



Australian Government

Department of the Environment and Energy

EPBC Referral Guidance

Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of
the Swan Coastal Plain ecological community



How to prepare a referral for proposals likely to significantly impact on the Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community

Could your action impact on the Tuart Woodlands and Forests of the Swan Coastal Plain ecological community?

The Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community (Tuart Woodlands and Forests) is listed as Critically Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

If you are proposing to take an action that could have a significant impact on the Tuart Woodlands and Forests you are required to refer the proposal for consideration under the EPBC Act.

How should I use this referral guidance?

This guidance document contains detailed tables to:

- help you determine whether your action may have a significant impact on Tuart Woodlands and Forests and needs to be referred to the Minister for the Environment to determine whether the action is a controlled action
- ensure your referral includes the right information so that your referral can be considered in a timely manner.

This referral guidance should be read alongside the:

- Approved Conservation Advice for the Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community available at <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/153-conservation-advice.pdf> (Approved Conservation Advice)

- *Significant impact guidelines*
1.1 *Matters of National Environmental Significance*, available at <http://www.environment.gov.au/epbc/publications/significant-impact-guidelines-11-matters-national-environmental-significance>.

Further information on how to make an EPBC Act referral can be found at <http://www.environment.gov.au/epbc/do-you-need-approval>.

As you are deciding whether to refer your proposed action, you will need to consider the four important questions set out on page 3 of this document.

The colour-coded tables found on the following pages can help you answer these questions. Where you decide to refer, you may wish to submit the completed tables as referenced attachments to your referral. Please also attach any relevant survey reports containing supporting information and data. Should you decide not to refer, retaining the completed tables may be useful evidence of your reasoning should the Department require further information about your decision.

This document provides guidance only on the Tuart Woodlands and Forests—you will also need to consider any other matters of national environmental significance when making a decision to refer a proposed action and providing that referral. The Department's Protected Matter Search Tool available at: <http://www.environment.gov.au/epbc/protected-matters-search-tool> should be used to identify protected matters that may be impacted by your action.

Four important questions to consider when preparing a referral that may impact the Tuart Woodlands and Forests

1 Is the Tuart Woodlands and Forests ecological community in your proposed project site? Is it in other adjacent or off-site areas that may be impacted (for example, by introducing weeds)?

To help you answer this question, the Approved Conservation Advice contains a description, key diagnostic characteristics and information on defining a patch of Tuart Woodlands and Forests, including location, structure and composition.

If the answer to **Question 1** is 'No', it is unlikely a referral for Tuart Woodlands and Forests is required.

If the answer to **Question 1** is 'Yes' or 'Maybe', you will need to answer the following three questions:

2 What is the patch size and condition category of the Tuart Woodlands and Forests in the proposed project site and in the surrounding area?

You will need to provide information on the condition of Tuart Woodlands and Forests on your proposal site. If the Tuart Woodlands and Forests patch extends beyond the site of your proposed action or if there is a site that may be indirectly impacted you should provide information on the extent and quality of all the vegetation. Contextual information on other patches nearby, will also be essential.

Providing this information at the referral stage will assist the Department in progressing your referral quickly and efficiently.

3 What further information can assist in identifying patches of the Tuart Woodlands and Forests and avoiding significant adverse impacts?

You are likely to be required to provide further information on the characteristics of the site including, but not limited to, information on how you sampled and what other species occur on the site.

Providing this information at the referral stage will assist the Department to understand the site context, quality and other important information on the significance of the site.

4 Will your proposed action have a significant impact on Tuart Woodlands and Forests?

You will need to consider whether the proposed action has a real chance or possibility of having a significant impact on Tuart Woodlands and Forests. Expected impacts, avoidance and mitigation measures will need to be explained and, to the extent possible, characterised.

These questions are explained in more detail in pages 4–9 of this document.

What if I cannot fully answer these questions, or there is not enough information available?

When determining whether or not an action will have a significant impact on Tuart Woodlands and Forests, the Department will consider information about the individual patch of vegetation and take into account the context of the proposal site.

If you are unable to provide adequate information in your referral, the Department will use a precautionary approach to determine whether impacts to Tuart Woodlands and Forests are likely to be significant.

Question 1—Is the Tuart Woodlands and Forests ecological community in your proposed project site? Is it in other adjacent or off-site areas that may be impacted (for example, by introducing weeds)?

Refer to **Section 3** of the Approved Conservation Advice for steps to identify the nationally protected ecological community.

