



Australian Government

Department of the Environment and Energy

Poplar Box Grassy Woodland on Alluvial Plains: Proposal to list as a nationally protected ecological community



Poplar Box Grassy Woodland on Alluvial Plains - Darling Downs Queensland (Photo credit: Rosemary Purdie)

The Poplar Box Grassy Woodland on Alluvial Plains was nominated for protection as a nationally listed ecological community under Australia's national environment law, the EPBC Act.

The nomination was accepted in 2013 and a scientific assessment is now under way. This assessment culminates in a Conservation Advice and will:

- clarify what kind of vegetation is covered by the proposed listing;
- identify what evidence shows these woodlands to be threatened; and
- recommend what can be done to minimise further damage to the ecological community and help recover degraded patches.

This guide briefly explains the proposed listing and its implications.

The draft scientific assessment, or Conservation Advice, is now available for comment.

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

See back page for details of how to get consultation documents and provide your comments.

Images

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Maps were prepared by ERIN (Environmental Resources Information Network) of the Department of the Environment and Energy.



What is the ecological community?

Grassy woodlands are widely distributed throughout the 'sheep-wheat belt', running from southern Queensland to central Victoria. They are characterised by a species-rich understorey of native tussock grasses, herbs and scattered shrubs, and the dominance of openly spaced trees, such as poplar/bimble box (*Eucalyptus populnea*). The drought tolerant grassy woodlands typically occur on fertile clay or loamy soils on alluvial plains, lower slopes, creek flats and drainage lines. But due to the productive nature of the landscape in which they occur, most have been modified or degraded. Remnant patches that retain mature trees and an intact native grassy groundlayer or a variety of wildflowers have very high conservation value and are 'rare jewels' within the now fragmented rural landscape. These patches not only provide habitat for many flora and fauna species, they provide vital reference areas for restoration of degraded woodlands. Remnant grassy woodlands provide increasingly rare natural connections with rural identity in the productive landscape.

The nominated "Poplar Box Grassy Woodland on Alluvial Plains" covers native grassy eucalypt woodland where poplar/bimble box is the main tree canopy species present. Other tree species may occasionally occur depending on the characteristics of the site, these include *Callitris glaucophylla* (white cypress pine), *Casuarina cristata* (belah), *Eucalyptus coolabah* (coolibah), *Eucalyptus largiflorens* (black box), *Eucalyptus melanophloia* (silver-leaved ironbark), *Eucalyptus microcarpa* (inland grey box) and *Eucalyptus pilligaensis* (narrow-leaved grey box).

