)	Esperance extension to the State Barrier Fence consultation timeline	Department of Agriculture and Food WA (2016)	Summary of key consultations undertaken in developing the proposal.
(7)	State Barrier Fence Biological Surveys.	Ecoscape Australia Pty Ltd. (2015)	Level 1 fauna and Level 2 flora surveys for the proposed Esperance Extension alignment.

Proponent, DMA and Third Party to complete			
(8)	Biological Surveys of the State Barrier Fence – Merivale Road Reserve Realignment – Cape Arid.	Great Southern Bio Logic Sept 2015.	Level 1 flora, Level 1 fauna and dieback surveys completed for an additional 1.6km section of UCL not surveyed by Ecoscape Australia Pty Ltd.
(9)	State Barrier Fence Esperance Extension Assessment of the Eucalypt woodlands of the Western Wheatbelt Threatened Ecological Community (TEC).	Ecoscape Australia Pty Ltd. (2016)	Assessment of the alignment for potential occurrence of Eucalypt Woodlands of the Western Wheatbelt Commonwealth listed TEC.
(10)	Soil and Land Conservation Act 1945 reports- (1) desk top study; (2) subsequent field investigation and (3) final recommendations report.	Department of Agriculture and Food WA and Precision Technology Solutions, Esperance WA (2016)	Research and field investigations undertaken on potential high risk erosion areas of the alignment and mitigation strategies adopted to minimise erosion potential.
(11)	State Barrier Fence Esperance Extension. Phytophthora Dieback occurrence assessment.	Glevan Consulting (2015)	Dieback assessment completed for the proposed alignment. Dieback Management Plan to be prepared if proposal is approved.
(12)	State Barrier Fence Weed Hygiene Plan	Ecoscape Australia Pty Ltd. (2015)	Weed management plan prepared for contractors if proposal is approved.
(13)	Potential ecological footprint of the proposed Esperance extension to the State Barrier Fence on wildlife.	Department of Agriculture and Food WA (2016)	Discussion of the broader potential ecological impacts on wildlife and the mitigation strategies adopted to minimise impacts of the proposed barrier fence.
(14)	Risk assessment of the proposed extension to the State Barrier Fence on the Brush Wallaby.	M.J. & A.R. Bamford Consulting Ecologists (2016).	Additional advice and risk assessment for the brush wallaby (<i>Macropus irma</i>) related to potential for population fragmentation and changes in the abundance of predators and competitors due to the construction of the fence.
(15)	Report of an Aboriginal Cultural	Applied Archaeology	Comprehensive archaeological and ethnographic Aboriginal

Proponent, DMA and Third Party to complete			
	Heritage Survey of the State Barrier Fence Proposed Extension, Esperance Shire, Western Australia'	Australia Pty Ltd (2015)	Heritage surveys completed for the Esperance Nyungar and Ngadju Determined Native Title lands for the proposal. Not publicly available.
(16)	Anthropological Heritage Survey Work Area Clearance, Ngadju People DAFWA State Barrier Fence Esperance Extension.	Dr James Taylor, Consultant Anthropologist (2015)	Ethnographic Aboriginal Heritage surveys completed for the Ngadju determined lands of the proposal. Not publicly available.

PART B: ENVIRONMENTAL FACTORS

The purpose of Part B is to assist the EPA to determine the significance of the likely environmental impacts of the proposal in accordance with the EPA's *Environmental Assessment Guideline for Environmental factors and objectives* (EAG 8) and *Environmental Assessment Guideline for Application of a significant framework in the EIA process* (EAG 9). Referrers completing Part B should refer closely to EAG 8 and EAG 9.

The EPA has prepared *Referral of a Proposal under s38 of the EP Act EAG No.16 - Appendix A* (Appendix A) to assist in identifying factors and completing the below table. Further guidance can be found in the guidance and policy documents cited in Appendix A under each factor.

How to complete Part B

For each environmental factor, that is likely to be significantly impacted by the implementation of the proposal, make a copy of the table below and insert a summary of the relevant information relating to the proposal. The table can be broken down into more than one table per factor, if the need arises. For example the hydrological processes factor can be presented in two separate tables, one for surface water and one for groundwater, or similarly one for construction and one for operations.

For complex proposals a supplementary referral report can be provided in addition to the referral form. If this option is chosen the table must still be completed (summaries are acceptable) to assist the Office of the EPA with statistical reporting and filtering proposals for processing.

Proponents expecting an API level of assessment must provide information in accordance with the EPA's *Environmental Assessment Guideline for Preparation of an API-A environmental review document* (EAG 14).

For each of the significant environmental factors, complete the following table (Questions 1 – 10).

