

# Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain

## Proposal to list as a nationally threatened ecological community

October 2017



This guide explains how the Tuart woodlands and forests are being assessed for possible listing and protection as a nationally threatened ecological community under the *Environment Protection and Biodiversity Conservation Act 1999*. It describes why the Tuart woodlands and forests may need protection and what a listing would achieve and mean for people in the Swan Coastal Plain.

## Public consultation on Tuart woodlands and forests

Tuart woodlands and forests is an ecological community that only occurs on the Swan Coastal Plain in Western Australia. Following a public nomination in 2016, the Threatened Species Scientific Committee is assessing it for potential listing as a nationally threatened ecological community under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Public consultation is an important part of the assessment of Tuart woodlands and forests.

### **The draft Conservation Advice is now available for comment.**

Your feedback on the proposal to list the ecological community as threatened is welcome.

This is now open until **Wednesday 13 December 2017**.

The Committee is seeking comments on the proposal to list the ecological community as 'Critically Endangered', meeting the conditions of the EPBC Act. They would also appreciate other information that helps to clearly define the ecological community or to improve other parts of the draft Conservation Advice. All comments will be given to the Committee and to the Minister for them to consider.

The draft Conservation Advice and other information about how to make a submission, including questions to guide your responses, are available from [www.environment.gov.au/biodiversity/threatened/nominations/comment](http://www.environment.gov.au/biodiversity/threatened/nominations/comment)

For further advice on this assessment or to provide comments, please contact:

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Summary	
<ul style="list-style-type: none"> <li>• Ecological communities are groups of living things such as plants and animals that naturally inhabit a particular area.</li> <li>• The Tuart (<i>Eucalyptus gomphocephala</i>) woodlands and forests of the Swan Coastal Plain is an ecological community that is important in Western Australia. It contains the trees and smaller plants as well as animals and fungi that live in areas dominated by tuart trees, on the Swan Coastal Plain. This is the traditional country of Nyoongar people and it is the only place in the world where tuart woodlands and forests are found.</li> <li>• Very little of the original area of Tuart woodlands and forests remain, and much of it has been damaged. The best remaining areas are now being considered for listing as threatened according to the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). This is one of Australia's national environment laws.</li> <li>• A scientific assessment is under way to determine whether these woodlands and forests meet the conditions for national protection under this law. This assessment is being made by the independent Threatened Species Scientific Committee. The Department of the Environment and Energy is assisting with this process.</li> <li>• We are now inviting comments from interested people including the Nyoongar community, State and Local government, land owners and managers, Natural Resource Management Groups, industry groups and others.</li> <li>• The main question is whether the ecological community meets the EPBC Act conditions for listing as 'critically endangered'. We also welcome other information that will help with the assessment.</li> </ul>	<ul style="list-style-type: none"> <li>• The Minister for the Environment will decide whether to list the ecological community in 2018.</li> <li>• If the tuart forest and woodlands are listed under the EPBC Act it would help protect them from further loss.</li> <li>• National listing raises the profile of threatened ecological communities. It sometimes leads to increased opportunities for landholders and managers to gain funding for work to protect and restore patches of these ecological communities. This could also help threatened species that are found in the ecological community, for example, Carnaby's Cockatoo.</li> <li>• Listing the Tuart woodlands and forests ecological community would mean that any activity likely to have a significant impact on them would need to be referred to the Australian Government Department of Environment and Energy for assessment and approval.</li> <li>• The EPBC Act is not designed to stop people using their land. Existing and routine landholder and agricultural activities and actions previously approved under other legislation are generally exempt from the EPBC Act.</li> <li>• Typically, major new activities or developments would require referral (for example, permanently clearing significant areas of intact or high-quality native vegetation for new residential, industrial areas, energy infrastructure, or mines).</li> <li>• Listing Tuart woodlands and forests as threatened would not affect native title or traditional use of country. It may help in gaining community recognition of the important cultural values of Tuart woodlands and forests.</li> <li>• Consultation is open until <b>Wednesday 13 December 2017</b>.</li> </ul>