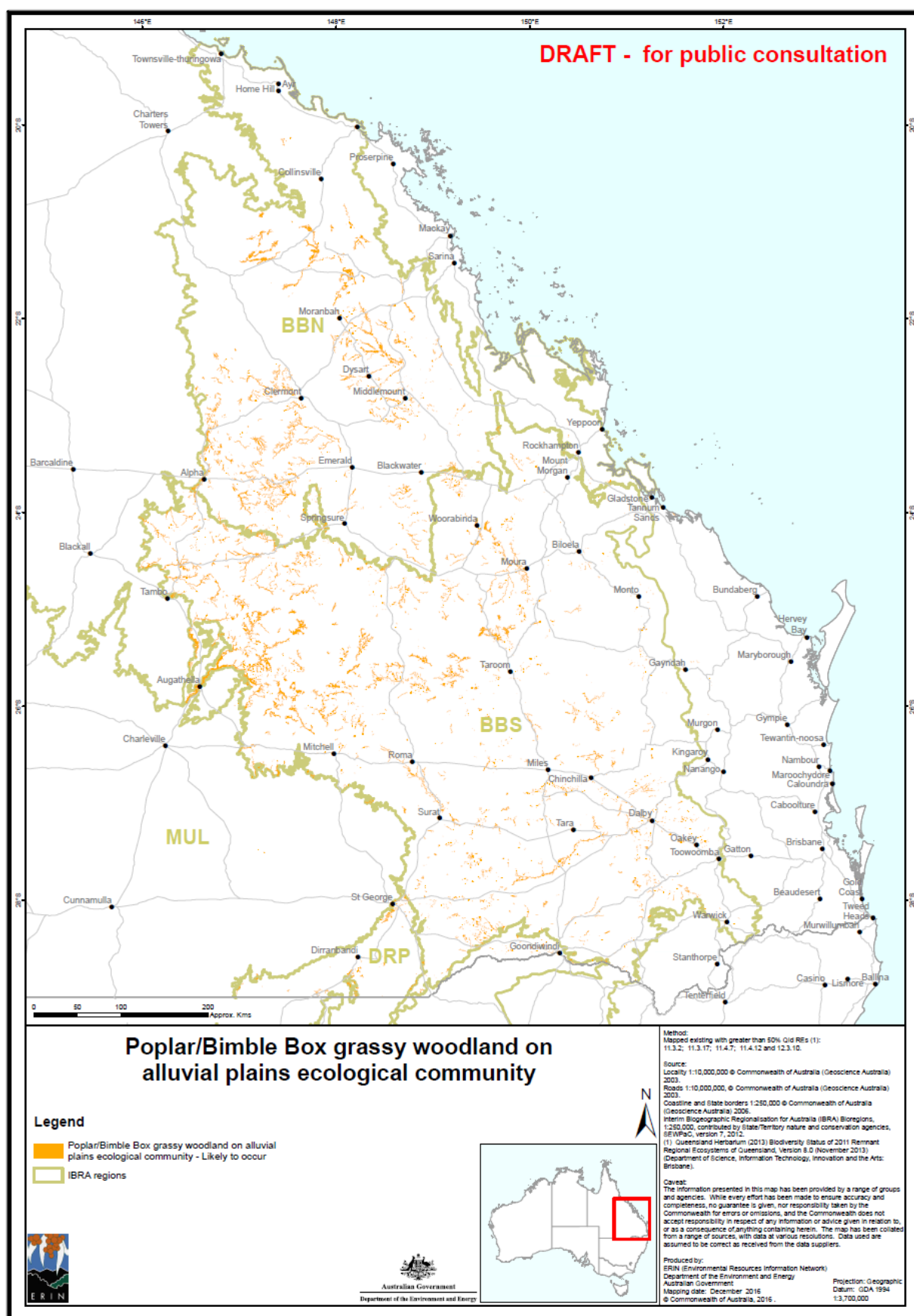
The mostly grassy understorey of the Poplar Box Grassy Woodland can vary in composition depending on local hydrological conditions, rainfall, landscape position, soil type and season. It will also vary depending on fire, grazing and other management regimes. Parts of the ecological community may occasionally have patchy or scattered shrubs, particularly during droughts when hardy plants such as chenopods (saltbush) become more prevalent.

Where is the Poplar Box Grassy Woodland found?