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Flora and Vegetation
2	EPA Objective, as defined in <u>EAG 8</u>	To maintain representation, diversity, viability and ecological function at the species, population and community level.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	<ul style="list-style-type: none"> EPA (2000) Position Statement No. 2: Environmental Protection of Native Vegetation in Western Australia. EPA (2002) Position Statement No. 3: Terrestrial Biological Surveys as an Element of Biodiversity Protection. EPA (2004c) Position Statement No. 7: Principles of Environmental Protection. EPA (2008) Guidance Statement No. 33: Environmental Guidance for Planning and Development. EPA (2004a) Guidance Statement No. 51: Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessments in Western Australia. EPA (2003) Guidance Statement No. 55: Implementing Best Practice in Proposals

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
		Submitted to the Environmental Impact Assessment Process
4	<p>Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including:</p> <ul style="list-style-type: none"> • <i>anticipated level of public interest in the impact;</i> • <i>consultation with regulatory agencies; and</i> • <i>consultation with community.</i> 	<p>A moderate level of public interest in the potential impacts of the proposal has been shown with respect to vegetation clearing.</p> <p>Significant consultation, planning and biological studies have been undertaken to avoid or mitigate potential ecological impacts of the proposed SBFEE on flora and vegetation and to involve key stakeholders in developing the project.</p> <p>DAFWA has consulted broadly in an open, transparent manner about the proposed SBFEE. DAFWA and the Esperance Extension Reference Group have considered the various stakeholders' views on the proposed SBFEE and significantly altered the proposal in response to concerns raised and advice provided (see Attachment 5 for alternative options that were considered). This has resulted in a revised final alignment, fence structure and clearing practice that minimises or avoids potential environmental impacts.</p> <p>Refer to Attachment 6 for an overview of the key consultation events undertaken for the proposed SBFEE involving the community, regulatory agencies and key stakeholders.</p>
5	<p>Baseline information - describe the relevant characteristics of the receiving environment.</p> <p><i>This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.</i></p>	<p>The Ecoscape (2015) flora and vegetation field survey (see Attachment 7) identified:</p> <ul style="list-style-type: none"> • 88 vegetation types within the study area, • two vegetation types are considered likely to match the description of the Commonwealth EPBC Act listed 'Proteaceae Dominated Kwongan Shrublands' TEC. • vegetation condition ranged from degraded to pristine, with 98% of sites within the study area classified as very good or better, based on a broad 100m survey buffer. Much of the alignment has since been cleared/chained for fuel management by the Department of Parks and Wildlife (DPaW). The SBFEE alignment has been chosen strategically to follow existing tracks and clearing within these areas where possible. • 860 vascular flora taxa. • three Threatened Flora (TF) were found within the study area (<i>Anigozanthos bicolor subsp. minor</i>, <i>Conostylis lepidospermoides</i> and <i>Eucalyptus merrickiae</i>). <i>Rhizanthella gardneri</i> is also known to occur within the study area based on recent records. • 60 Priority (P) Flora were recorded (11 P1, 13 P2, 25 P3 and 10 P4. An additional P3 taxon