## What is the Tuart woodlands and forests ecological community?



*Tuart woodland at Reabold Hill, Bold Park*

The ecological community occurs on Nyoongar land on the Swan Coastal Plain of Western Australia (approximately 200km north and south of Perth) (see map). It mainly occurs on dune formations, particularly the Spearwood and Quindalup dunes, but also along rivers and wetland fringes. It can be a woodland (including as mallee trees) or a forest. Generally in the south the trees are larger than in the northern part of the ecological community. The tree canopy is dominated by tuart (*Eucalyptus gomphocephala*) trees but can also contain other tree species, commonly including: peppermint (*Agonis flexuosa*), bull banksia (*Banksia grandis*); candlestick banksia (*Banksia attenuata*), or jarrah (*Eucalyptus marginata*); less commonly, marri (*Corymbia calophylla*). The understorey varies substantially between sites, but some of the native plant species that are likely to be present are listed in the draft Conservation Advice.

Some of the animals that were once part of the ecological community have now been lost and some are threatened. The southern part of the ecological community provides important habitat for threatened Western Ringtail Possums. As Tuart trees are the largest trees present on the Swan Coastal Plain, old

trees may also provide hollows important for black cockatoos such as Carnaby's, Baudin's and Forest Red Tail black cockatoos.



*Red tailed phascogale (Phascogale calura) Photo, copyright: Babs and Bert Wells.*



*Dichopogon capillipes, Yalgorup*

## Why do Tuart woodlands and forests need protection?

The South West of Western Australia is known world-wide for the number of native species that live only there. However, in many areas, particularly along the stretch of the Swan Coastal Plain a lot of the native vegetation has been cleared, fragmented or damaged. The ongoing expansion of Perth and rapid coastal development to its north and south suggest that native vegetation loss will continue. As natural areas are cleared, fragmented or damaged, many of the plants and animals that live there are lost from the region. The Tuart woodlands and forests do not occur anywhere else on earth, so for the species that live there, the remaining patches on the Swan Coastal Plain are critical.

Approximately 80% of the area of Tuart woodlands and forests has already been cleared.

Many of the remaining patches are very small and are in poor condition due to invasion by weeds, unsuitable burning and problems such as tree death or loss of foliage. It is likely that the clearing has been particularly severe in the greater metropolitan area, as the remaining patches there are very small. Other threats to the ecological community include feral animals, changes to groundwater, climate change and the loss of the animals that play important roles such as pollination or digging.



*Clearing for development, near Mandurah*

## How does Australia protect nationally threatened ecological communities?

An ecological community is a group of native living things, such as plants, animals and fungi that live in a particular type of natural area. Each of these ecological communities is a natural system, for example, particular kinds of grassland, woodland or forest.



*Hibbertia hypericoides, Yalgorup*

Some of these living things may only exist within one ecological community, while others may be found more widely. Ecological communities often occur in particular landscapes, for example, they may belong near rivers, on mountain tops or on a particular type of soil. Altogether, ecological communities are complex living systems.

Some ecological communities are threatened due to loss or damage such as clearing of vegetation, loss of native animals or plants or spread of weeds. These ecological communities can be listed as 'matters of national environmental significance' under the *Environment Protection and Biodiversity Conservation Act* (EPBC Act).

Listing threatened ecological communities helps protect them from significant human impacts that may cause their loss in the future. Under the EPBC Act, matters of national environmental significance, including threatened ecological communities are considered along with broader economic, social and other issues before large projects are approved.

National listing also raises the profile of threatened ecological communities. It sometimes leads to increased opportunities for landholders and managers to gain funding for work to protect and restore patches of these ecological communities. The Australian Government has a variety of programs, such as National Landcare, to support land managers to maintain conservation values of their properties.

Some State and Territory governments also have systems for identifying and listing threatened ecological communities for protection.

## **What are the benefits of protecting ecological communities?**

Protecting ecological communities from loss and damage helps to look after the whole range of living things that are found there. It also helps to protect the processes that are needed for natural areas to work properly, for example, pollination, natural water flows, movement and breeding of animals and regeneration of plants. Maintaining ecological communities also helps to protect good quality air and water, healthy soils, shelter and feed for stock, and maintaining a stable climate. These all help to create productive and healthy land and water, and healthy and pleasant places to live. Ecological communities may also have particular cultural values, including those important for Indigenous people. Listing an ecological community as threatened does not affect native title or traditional use of country. It may help to gain community recognition of the important cultural values of the ecological community. In many cases scientists are still learning how the parts of ecological communities work together. Protecting all their parts, rather than just some types of plants or animals is the best way to keep them healthy.