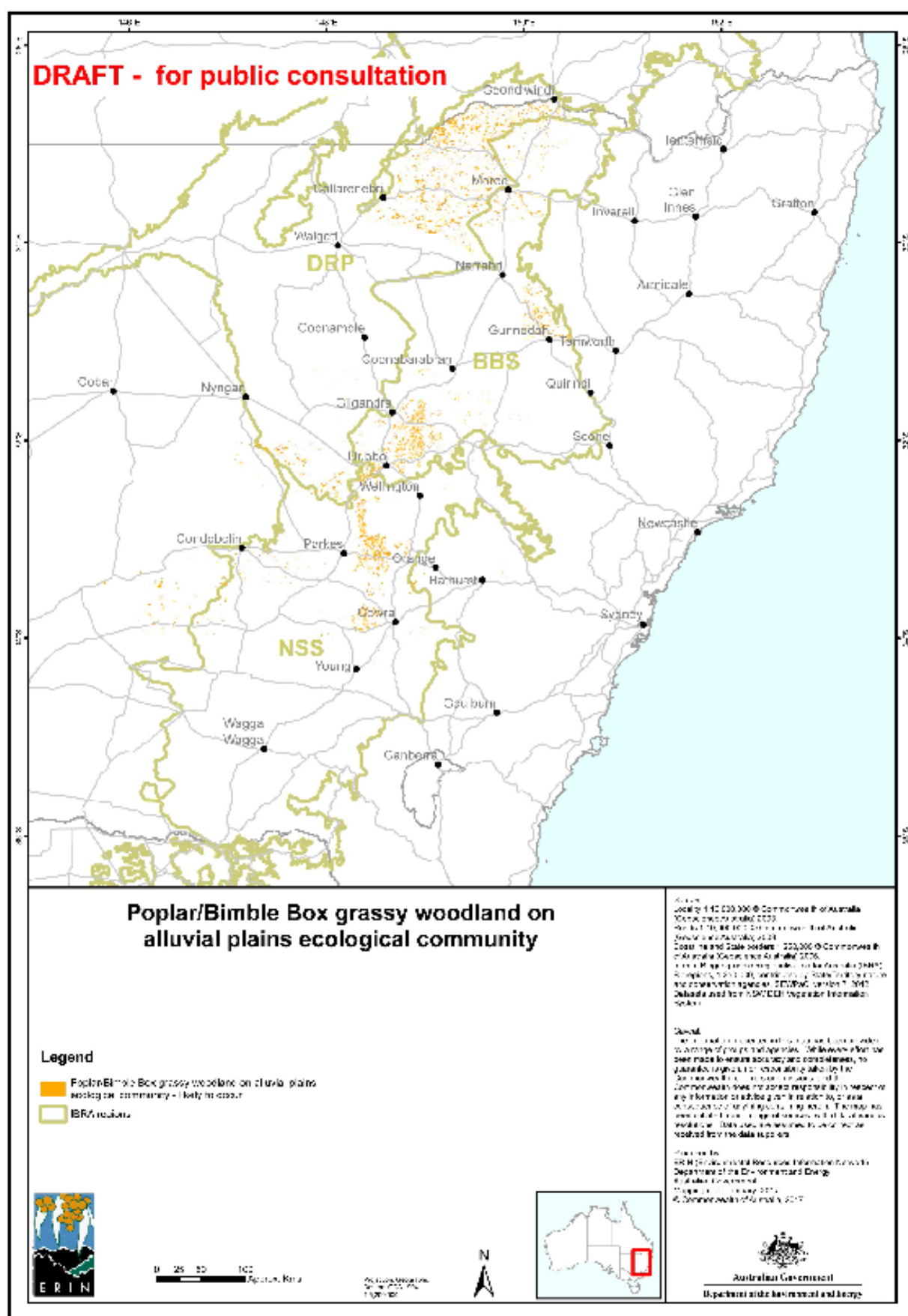
The ecological community mostly now occurs as scattered remnant patches inland of the Great Dividing Range in New South Wales and Queensland, within the Brigalow Belt North, Brigalow Belt South, Cobar Peneplain, Darling Riverine Plains, NSW South Western Slopes and Riverina IBRA bioregions.

The following maps represent the indicative present distribution of the ecological community. Some mapping units represent vegetation mosaics, and are not necessarily entirely the Poplar Box Grassy Woodland. At this resolution and scale many of data points blend together to give an artificial impression of larger intact areas than actually remain. In addition, when the quality of the vegetation is taken into account, the areas of protected ecological community will be fewer and even smaller. Therefore the likely to occur areas on the map overestimate how much of the ecological community remains. Ground-truthing (e.g. an on-ground survey) is required to verify if a particular site meets the required key diagnostic characteristics and minimum condition thresholds to be the described ecological community.

Map 1: Indicative present distribution of Poplar Box Grassy Woodland on Alluvial Plains in Queensland



Map 2: Indicative present distribution of Poplar Box Grassy Woodland on Alluvial Plains in New South Wales



Why is the Poplar Box Grassy Woodland on Alluvial Plains threatened and why is it important to keep protecting it?

The draft conservation advice recommends the Poplar Box Grassy Woodland on Alluvial Plains may be eligible for listing nationally as **Endangered**.

The draft assessment found that:

- It has severely declined with about 24% remaining. Much of this was due to historical clearance for agriculture and pastoral activities, but more recently mining and peri-urban activities have also contributed to its decline.
- The woodland has become severely fragmented since 1750, particularly in its northern extent. This has resulted in fewer, more isolated patches, spaced further apart in the landscape.
- The remaining woodland faces ongoing threats from continued clearing, invasion by weeds and feral animals, inappropriate fire regimes, grazing, dieback and potential climate change impacts.
- There are many reasons why it's important to keep what's left of this woodland, and to recover or expand remnants. Native woodlands and forests provide benefits to the environment, to land productivity and to people.
- The remaining woodland also provides vital habitat for many plants and animals. They include some that are now threatened, such as the swift parrot and iconic species such as koalas, bush stone-curlew and Australian bustard.