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

		<p>was identified from the Merivale Rd (UCL) section by GS Biologic (2015) (Attachment 8).</p> <ul style="list-style-type: none"> • four Environmentally Sensitive Areas occur within 500m of the study area, including Cape Arid National Park and three TF locations. • 20 introduced species including the Declared Pest plants <i>*Asparagus asparagoides</i> (Bridal Creeper), <i>*Carthamus lanatus</i> (Saffron Thistle) and <i>*Onopordum acaulon</i> (Stemless Thistle). <p>Twenty pre-European vegetation associations (DAFWA 2013) are mapped over the study area (see Table 27 in Appendix Two in Ecoscape 2015). Three vegetation associations have 10-30% of their pre-European extent remaining at various scales:</p> <ul style="list-style-type: none"> • vegetation association 512 (Shrublands; mallee scrub, <i>Eucalyptus eremophila</i> & Forrest's marlock (<i>E. forrestiana</i>) has 10-30% of its pre-European extent remaining within Western Australia, the Mallee IBRA region, the Eastern Mallee (MAL1) IBRA subregion and Shire of Esperance. • vegetation association 4801 (Shrublands; heath with scattered <i>Nuytsia floribunda</i> on sandplain) has 10-30% of its pre-European extent remaining within Western Australia, the Esperance Plains IBRA region. • the Recherche (ESP2) IBRA subregion and Shire of Esperance vegetation association 47 (Shrublands; tallerack mallee-heath) has 10-30% of its pre-European extent remaining within the Shire of Esperance, but more than 30% remaining at other scales. <p>The study area corresponds generally with the southern edge of the Great Western Woodlands.</p> <p>Given the alignment occurs at the interface between UCL and private property, these areas have a history of management either as fenced private property or bushfire fuel management (graded tracks and chaining) by DPaW. The existing fire buffer is re-treated every four to six years, however this can push out to 10 years depending on budgetary constraints (R. Block DPaW pers. comm 2016). Given proposed impacts of 9-20m wide occur over 548km (depending on the treatment and excluding areas that only require pruning), sensitivity to impact and cumulative impacts are considered to be low. The proposal would introduce additional clearing/chaining impacts to previously undisturbed vegetation - over 69km (124ha), which only accounts for 10% of the alignment.</p>
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Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	<ul style="list-style-type: none"> • Maximum clearing footprint of 843ha of native vegetation, broken down as follows (see Attachments 1 and 2): <ul style="list-style-type: none"> ▪ Ten percent (69km) of the proposed fence is in previously uncleared vegetation. This will require a 6m graded track and additional chaining between 9-14m wide. Total required clearing: 124ha. ▪ Sixty five percent (432km) of the alignment was cleared/chained either recently during the November 2015 Esperance bush fires, will be before July 2016 or has been subject to historic and ongoing chaining/clearing for fire management by DPaW. Total required clearing: 648ha. ▪ Seven percent (47km) of the alignment includes existing tracks or graded areas, with an additional 9-14m of chaining required (total required clearing: 65ha). ▪ Eighteen percent (112km) of the alignment involves replacing existing fencing on private property where no clearing is required (pruning only, where necessary). Total required clearing: None. ▪ Two of the pre-European vegetation associations (512 and 4801) impacted have 10-30% of their original extent remaining for Western Australia (i.e. they are considered overcleared). Clearing impacts are mostly limited to existing chained areas (total required clearing: 83ha) with only 1ha required to be chained/graded in uncleared areas. ▪ Six hectares over the total alignment will be cleared for erosion control. Controls will involve the construction of water diversion turnouts (10m long by 2.5m wide), alternating every 200m along the 6m wide cleared track in areas susceptible to erosion. This will result in an additional maximum of 5.5m x 2.5m (13.75m²) of clearing every 200m. • Impacts to previously chained/cleared Proteaceae Dominated Kwongan Shrublands, (TEC), at two locations: lengths of 480m and 175m including 6m wide grading (total 0.4ha) and re chaining an additional width of 9m (total 0.6ha). • Eucalyptus woodlands of the Western Wheatbelt TEC will not be impacted (see Attachment 9).
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Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

- Impacts to three of four TF below identified which are predominantly located in an existing scrub rolled area. The number of individuals to be cleared is not known at this stage, though direct impacts to most plants will be avoided. Refer to Section 5.2 in Ecoscape (2015) for tabulated impact estimates, noting recent fire break clearing since November 2015 will have reduced any new impacts from fence clearing significantly from these impact estimates (refer below).

Conostylis lepidospermoides TF

Since the Ecoscape (2015) surveys were completed, an 80-100m wide area was chained in the same area as the proposed barrier fence alignment. The clearing was undertaken for improved fire protection to protect human life and property in response to the November 2015 Esperance emergency fires. DPaW who are responsible for fire mitigation on UCL applied for and were granted a permit to take an estimated 300 *Conostylis lepidospermoides* plants from the Minister for Environment. The proposed barrier fence alignment and clearing is in the same location as this cleared fire break area and so very limited new impacts to these populations are expected.

Anigozanthos bicolor subsp minor TF

The area near where this species is located was re-chained by DPaW during the November 2015 Esperance fires, however, a permit to take *Anigozanthos bicolor subsp minor* was not submitted as the species was avoided by only re-chaining the inner 60m strip of vegetation next to the farmers fence. The population is located outside of this inner 60m fire break buffer. DAFWA would also avoid this species by realigning the 15m fence reserve in this existing cleared area next to the farmers fence. However, DAFWA would still likely need to apply for a permit to take the species, as the fence clearing may not be 50m away from the species. DPaW expects to erect Threatened Flora signs near where *Anigozanthos bicolor subsp minor* species is located (Stephen Butler, DPaW pers comm. 2016) and DAFWA would ensure any fence construction activities would have this population location clearly marked as off limits.

Eucalyptus merrickiae TF

Since the Ecoscape (2015) surveys were completed for this species, an 80-100m wide area was re-cleared for improved fire protection to protect human life and property during the