*Western yellow robin. Photo: Brian Furby Collection. Copyright Brian Furby*



## What is the process for listing a threatened ecological community?

The Minister for the Environment annually calls for public nominations of ecological communities that may be eligible for listing as threatened under the EPBC Act and that may benefit from national protection.

An assessment is then made by the independent Threatened Species Scientific Committee. This independent group of scientists gives expert advice on threatened species and ecological communities to the Australian Government Minister for the Environment and Energy.

In preparing their Conservation Advice to the Minister, the Committee proposes a clear definition of the ecological community. This can later be used by landholders and others to determine whether any patch of land is part of a nationally listed ecological community.



*Shingleback (Tiliqua rugosa) Photo: Cameron Slatyer.  
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The Committee then considers the evidence for how much of the ecological community has been lost or damaged, how much is likely to remain and what future it faces. The EPBC Act has a set of criteria to determine how urgently an ecological community needs to be protected. To be considered threatened, an ecological community must meet at least one of these criteria.

There are three listing categories based on the level of extinction risk shown under each criterion: vulnerable, endangered or critically endangered. The Committee's overall recommendation for listing is based on the highest category met for any criterion.

Based on the Committee's advice, the Minister then decides whether to list the ecological community, and what category to list it under. This decision is based solely on whether the ecological community meets the listing criteria and whether the listing will assist its survival.

## How are the Tuart woodlands and forests being assessed?

The Tuart woodlands and forests were nominated for listing as threatened under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The Committee has prepared a draft description and draft assessment against the listing criteria, which they are now seeking comment on before finalising their Conservation Advice for the Minister. This is due to the Minister by 31 July 2018.

The Conservation Advice:

- describes the woodlands and forests that are covered by the listing;
- outlines the evidence that shows the Tuart woodlands and forests to be threatened; and
- recommends what can be done to minimise further damage and help recover the Tuart woodlands and forests.

The Minister will then decide whether the Tuart woodlands and forests should be listed for national protection, and in which conservation category. The Minister's decision will be due in the second half of 2018.

## How has the Committee defined the Tuart woodlands and forests?

The Draft Conservation Advice defines the ecological community as the various woodlands and forests that are dominated by tuart trees, on the Swan Coastal Plain.

It also recognises that there are differences in quality in the remaining patches of the ecological community. It proposes that only the largest and best condition patches are prioritised for national protection. In some places, buildings and other structures or other land covers such as non-native crops have replaced the natural environment. These are not usually part of the ecological community.

In some areas, Tuart woodlands and forests have been so greatly changed that under the proposed approach, these patches would not be nationally protected. For example, many trees and other plants may have already been removed, or the area been taken over by weeds. While these lower quality areas of the ecological community still play a role in the natural landscape and may be restored, this approach to listing emphasises formal protection for the highest quality patches.

This approach is explained in the sections on 'Condition thresholds and Classes' (section 2.6) and 'Defining a Patch' (section 2.7) in the Draft Conservation Advice. If the Tuart woodlands and forests are listed as threatened, the individual patches that would be nationally protected would not be identified. An indicative map of the areas where the ecological community is likely to be found will be provided. To identify whether a particular patch is protected requires an onground survey to find out whether at that time the patch meets the description of the ecological community and the minimum condition classes.



*Tuart woodland near Kamup*



*Tuart buds and flowers, Guilderton.*



## What listing category is the Committee recommending?



*A range of weeds such as Olive (pictured, near Mylaup), Arum lily, Bridal creeper and introduced grasses affect the integrity of Tuart woodlands and forests.*

The Committee's initial assessment indicates that the Tuart woodlands and forests are eligible to be listed as 'Critically Endangered' on the basis of a widespread loss of integrity from various types of local damage and broad scale landscape change.

They also meet the criteria for 'Endangered' under three other criteria, including a decline in geographic extent of approximately 80 per cent; a restricted distribution, with most remaining patches less than 10 ha in size, making it easily affected by losses from ongoing fragmentation, weed invasion, fire threats and disease; and the loss by at least 50 per cent of the key species, Tuart, which is essential to the structure and function of the ecological community.