- Keeping woodland vegetation intact helps to minimise serious erosion and water quality problems. It helps prevent: the loss of valuable topsoil from farmlands; sediment to rivers and streams; and saline soil issues, such as salt scalds.

- Woodlands also supply much needed cover to help stabilise and moderate the regional climate, which has become drier and more hostile in some areas due to the loss of resilient perennial cover. Remnant vegetation also supports soil formation, nutrient exchange and regulates water flow through the landscape.

- Woodland birds and bats help to control pest insects that attack nearby crops or plantations. Native insects living in woodlands also play an important role in the pollination of native and crop plants, and control of pests.

- Supportive practices have helped to retain many woodland remnants. For instance, some remnants are intentionally set aside by farmers because they occur near watercourses, or serve as shelter for stock and windbreaks for croplands and pastures. These patches are important for conservation because they still provide habitat for native species, and corridors for the movement of native wildlife.

Listing is intended to further support farmers and other land managers who want to continue managing patches of woodland that still remain in good quality, for future benefits.

What state-identified woodlands may be protected as the Poplar Box Grassy Woodland on Alluvial Plains?

Several state vegetation mapping units have been identified to contain the Poplar Box Grassy Woodland:

In New South Wales, the four main units are:

VCA 56 - Poplar Box - Belah woodland on clay-loam soils of the alluvial plains of north-central NSW;

VCA 87 - Poplar Box - Coolabah floodplain woodland on light clay soil mainly in the Darling Riverine Plains Bioregion;

VCA 101 - Poplar Box grassy woodland on alluvial heavy clay soils in the Brigalow Belt South Bioregion;

VCA 244 - Poplar Box grassy/shrubby woodland on alluvial clay-loam soils mainly in the temperate (hot summer) climate zone of central NSW (wheatbelt); and

Stands of Poplar Box Grassy Woodlands may also occur within VCA 88 - Pilliga Box - White Cypress Pine - Buloke shrubby woodland in the Brigalow Belt South Bioregion.

In Queensland, the main units are:

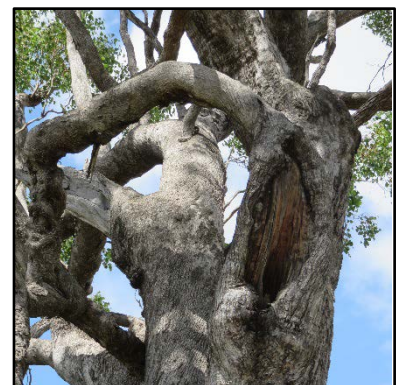
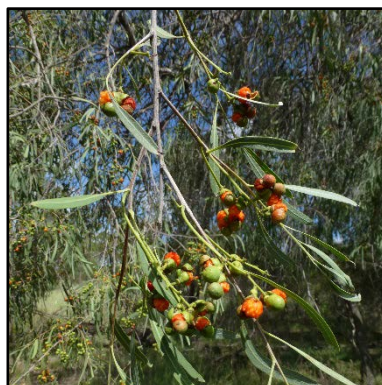
RE 11.3.2 - *Eucalyptus populnea* woodland on alluvial plains;

RE 11.3.17 - *Eucalyptus populnea* woodland with *Acacia harpophylla* and/or *Casuarina cristata* on alluvial plains;

RE 11.4.7 - *Eucalyptus populnea* with *Acacia harpophylla* and/or *Casuarina cristata* open forest to woodland on Cainozoic clay plains;

RE 11.4.12 - *Eucalyptus populnea* woodland on Cainozoic clay plains; and

RE 12.3.10 - *Eucalyptus populnea* +/- *E. tereticornis* grassy woodland/tall woodland +/- patches of *Acacia harpophylla* and *Melaleuca bracteata*.