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

		<p>November 2015 Esperance emergency fires. DPaW, who are responsible for fire mitigation on UCL applied for and were granted a permit to take <i>Eucalyptus merrickiae</i> from the Minister for Environment. The proposed barrier fence alignment and clearing is in the same location as this cleared fire break area and so very limited new impacts to these populations are expected.</p> <p><i>Rhizanthella gardneri</i> TF</p> <p>The population of <i>Rhizanthella gardneri</i> is located adjacent to a 'gap' in the study area that corresponds with the Oldfield River. This population could be completely avoided if this gap is expanded by approximately 400 m to the north, which would effectively avoid impacting the vegetation type associated with <i>Rhizanthella gardneri</i> (EspMhLsp). Based on this advice DAFWA modified the alignment to avoid this species and its associated vegetation type.</p> <ul style="list-style-type: none"> • Potential clearing impacts to 60 Priority Flora taxa (11 P1, 13 P2, 26 P3 and 10 P4) recorded from the 100m wide study area during the field surveys, predominantly located in the existing chained fire break. • Although a Phytophthora Dieback Management Plan will be implemented there is a risk of Phytophthora or weed introduction or spread through construction and future maintenance of fence.
7	<p>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</p> <ul style="list-style-type: none"> • <i>Avoidance - avoiding the adverse environmental impact altogether;</i> • <i>Minimisation - limiting the degree or magnitude of the adverse impact;</i> • <i>Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and</i> • <i>Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.</i> 	<ul style="list-style-type: none"> • An interdepartmental approach has been taken with DAFWA liaising with the Great Southern Region of DPaW to co-locate and maximize use of the chaining/clearing associated with DPaW's fuel management program. • Alignment has been modified on the basis of flora surveys to entirely avoid the threatened underground orchid (<i>Rhizanthella gardneri</i>) habitat near the Oldfield River. • Alignment has been modified to reduce isolation of large sections of Great Western Woodlands from vegetated patches to the south. • The majority of proposed chaining/clearing will occur through existing chained/cleared firebreak areas, adjacent to private agricultural land. Existing cleared tracks will be used for the fence location wherever possible to avoid clearing duplication. • Reduced clearing width to 15m from original 20m proposal for 460km of the fence (except in high fire risk previously uncleared land).

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

		<ul style="list-style-type: none"> • Clearing activity has been modified from bulldozing and grading the entire 20m wide area, to only bulldozing/grading a 6m wide track. The remaining area adjacent to the track will be chained and potentially mulched (instead of bare earth cleared) to reduce erosion potential, potential cultural heritage disturbance, maintain the seed bank, and to provide some ground habitat. Soil and Land Conservation Act erosion desk top and field assessments were completed (Attachment 10). • Alignment avoids clearing in any A Class Reserves and Cape Arid National Park. • Fence realigned on private property to avoid impacts to approximately 7245 of 7900m of Proteaceae Dominated Kwongan Shrublands TEC. The remaining TEC proposed to be impacted was recently re-chained for fire mitigation. • Alignment modified to private property for 112km by replacing existing farm fences with a barrier fence to avoid high environmental or cultural concerns identified. Only vegetation trimming in places where growth occurs on existing farm fence will be required in these areas. Additional clearing on private land is restricted to 3ha over 1.5km to avoid a cultural place and deep salt lake. • Phytophthora Dieback Management Plan will be prepared in consultation with DPaW and South Coast Natural Resource Management Inc. prior to any construction works. It will be based on the dieback assessment for the SBFEE carried out by Glevan Consulting (2015) (Attachment 11). Clearing and construction works contract terms will have requirements for strict adherence to the plan (e.g. clean on entry points). Compliance with the plan will be enforced by DAFWA construction supervisors. • State Barrier Fence Weed Hygiene Plan prepared by Ecoscape Australia Pty Ltd (2015) will be adopted (Attachment 12). Clearing and construction works contract terms will have requirements for strict adherence to this plan. • Construction Management Plan to be developed following construction approval. • Environmental offsets are not proposed at this stage.
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Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	<p>Residual impacts – review the residual impacts against the EPA objectives.</p> <p><i>It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require:</i></p> <ul style="list-style-type: none"> <i>quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;</i> <i>putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and</i> <i>comparison against any established environmental policies, guidelines, and standards.</i> 	<p>The vegetation clearing proposed for the SBFEE is predominantly within an existing, low fuel managed (chained/cleared) fire buffer between the agricultural land and woodlands. This fire buffer will continue to be cleared for fire protection irrespective of a State Barrier Fence. The SBFEE alignment has been strategically located to maximise the use of this easement and other tracks. Refer to Attachment 1 and 2 for exact areas.</p> <p>New clearing (up to 120ha) will occur through 69km of previously uncleared vegetation, i.e. along 10% of the alignment, consisting of a 15-20m chained area (including a graded 6m track) located on the edge of agricultural land. Vegetation associations are generally well represented in the area and on the edge of 16 million hectares of the Great Western Woodlands.</p>
9	<p>EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to <u>EAG 9</u></p>	<p><input checked="" type="checkbox"/> <i>meets the EPA's objective</i></p> <p><input type="checkbox"/> <i>may meet the EPA's objective</i></p> <p><input type="checkbox"/> <i>is unlikely to meet the EPA's objective</i></p>
10	<p>Describe any assumptions critical to your conclusion (in Question 9). e.g. <i>particular mitigation measures or regulatory conditions.</i></p>	<p>Calculations outlined in Attachment 1 are approximate and based on Shapefiles provided to the EPA with this referral. Assessments are based on the supporting information outlined in Section 3. Shapefiles were derived from the inside of the proposed SBFEE easement and may be subject to minor deviations and alterations during construction to avoid on ground, cultural heritage, environmental and other constraints.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Terrestrial Fauna
2	EPA Objective, as defined in <u>EAG 8</u>	To maintain representation, diversity, viability and ecological function at the species, population and assemblage level.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	<p>EPA (2002) <i>Position Statement No. 3: Terrestrial Biological Surveys as an Element of Biodiversity Protection</i>.</p> <p>EPA (2004c) <i>Position Statement No. 7: Principles of Environmental Protection</i>.</p> <p>EPA (2008) <i>Guidance Statement No. 33: Environmental Guidance for Planning and Development</i>.</p> <p>EPA (2003) <i>Guidance Statement No. 55: Implementing Best Practice in Proposals Submitted to the Environmental Impact Assessment Process</i>.</p> <p>EPA (2004b) <i>Guidance Statement No. 56: Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia</i>.</p> <p>EPA and Department of Environment and Conservation (EPA & DEC 2010) <i>Technical Guide – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment</i>.</p>
4	<p>Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including:</p> <ul style="list-style-type: none"> • <i>anticipated level of public interest in the impact;</i> • <i>consultation with regulatory agencies; and</i> • <i>consultation with community.</i> 	<p>Significant consultation, planning and biological studies have been undertaken to avoid or mitigate potential ecological impacts of the proposed SBFEE and to involve stakeholders in developing the project.</p> <p>A moderate level of public interest in the potential impacts of the proposal has been shown with respect to terrestrial fauna.</p> <p>DAFWA has consulted broadly in an open, transparent manner about the proposed SBFEE. DAFWA and the Esperance Extension Reference Group have considered the various stakeholders' views on the proposed SBFEE and significantly altered the proposal in response to concerns raised and advice provided (see Attachment 5 for alternative options that were considered). This has resulted in a revised final alignment, fence structure and clearing practice that minimises or avoids potential environmental impacts.</p> <p>Refer to Attachment 6 for an overview of the key consultation events undertaken for the proposed SBFEE involving the community, regulatory agencies and key stakeholders.</p>
5	<p>Baseline information - describe the relevant characteristics of the receiving environment.</p> <p><i>This may include: regional context; known environmental</i></p>	<p>A summary of the Ecoscape (2015) fauna results:</p> <ul style="list-style-type: none"> • eight fauna habitat types • Mallee Woodland Eucalyptus Woodland over mixed shrubs (51.2%)