Key diagnostic characteristics*	Information	Key diagnostic questions* (Refer to Section 3.2 of the Approved Conservation Advice for a complete explanation of these diagnostic features—other sections of the Approved Conservation Advice are referenced where relevant)	Response (yes/no/possibly) and detailed comments. Use as much space as you need to fully answer the question*
Location and physical environment	Bioregion	Is the proposal site within the Swan Coastal Plain IBRA bioregion?	
Soils and Landform	Soil type	Is the soil type consistent with where the Tuart Woodlands and Forests may occur? (see Section 2.2.1*)	
	Location in the landscape, topography	Is the topography/physical environment consistent with where the Tuart Woodlands and Forests may occur? Is the site associated with any hydrology (groundwater/surface water)?	
Structure	Presence of Tuart trees	How many Tuart trees are present and are they consistent with the characteristics set out in the Approved Conservation Advice? Note: Please present this information in terms of total number of trees (dead, established, seedlings etc.) and trees per hectare of the footprint. Diagrams/maps should also be provided.	
	Structural form	What structural form is the vegetation?	
Composition	Dominant tree species, emergent tree layer, understory	Is the composition of the community consistent with the characteristics set out in the Approved Conservation Advice? What other tree species are present? How many native understorey species are present and what is the number of weedy species/proportion of weeds?	

Key diagnostic characteristics [♦]	Information	Key diagnostic questions* (Refer to Section 3.2 of the Approved Conservation Advice for a complete explanation of these diagnostic features—other sections of the Approved Conservation Advice are referenced where relevant)	Response (yes/no/possibly) and detailed comments. Use as much space as you need to fully answer the question [#]
Defining a patch of Tuart Woodlands and Forests	Patch definition	What is the extent of the patch? Note: Descriptions of patch extent must include analysis of canopy extent and associated understorey vegetation (see Section 3.2.2*). Patches may extend beyond the project area or include areas of infrastructure (i.e. road, powerline). The referral should make clear how, and how much of the patch will be directly or indirectly impacted.	
Relationship with other ecological communities	Other vegetation communities	Are other vegetation communities present? What are they and how do they intergrade and/or interact with the Tuart Woodlands and Forests TEC? (see Section 3.2.3*)	

♦ The complete key diagnostic characteristics are provided in the Approved Conservation Advice available at <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/153-conservation-advice.pdf>.

* The Tuart Woodlands and Forests may include restored, planted or revegetated flora. Do not exclude vegetation from being classed as the Tuart Woodlands and Forests because it is a planted, restoration or revegetation site (unless it is a garden).

Comments should include references to appropriate supporting information and data.

Question 2—What is the patch size and condition category of the Tuart Woodlands and Forests in the proposed project site and in the surrounding area?

Size and condition*	Information	Relevant content to be discussed in the referral (Refer to Section 3.3 of the Approved Conservation Advice for a complete explanation of these diagnostic features)	Detailed comments. Use as much space as you need to fully answer the question#
Patch Size	Patch size in hectares	Is the patch size large enough to meet the minimum patch size in this section? (Section 3.3*) Note: Patch boundaries are not limited to the proposal site. You must make clear that the patch boundary is consistent with Section 3.2.2* .	
Patch condition	Condition thresholds	Using the condition categories in this section, what is the patch condition? (Section 3.3.1*) What is the quality and size (hectares) of the vegetation community in and around the site where the proposed action will occur? Is the patch expected to improve in condition (e.g. after appropriate fire management) or is there a threatening process underway that will reduce the current size and/or condition? Note: Refer to Section 3.4 – Step 3 – Further information to assist in identifying patches of the protected ecological community and avoiding significant adverse impacts . If patch quality varies over the site; characterisation of the variation should be provided. Patch condition includes consideration of thresholds for characteristics such as plant species richness, landscape features, Tuart tree age and size and other habitat roles of the vegetation. Other vegetation condition measures (e.g. Keighery scale) do not necessary reflect the condition thresholds and both should be provided, where relevant. Where threats are identified (i.e. those listed in Appendix C of the Approved Conservation Advice) please provide further information on what these are and how they have impacted the condition.	

♦ Further information on the key diagnostic characteristics is provided in the Approved Conservation Advice available at: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/153-conservation-advice.pdf>

Comments should include references to appropriate supporting information and data. The response which includes the information does not need to be presented in table form.

Question 3—What further information can assist in identifying patches of the Tuart Woodlands and Forests and avoiding significant adverse impacts?