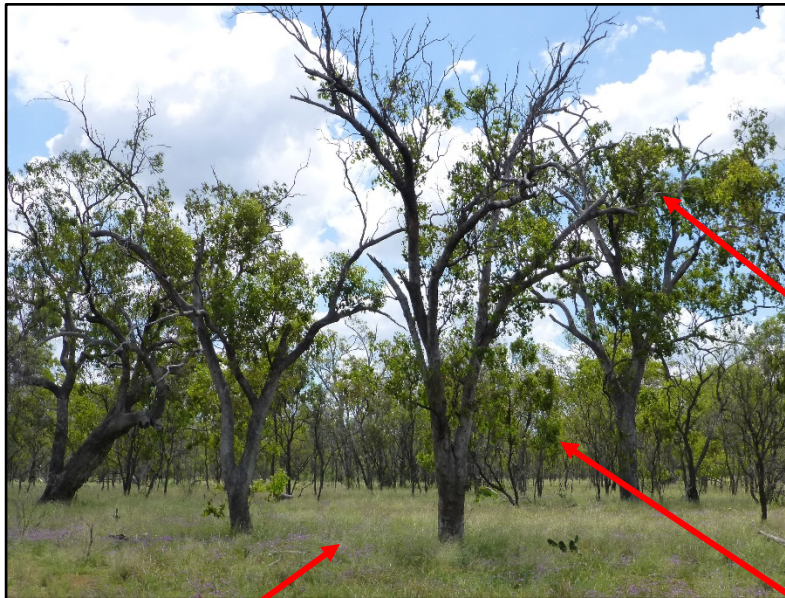
How can I tell if a patch of the Poplar Box Grassy Woodland on Alluvial Plains is present and in reasonably intact condition?

National protection is proposed to only apply to patches of the Poplar Box Grassy Woodland where poplar/bimble box is the main canopy tree species present and that retain a reasonably intact understorey or other conservation values.

These are patches that are of reasonable size (at least 1 ha) and:

- retain mostly native ground layer vegetation cover; and/or
- have critical habitat features, such as large trees with hollows; and/or
- contain smaller trees, saplings or seedlings which are indicative of recruitment (reproduction)

Good quality patches contain:



Tree canopy is dominated to co-dominated by poplar/bimble box.

The tree canopy should have a solid crown cover of 10% or more.

A reasonably intact understorey. Although some weeds may be present, most ($\geq 50\%$) of the grassy ground layer is of native grasses and other herbs. Some shrubs may also occur ($< 20\%$ in the mid layer).

Both mature trees and regenerating canopy (trees) and 20 or more native plant species in the ground layer per hectare should be present IF the ground layer has lower native species cover ($< 50\%$). These are important features that provide hollows for nesting OR a range of tree ages which show evidence that poplar/bimble box is regenerating and likely to be present over the medium to long-term future.

How big should a patch of the Poplar Box Grassy Woodland be?

Minimum patch size thresholds apply to the Poplar Box Grassy Woodland.

A minimum patch size of 1 ha (one hectare = 2.5 acres) applies where:

- The patch has little or no perennial weeds and a diverse native understorey. An extensive native ground layer remains, with 90% or more of the perennial vegetation cover being native species and with 30 or more native plant species in the ground layer per ha.

A minimum patch size of 5 hectares (12.4 acres) or more applies where:

- The patch retains mature canopy trees [10 trees per ha that either are large (30 cm or more in diameter at breast height) and/or have developed hollows] AND there is evidence of periodic recruitment (smaller trees, saplings or seedlings) AND 20 or more native plant species per ha in the ground layer;

OR

- The patch has 50% or more perennial native vegetation cover in the ground layer AND moderate diversity of native species in the ground layer (20 or more native plant species per ha);

OR

- The patch has 50% or more perennial native vegetation cover in the ground layer AND it retains mature canopy trees [10 trees per ha that either are large (30 cm or more in diameter at breast height) and/or have developed hollows].

Patches of Poplar Box Grassy Woodland on Alluvial Plains that are too small or degraded don't need to be referred under national environment law.

This includes isolated paddock trees, grassy areas where the canopy trees have been removed and patches of trees where the ground layer has been largely or entirely replaced by crop, pasture and weed species. This would apply to many patches on farms that serve as shelterbelts and windbreaks, or very narrow road verges, that are usually too small and degraded to require referral as a significant impact upon the ecological community.