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

	<p><i>values, current quality, sensitivity to impact, and current level of cumulative impacts.</i></p>	<ul style="list-style-type: none"> • Mallee Shrubland Eucalyptus Shrubland over mixed shrubs (27.5%) • Shrubland Acacia or other species mixed shrubland/herbland (2.0%) • Woodland Eucalyptus sp. over shrubs/sedges (9.1%) • Banksia Shrubland Banksia or Proteaceae sp. (1.8%) • Salt Lake/Fringe Samphire/chenopod shrubland or Melaleuca sp. Shrubland (1.3%) • Forest Tall Eucalyptus sp. with mixed tall shrubs (5.9%) • Salt Lake Open water or bare ground (0.3%) • Degraded/Cleared (0.8%) • Habitat has been modified over most of the alignment due to chaining/clearing. These disturbed areas still provide some level of habitat value as well as connectivity to the surrounding bushland. Habitat condition was considered good within the chained areas (though more unsuitable for some species than others) and very good within the remaining vegetated areas. • 405 species of vertebrates and 11 invertebrates were identified from desktop assessment as potentially occurring within the study area. This is likely an overestimate. • Eight significant species were observed, including two threatened (Malleefowl and Western Quoll), four Priority 4, one Priority 5 and one Migratory species. Other conservation significant fauna known or likely to utilise the study area include the threatened Red-tailed Phascogale and Carnaby's Black Cockatoo. Western Ground Parrot may also occur locally in the far south-eastern section of the alignment where the SBFEE passes along the western edge of a Management Area for the species as outlined in the South Coast Threatened Birds Recovery Plan (DPaW 2014) (GS Biologic 2015). • Sensitivity of impact to most fauna is considered low: Peter Mawson (Department of Environment and Conservation, in Ecoscape 2015) suggests there is little adverse impact on non-target native species. None of the larger terrestrial species are migratory, and smaller local species such as reptiles have no difficulty in passing through the fence.
6	<p>Impact assessment - describe the potential impact/s that may occur to the environmental factor as a</p>	<p>Ecoscape (2015) indicated that impacts associated with the SBFEE to native fauna and habitats are expected to be predominantly negative, but relatively</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