## What would a listing mean for landowners, developers and the community?

- How you may be affected if the ecological community is nationally listed depends on:
- The size and quality of the patch or patches of the ecological community you have; and
- what you intend to do with any such patches.

EPBC listing does not change the ownership of land or access to land. It does not change native title or access for traditional cultural practices.

### I want to keep or improve my patches of Tuart woodlands and forests

Listing may open up funding opportunities for you. Land managers who want to retain good quality Tuart woodlands and forests, or intend to restore any patches of the Tuart woodlands and forests on their properties may be eligible for funding to help with their conservation work, through programs such as National Landcare. Many projects specifically target nationally listed threatened ecological communities.

Regional Catchment or National Resource Management (NRM) groups and Local Councils also often offer funding and advice support to help landholders look after threatened ecological communities.



*Rhagodia baccata, near Karnup*

## **I have a new development that involves clearing or damaging Tuart woodlands and forests**



*Blue lace flower (Trachymene coerulea) regenerating after fire in tuart woodland at Yalgorup National Park*

If the ecological community is listed and you are planning an activity that is likely to have a significant impact on it you must seek approval from the Minister for the Environment and Energy.

The major activity that is likely to have a significant impact on the ecological community is permanently clearing large or otherwise important areas of intact or high-quality native vegetation. Some examples of projects likely to do this are: major mining, residential, commercial or other industrial development; building new roads or widening existing roads or tracks (e.g. for electricity transmission lines).

### **I'm just doing usual routine activities to maintain my land**

Activities that were routine, or began before the year 2000 may generally continue without referral/approval under the EPBC Act. Exemptions apply to activities that were either

already legally approved or are ongoing.

Activities that are unlikely to require approval from the Australian Government include:

- unchanged grazing, horticultural or cropping activities
- maintaining existing fences, roads, internal access tracks and firebreaks
- maintaining existing gardens and orchards
- maintaining existing farm dams or water storages
- replacing and maintaining sheds, yards and other existing buildings
- targeted control of weeds and spraying for pests on individual properties
- management of feral pest species
- traditional cultural practices.

In all these cases land managers should aim to avoid damage to patches of the Tuart woodlands and forests.

### **What other protection applies to Tuart woodlands and forests?**

The Western Australian Government and local councils also have laws on vegetation clearance and protecting vegetation communities that may apply.

There also may be other nationally-protected matters that need to be considered, for instance any nationally threatened and migratory species likely to use the patch as habitat. Birds, including black cockatoos, and other mobile species, are known to use Tuart woodlands and forests as feeding and nesting habitat. Other listed species, including mammals and plants, may also occur at some sites.

## How are the Tuart woodlands and forests being taken into account in the Perth and Peel Strategic Assessment?

In 2011 the Western Australian Government began a Strategic Assessment of the Perth and Peel region under the EPBC Act (Perth and Peel Green Growth Plan for 3.5 million). The strategic assessment will determine areas to be protected and where sustainable development can go, permitted types of development and their conditions.

As Tuart woodlands and forests are under assessment for potential EPBC listing, it is being included as a potential Matter of National Environmental Significance in the preparation of the Strategic Assessment.

## Where can I get further information?

- Information on nationally threatened ecological communities and the listing process: [www.environment.gov.au/biodiversity/threatened/communities](http://www.environment.gov.au/biodiversity/threatened/communities)
- Information on the EPBC Act referral and approval process: [www.environment.gov.au/protection/environment-assessments/assessment-and-approval-process](http://www.environment.gov.au/protection/environment-assessments/assessment-and-approval-process)
- The Strategic Assessment of the Perth and Peel regions: [www.environment.gov.au/protection/assessments/strategic/wa-perth-peel](http://www.environment.gov.au/protection/assessments/strategic/wa-perth-peel)
- Australian Government natural resource management initiatives, including National Landcare: [www.nrm.gov.au](http://www.nrm.gov.au)
- The Department's Community Information Unit: by phone on **1800 803 772** (freecall), or email at [ciu@environment.gov.au](mailto:ciu@environment.gov.au)



*Species such as Carnaby's cockatoo (Calyptorhynchus latirostris) benefit from hollows in large old tuart trees* Brian Furby Collection.  
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