How will national protection affect developers and land managers?

National protection only applies to **new** actions likely to cause **significant** damage to patches of this woodland that remain in good condition. How you may be affected if the ecological community is nationally listed depends on:

- whether you have a large patch of good quality Poplar Box Grassy Woodland on your land; and
- what you intend to do with any such patches.

I want to keep my patches of woodland or don't plan to do anything to them.

If there are no new actions, then the listing won't affect you. Land managers who want to retain good quality woodland, or intend to restore any woodland on their properties may apply for funding to help with their conservation.

Relevant national environmental funding programmes are under way and currently include Landcare and 20 Million Trees and the Emissions Reduction Fund. They are designed to help people undertake environmental works across Australia. Regional Catchment or National Resource Management (NRM) groups also offer funding, advice and support to help landholders look after their landscape and remnant vegetation.

Many projects specifically target and support nationally listed threatened species and ecological communities that occur on properties.

I'm just doing usual routine activities to maintain my land, business, etc.

There are either exemptions in the national environment law that would apply here and most of these activities are unlikely to have a significant impact.

Routine and ongoing activities by farmers and business are rarely impacted by national listings. This has been the case for ecological communities that have been listed in this and other agricultural areas of Australia, including the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland, listed in 2006, the Weeping Myall Woodlands, listed in 2009, the Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia, listed in 2010, the Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions, listed in 2011 and the Eucalypt Woodlands of the Western Australian Wheatbelt, listed in 2015. There are exemptions for:

- activities that are already legally approved. For instance, existing cropping or pastoral activities, or developments that have already been approved, AND
- long-term, continuing or routine activities, such as normal farm practices, property maintenance, weed or pest control, or usual roadside maintenance activities.

I have a new development that might involve clearing this woodland.

The main recommendation would be that you seek advice to determine if approval is required for any new activity that could significantly impact upon larger, good quality patches of the woodland. Referrals usually apply to major projects, for instance new mines or mine expansions, major new road works, new housing and industrial developments, or proposals to convert large areas of intact woodland for plantations or cropping.

- Check you have the right type of woodland present and if it's in good enough condition to be referred [see previous pages for some guidance or seek help from local NRM staff].

- Plan to avoid or minimise impacts to woodland patches, especially the best quality patches.
- Talk with the Australian Government Environment Department first to check if the action may significantly impact any listed ecological communities or species and needs to be referred for national approval.

Note that your current socio-economic circumstances plus any past environmental history can be taken into account when approving any action that has to be referred under the EPBC Act.

The NSW and Queensland Governments also have laws on vegetation clearance and protecting State-listed vegetation communities that may apply to certain activities. In many cases, similar information used for state clearance assessment may be used for referral under national environment law.

These clearance and protection assessments operate in NSW either through the *Local Land Services Amendment Act 2016* and *Native Vegetation Regulation 2013*. In Queensland, vegetation clearance and protection is regulated under the *Vegetation Management Act 1999* and the *Sustainable Planning Act 2009*. In specific circumstances an Area Management Plan may apply.

There also may be other nationally-protected matters that need to be considered, for instance any nationally threatened species likely to use the patch as habitat. Swift and superb parrots, in particular, are known to use box woodlands such as the ecological community as feeding habitat. Koalas, quolls or other listed species may also occur at some sites.

Where do I get documents about the Poplar Box Grassy Woodland, and how to comment on the proposal?

The draft Conservation Advice and other information about how to make a submission, including questions to guide your responses, are on the website of the Department of Environment and Energy:

<http://www.environment.gov.au/biodiversity/threatened/nominations/comment>

Where do I find information about the national environmental law and Australian Government funding programmes?

Advice about Australian Government environmental funding programs (e.g. National Landcare, 20 Million Trees, Emissions Reduction Fund) can be found online at:

<http://www.environment.gov.au/about-us/grants-funding>

Information about the EPBC Act referral and assessment process is available on:

<http://www.environment.gov.au/protection/environment-assessments>

If you have any questions, then please contact:

The Federal Department of the Environment and Energy

Tel: 1800 803 772 or email ciu@environment.gov.au

OR

contacts given with the documents open for consultation at:

<http://www.environment.gov.au/biodiversity/threatened/nominations/comment>