	<p>result of implementing the proposal.</p>	<p>minor in proportion to changes that have already been made in previous decades, while some potential benefits have also been identified. Current evidence is insufficient to estimate the relative magnitudes of the many negative and few positive effects identified.</p> <p>The fence would not present a barrier to movement of birds, reptiles, or smaller mammals. Complete separation of populations of larger animals on either side of the fence (except for widely spaced breaks at creeks) may reduce effective population size and lead to a loss of genetic diversity, greater risk of population decline and local extinction on both sides, but particularly in the agricultural zone where remnant habitat patches are small and isolated. Considering the isolated, remnant nature of habitat within the agricultural zone, the SBFEE construction would represent a hardening of a barrier to gene flow rather than a new barrier (refer to Section 9.3.6 in Ecoscape 2015 for further assessment in habitat fragmentation and loss of connectivity for kangaroos, emus and wild dogs, 9.3.7 for entanglement and injury). These potential impacts are discussed further in Attachment 13 (DAFWA 2016) and a specific risk assessment for the P4 Western brush wallaby is provided at Attachment 14 (Bamford Consulting Ecologists 2016).</p> <p>Potential negative impacts to fauna identified may include:</p> <ul style="list-style-type: none"> • collisions and entrapment: DAFWA has recorded low numbers of animals entangled in the existing SBF fence; 41 carcasses were identified and removed from its 1190 km length between 2007-2015, almost all kangaroos and emus (Ecoscape 2015). Motion detecting cameras were deployed along the existing SBF over a 14-month period from August 2014 to September 2015 for 2311 "camera trap days" (number of cameras multiplied by number of 24 days deployed) or 6.33 camera trap years. No impact of any animals with the fence was recorded over this period. • prevention of dispersal and access to resources • separation and isolation of populations • changes to faunal communities within the fence • alteration of predator behaviour such as preferential predation along fence lines • long-term loss of anti-predator behaviour in prey species • increase in invasive species number, abundance and distribution as the fence and road allow greater access to bushland • restriction of animal movement in fires
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Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

		<p>Potential positive impacts to fauna:</p> <ul style="list-style-type: none"> • reduced threat of 'wild dogs' to medium-sized macropods, possibly including Western Brush Wallaby • access to fire fighting • dingo conservation: The wild dogs in the proposed fenced area and immediately to the north have a relatively high degree of dingo purity. Maintenance of intact dingo pack structure within some areas in the Great Western Woodlands may have conservation benefits. A fence preventing movement of dingos/wild dogs into the agricultural area could facilitate conflicting management approaches (wild dog control and dingo conservation) in the landscape. <p>Impacts of vegetation clearing and fence construction to fauna (including all species, not only conservation listed) are likely to be mostly negative but minor. The nature and extent of clearing is described in the vegetation section above (also see Attachment 13).</p> <p>Potential impacts to conservation significant fauna were assessed as minor to none for each fauna taxon, by:</p> <ul style="list-style-type: none"> • the fence acting as a barrier (Western brush wallaby). A further risk assessment and scientific literature review was completed for this species by Bamford Consulting Ecologists 2016 (Attachment 14). • collision/entanglement hazard (some birds, possibly including Western Ground Parrot, Malleefowl) • loss of habitat area by clearing (some mammals, birds, reptiles) • loss of habitat connectivity (some mammals, small birds, reptiles), or • increased exposure to feral predators using the fence and associated clearing as a corridor. <p style="text-align: right;">Ecoscape (2015)</p> <p>The south eastern section of the SBFEE alignment has potential for (minor) impact on the Critically Endangered Western Ground Parrot (<i>Pezoporus flaviventris</i>), limited to a low risk of collision for individual, juvenile birds dispersing beyond the currently occupied range. Existing farm fences are currently located on the alignment in this area, so the risk is not new. Additional mitigation measures to further reduce the very low collision potential are proposed for this area (refer below).</p>
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Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

