

Attachment E: Native vegetation assessment against EPBC Act box gum woodland condition classes and thresholds

Each vegetation zone identified as PCT 3373 Goulburn Tableland Box-Gum Grassy Forest was assessed against key diagnostic criteria identified in the BGW Conservation Advice (TSSC, 2023) and replicated in **Table 1**, to determine whether patches meet the listing definition for the EPBC Act listed BGW.

Patches that <u>did not</u> meet the key diagnostic criteria are considered not to represent BGW. Patches that <u>did</u> meet the key diagnostic criteria are considered to represent BGW and were assessed using the minimum condition thresholds described in the BGW Conservation Advice and replicated in **Table 2**.

Minimum condition thresholds are used to identify patches of BGW that are the most functional, relatively natural and in comparatively good condition. They are designed to identify patches of BGW that retain sufficient conservation values to be considered an MNES. These patches then help to prioritise legal protection for the ecological community. Any patch meeting the condition thresholds for Class A, B, or C (as defined in the BGW Conservation Advice) is considered an MNES, Class A patches being of the highest conservation value, and priority for protection. Patches that link remnants in the landscape, occur in depauperate areas, contain rare, declining, or threatened species and contribute to representation across the entire range of BGW, are important to the viability of the ecological community.

Table 1 Assessment of PCT 3373 vegetation zones against BGW key diagnostic characteristics Assessment (from the BGW Conservation Advice (TSSC, 2023))

| Key diagnostic characteristics | PCT 3373 (woodland, low quality) | PCT 3373 (derived native grassland, mod/high quality) | PCT 3373 (derived native grassland, low quality) |
|--|--|---|---|
| The ecological community occurs in the following bioregions (DCCEEW, 2023): Brigalow Belt South, Murray Darling Depression, Nandewar, New England Tableland, NSW North Coast, NSW South Western Slopes, Riverina, South Eastern Queensland, South East Corner, South East Coastal Plain, South Eastern Highlands, Southern Volcanic Plain, Sydney Basin and Victorian Midlands (DEH, 2006) (NSW DECCW, 2011) (DCCEEW, 2024). | Yes | Yes | Yes |
| It has, or previously had, an overstorey dominated or co-dominated by: Eucalyptus albens (white box) and/or E. melliodora (yellow box) and/or E. blakelyi (Blakely's red gum) (applicable across the entire range of the ecological community); or, in the Nandewar bioregion (DCCEEW, 2023), any of the above three species and/or E. microcarpa (western grey box) and/or E. moluccana (grey box, coastal grey box). | Yes | Yes | Yes |
| It has a predominantly native ground layer. | Yes | Yes | No |



| Key diagnostic characteristics | PCT 3373 (woodland, low quality) | PCT 3373 (derived native grassland, mod/high quality) | PCT 3373 (derived native grassland, low quality) |
|---|--|---|---|
| Tussock grasses are conspicuous in the ground layer (except in some situations, such as under dense groves of shrubs or regenerating trees), usually with several native species from some the following genera: Austrostipa, Bothriochloa, Chloris, Cymbopogon, Dichanthium, Microlaena, Poa, Themeda, Rytidosperma or Sorghum. | Yes | Yes | No |
| Amongst the grass tussocks and sometimes in swathes, a range of broad-leaved forbs and petaloid monocots (e.g. lilies sens. lat.) may be a major component of the plant diversity. | Yes | Yes | No (forbs make up 0.002% cover) |
| While shrubs may be dominant locally within areas of the ecological community, areas of native vegetation with a more continuous shrub layer, in which the average shrub cover of the whole patch is greater than 30%, is considered to be a shrubby woodland and so is not part of the listed ecological community. In assessing this, the effects of disturbance need to be considered, for example where heavy grazing may result in high densities of shrubs during a recovery phase. | No | No | No |
| EPBC Act White Box – Yellow Box – Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands | Yes | Yes | No |

Table 2 Assessment of PCT 3373 vegetation zones against BGW condition classes and thresholds (from the BGW Conservation Advice (TSSC, 2023))

| Condition class | Patch size and features present | PCT 3373 (woodland, low quality) | PCT 3373 (derived native grassland, mod/high quality) | PCT 3373 (derived native grassland, low quality) |
|--|--|--|---|---|
| Class A | Patch size 0.1 ha (1,000 m ²) or larger? | Yes | Yes | Yes |
| Good quality understory and mature overstory both present | The ground layer is predominantly native (at least 50% of the perennial vegetation cover in the ground layer is made up of native species)? | Yes | Yes | No |
| | The understorey contains at least 12 native, non- grass species (such as forbs, shrubs, ferns, and sedges) and that least one species should be recognised as 'important' (e.g., grazing-sensitive, regionally significant, listed threatened or uncommon species)? | Yes | Yes | No |
| | The patch contains 10 or more mature trees per hectare consistent with the key diagnostics for the ecological community (mature trees are those with a circumference of at least 125 cm measured at a height of 130 cm above the ground (equivalent to diameter of 40 cm)? | No | No | No |
| Class B | Patch size 0.1 ha (1,000 m ²) or larger? | Yes | Yes | Yes |
| | The ground layer is predominantly native? | Yes | Yes | No |



| Condition class | Patch size and features present | PCT 3373 (woodland, low quality) | PCT 3373 (derived native grassland, mod/high quality) | PCT 3373 (derived native grassland, low quality) |
|---|---|--|---|---|
| Good quality understory present. Characteristic trees may be absent. | The understorey contains at least 12 native, nongrass species (such as forbs, shrubs, ferns and sedges) and that least one species should be recognised as 'important' (e.g. grazing-sensitive, regionally significant, listed threatened or uncommon species)? | Yes | Yes | No |
| Class C Allows for a lower divert in the understory in areas where there is regeneration and/or tree density may be relatively dense. | Patch size 2 ha (20,000 m²) or larger? | No | No | No |
| | The ground layer is predominantly native? | Yes | Yes | No |
| | The patch contains 20 or more mature trees per hectare? and/or | No | No | No |
| | The patch contains natural regeneration of dominant overstorey eucalypts (the patch contains eucalyptus saplings of the dominant species that are 5 cm diameter or greater at breast height)? | Yes | No | No |
| EPBC Act White Box – Yellow Box – Blakely's Red Gum Grassy Woodlands and Derived Native Grasslands | | Yes – Class B | Yes – Class B | No |



References

- DCCEEW. (2023, July 14). *Australia's bioregions (IBRA)*. Retrieved from https://www.dcceew.gov.au/environment/land/nrs/science/ibra#ibra
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