Other characteristics*	Information	Relevant content to be discussed in the referral (Refer to Section 3.4 of the Approved Conservation Advice for a complete explanation of these)	Detailed comments. Use as much space as you need to fully answer the question#
Buffer zone	Condition thresholds	Has a buffer zone been applied to the Tuart Woodlands and Forests patch and what size is the buffer? What activities will occur within the buffer zone? (Section 3.4.1 *) Note: Activities within the buffer zone must be considered where they have the potential or may significantly impact Tuart Woodlands and Forests.	
Revegetated areas and areas of regrowth	Revegetation	Does the area contain revegetation or areas of regrowth? (Section 3.4.2 *) Note: Revegetated areas, if they meet the key diagnostic criteria can be Tuart Woodlands and Forests.	
Sampling protocol	Design	Is the sampling consistent with what is described in Section 3.4.3 ?	
	Timing of surveys, seasonal variation and post-disturbance surveys	Is the sampling consistent with what is described in Section 3.4.4 (evidence must be provided)? Has any disturbance or other factors which may impact on the outcome of the survey been identified (fire, drought)?	

Other characteristics [♦]	Information	Relevant content to be discussed in the referral	Detailed comments.
		(Refer to Section 3.4 of the Approved Conservation Advice for a complete explanation of these)	Use as much space as you need to fully answer the question [#]
Other guidance for impact assessment and mitigation (see section 3.4.5)	Size and/or area to boundary ratio	What is the size/area to boundary ratio? Note: A map/diagram should be provided with the location and shape of the proposal site in context to the surrounding area.	
	Species recruitment	What evidence exists of recruitment of overstorey and understory species? Does the site have a range of Tuart tree age cohorts? Are very large trees and/or tree hollows present?	
	Faunal habitat	What habitat does the site provide for fauna (e.g. water, variety in substrate, nest hollows)? What fauna does the site support?	
	Combination of species	Does the site contain a unique combination of species?	
	Species richness	What is the species richness of the site? Is it high? Note: this should include both flora and fauna.	
	Other listed species	Are any other EPBC Act listed species located on the site?	
	Soil surface characteristics	Is there presence of cryptogams, soil crust, leaf litter, intact proteaceous root mats or other indicators of a low level of soil disturbance?	

♦ Further information is provided in the Approved Conservation Advice available at: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/153-conservation-advice.pdf>.

Comments should include references to appropriate supporting information and data. The response which includes the information does not need to be presented in table form.

Question 4—Will your proposed action have a significant impact on Tuart Woodlands and Forests?

To answer this question, you should refer to the significant impact criteria for critically endangered and endangered ecological communities outlined in the Department's [Significant Impact Guidelines 1.1 - Matters of National Environmental Significance, Commonwealth of Australia, 2013](#) (or as updated) and the Approved Conservation Advice linked in this document (particularly the other factors listed in **section 3.4.5**).

Expected impacts need to be explained and, to the extent possible, characterised. Consider representing this information in the following table:

Significant Impact Criteria* <i>An action is likely to have a significant impact on a critically endangered or endangered ecological community if there is a real chance or possibility that it will:</i>	Description of proposed action in relation to significant impact criteria	Likelihood <i>(known, likely, possible, unlikely)</i>
Reduce the extent of an ecological community. Note: This must include consideration of community extent, including local and regional context.		
Fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines. Note: Appendix C2 , as well as Section 5.2 and Appendix D2 of the Approved Conservation Advice discusses the threat of fragmentation.		
Adversely affect habitat critical to the survival of an ecological community. Note: Habitat critical to the survival is discussed in Section 3.5 of the Approved Conservation Advice.		
Modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns. Note: Appendix C of the Approved Conservation Advice provides a description of threats to the ecological community. Where the proposed action has the potential to result in or increase threats (i.e. change groundwater), sufficient information must be provided.		

Significant Impact Criteria [*]	Description of proposed action in relation to significant impact criteria	Likelihood <i>(known, likely, possible, unlikely)</i>
<p><i>An action is likely to have a significant impact on a critically endangered or endangered ecological community if there is a real chance or possibility that it will:</i></p> <p>Cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting.</p> <p>Note: Section 2 of the Approved Conservation Advice discusses the composition of the community focusing on the diagnostic species but this is highly variable across its range.</p>		
<p>Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to:</p> <ul style="list-style-type: none"> • assisting invasive species, that are harmful to the listed ecological community, to become established, or • causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community. <p>Note: Appendix C of the Approved Conservation Advice provides a description of threats to the ecological community.</p>		
<p>Interfere with the recovery of an ecological community.</p> <p>Note: Section 6 of the Approved Conservation Advice discusses priority research and conservation actions.</p>		

♦ From the Significant Impact Guidelines 1.1—Matters of National Environmental Significance, Commonwealth of Australia, 2013. Available from: <http://www.environment.gov.au/epbc/publications/significant-impact-guidelines-11-matters-national-environmental-significance>.