7	<p>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</p> <ul style="list-style-type: none"> • <i>Avoidance - avoiding the adverse environmental impact altogether;</i> • <i>Minimisation - limiting the degree or magnitude of the adverse impact;</i> • <i>Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and</i> • <i>Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.</i> 	<p>Ecoscope (2015) note that fence design can have a major influence on how it affects particular species, including the height, mesh size, underground extent, and presence of barbed wire strands and foot netting. The current fence design has taken these and other design aspects into consideration to minimise impacts to fauna (see also Attachment 13: DAFWA, 2016).</p> <ul style="list-style-type: none"> • Fence specifications have been modified from the original SBF design to include fluorescent orange droppers every 7m to increase the visibility of the fence in a colour spectrum that is more visually obvious than conventional fencing. The number of florescent orange fence droppers would also be doubled for approximately 85km of fence near (two kilometres from) known Western ground parrot habitat in Cape Arid National Park where dispersing juvenile ground parrots could possibly encounter or cross the fence if they expand from their known range. Two florescent orange droppers would be installed in-between each 7m solid star picket about 2.3m apart to further minimise collision potential in this area. • The fence mesh dimensions are also large enough (minimum 152mm x 102mm increasing to 152mm x 152mm at the top of the fence) to allow fauna species including snakes, lizards and small to mid-sized (or juvenile) mammals to pass through. • No barbed wire is used to reduce entanglement or injury potential. • A relatively low fence height of 1.35m will reduce collision potential with bats or birds. • Electrical wires will not be used as they can cause mortality of smaller native species. • Regular inspections of the SBFEE will be conducted by DAFWA staff and contractors during construction and particularly during the first year of operation while wildlife gets used to the new fence. <p>The proposed fence alignment, fence design, and fence clearing practices have been considered to avoid or minimise impacts to fauna where possible. Other management and design actions such as including mitigation strategies to address collision and entrapment, prevention of dispersal and access to resources, and separation and isolation of populations, are discussed in Attachment 13.</p> <ul style="list-style-type: none"> • Further design improvements include positioning tracks and existing cleared areas near the fence where possible to increase visibility for wildlife; reducing the clearing footprint to 15m width from 20m along most of the alignment; modifying the clearing practices within the fence reserve so some ground cover remains; placing the fence on private land and not clearing any additional land where environmental
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Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

		<p>or cultural concerns were high.</p> <ul style="list-style-type: none"> • The alignment has minimised the use of acute angles to address the potential for aggregations of large animals from the woodlands/rangelands and limited the isolation of large sections of woodlands by predominantly following the existing cleared agricultural/woodland interface. • The alignment has provided for connectivity of larger animals with the adjacent woodlands by leaving the three main river systems in the west and the coastal corridor in the east open to animal movement. Gaps in the fence at the Oldfield River (about 1km wide) the Young River (about 400m wide) and the Lort River (about 2km wide) will leave these waterways and riparian areas open to animal movement on the western side of the alignment. On the eastern side of the EE a 3.2km wide gap in the fence from the agricultural land to the coast adjacent to Cape Arid National Park will allow fauna movement to continue through this coastal corridor. Some connectivity will always remain due to imperfect fence maintenance, the ability of animals to jump or fly over the fence and where fence grids cross roads. • The alignment has also been significantly modified to reduce the number of bottlenecks/acute angles that emus may aggregate in and to reduce isolation of large sections of the Great Western Woodlands compared to the original scoping studies. The alignment predominantly follows the existing cleared agricultural/woodland interface. • Wild dog trapping and wild dog/fox baiting will continue in a 10-20km buffer area from the SBFEE reducing potential predation impacts on species such as the Western brush wallaby. • Attachment 4 provides details on alternative options considered to the proposed SBFEE. • Environmental offsets are not proposed at this stage.
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Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	<p>Residual impacts – review the residual impacts against the EPA objectives.</p> <p><i>It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require:</i></p> <ul style="list-style-type: none"> • <i>quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;</i> • <i>putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and</i> • <i>comparison against any established environmental policies, guidelines, and standards.</i> 	<p>Residual impacts are difficult to determine at this stage. Most are likely to be associated with the direct impacts outlined above, but more likely to be measurable in the long term, e.g. population numbers of fauna on either sides of the fence, mortalities associated with entanglement and collision, success in isolating foxes/dogs and agricultural pests within and outside of the agricultural zone, and other positive/negative outcomes. These are discussed in more detail in Attachment 13.</p> <p>Cumulative effects of clearing and direct habitat loss are likely to be low.</p>
9	<p>EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to <u>EAG 9</u></p>	<p><input checked="" type="checkbox"/> <i>meets the EPA's objective</i></p> <p><input type="checkbox"/> <i>may meet the EPA's objective</i></p> <p><input type="checkbox"/> <i>is unlikely to meet the EPA's objective</i></p>
10	<p>Describe any assumptions critical to your conclusion (in Question 9). e.g. <i>particular mitigation measures or regulatory conditions.</i></p>	<p>Assumptions critical to the conclusion above include the adoption of the measures and design specifications outlined in Attachment 13.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Heritage
2	EPA Objective, as defined in <u>EAG 8</u>	To ensure that historical and cultural associations, and natural heritage, are not adversely affected.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	<ul style="list-style-type: none"> • Aboriginal Heritage Act 1972 • EPA (2004) Position Statement No. 41: Assessment of Aboriginal Heritage. • Esperance Nyungar Government Standard Heritage Agreement (2014) • Departments' of Aboriginal Affairs and Premier and Cabinet (2013). Aboriginal Heritage Due Diligence Guidelines.
4	Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including: <ul style="list-style-type: none"> • <i>anticipated level of public interest in the impact;</i> • <i>consultation with regulatory agencies; and</i> • <i>consultation with community.</i> 	<ul style="list-style-type: none"> • A moderate level of public interest in the potential heritage impacts. • DAFWA has undertaken extensive consultation over a number of years with Traditional Owners and their representative bodies, the Department of Aboriginal Affairs and the Native Title Unit at the Department of Premier and Cabinet. An Activity Notice was submitted under the Esperance Nyungar Government Standard Heritage Agreement (2014) and archaeological and ethnographic assessments of the proposed alignment were completed by the Esperance Nyungar and Ngadju Traditional Owners.
5	Baseline information - describe the relevant characteristics of the receiving environment. <i>This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.</i>	<ul style="list-style-type: none"> • Comprehensive archaeological and ethnographic Aboriginal Heritage surveys completed for both the Esperance Nyungar and Ngadju determined lands of the proposed Esperance extension. Reports prepared in confidence for DAFWA in accordance with the Esperance Nyungar Government Standard Heritage Agreement (confidential): Aboriginal Cultural Heritage Survey of the State Barrier Fence Proposed Extension, Esperance Shire, Western Australia' (2015; Attachment 15 provided to EPA only) and Anthropological Heritage Survey Work Area Clearance, Ngadju People DAFWA State Barrier Fence Esperance Extension (2015; Attachment 16 provided to EPA only).
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	<ul style="list-style-type: none"> • The nature of the proposed activity will result in minimal ground disturbance. Most of the alignment has already been cleared in the past (and large sections again during and after the November 2015 Esperance emergency fires). The construction of the fence will involve only limited ground penetration.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

7	<p>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</p> <ul style="list-style-type: none"> • <i>Avoidance - avoiding the adverse environmental impact altogether;</i> • <i>Minimisation - limiting the degree or magnitude of the adverse impact;</i> • <i>Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and</i> • <i>Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.</i> 	<ul style="list-style-type: none"> • 38 Aboriginal places identified (predominantly rock scatters and granite outcroppings). However, it remains unclear which, if any, of the 38 places identified meet the requirements of s5 of the Aboriginal Heritage Act 1972. • 19 places can be completely avoided by deviating the fence alignment. • 11 places would be impacted within the management boundary indicated but only on existing, disturbed freehold crop land. This would involve removing an existing farm fence and replacing it with a barrier fence - no new additional clearing would be undertaken. This re-alignment option was considered preferable to extending outside of the management boundary and clearing undisturbed bushland. • The management boundary of five places would be impacted but on an existing fire track. • To avoid place 016 and the two water sources near it, a 350m deviation through private bushland to reach the farmers private fence is proposed. • Minor impact to two artefact scatters would occur but adjacent to an existing disturbed communications line and road. The fence would be located near a below ground Telstra telecommunications cable. • The three main river systems (the Lort, Young and Oldfield Rivers) are not included in the alignment and the fence has been stopped at these areas so ground disturbing activities do not impact near these Aboriginal sites. • Clearing activity has been modified from bulldozing and grading the entire 20m wide area, to only bulldozing/grading a 6m wide track. The remaining area adjacent to the track will be chained and potentially mulched (instead of bare earth cleared) to reduce erosion potential, potential cultural heritage disturbance, maintain the seed bank, and to provide ground habitat. • Ongoing consultation with Department of Aboriginal Affairs and Traditional Owners with respect to three Aboriginal Sites located on freehold private property.
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Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	<p>Residual impacts – review the residual impacts against the EPA objectives.</p> <p><i>It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA's objective for this factor would be met if residual impacts remain. This will require:</i></p> <ul style="list-style-type: none"> quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions; putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and comparison against any established environmental policies, guidelines, and standards. 	<ul style="list-style-type: none"> The nature of the proposed activity will result in minimal ground disturbance. Most of the alignment has already been cleared in the past (and large sections again during and after the November 2015 Esperance emergency fires) and the construction of the fence will involve only limited ground penetration. Concerns raised by Traditional Owners have been thoroughly considered by DAFWA and the Department of Aboriginal Affairs. The changes proposed as a result of the cultural heritage assessment processes have minimised cultural impacts and potential ecological impacts. DAFWA's position on the proposal has been explained with utmost respect to Traditional Owners.
9	<p>EPA's Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to <u>EAG 9</u></p>	<p><input checked="" type="checkbox"/> meets the EPA's objective</p> <p><input type="checkbox"/> may meet the EPA's objective</p> <p><input type="checkbox"/> is unlikely to meet the EPA's objective</p>
10	<p>Describe any assumptions critical to your conclusion (in Question 9). e.g. particular mitigation measures or regulatory conditions.</p>	

In circumstances where there was some uncertainty on the level of significance of a particular factor it is recommended that a brief summary (no longer than 1 - 2 paragraphs) is provided on the steps taken to determine why a factor was not considered to be significant.