



Vegetation Quality Assessment for 42 Bury Street, Euroa 3666

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1 Introduction

A Vegetation Quality Assessment (VQA) was requested by Planography Pty Ltd. for the proposed subdivision at 42 Bury Street, Euroa (henceforth the 'study site').

A thirteen residential lot subdivision is planned for the study site. All the proposed lots are less than 0.4 hectares in size; with the largest lot size being 790 square metres (lot 11) and the smallest lot being 462 square metres (lot 6). The proposed development plan is given as appendix 1.

The total area of the study is approximately 0.8851 hectares.

A VQA had to be conducted to determine the potential impact that the subdivision would have on: any native vegetation growing on the property, the surrounding environs and if an offset is required. In addition to a vegetation quality survey, any native fauna seen on the property was recorded.

Thus, the purpose of the VQA was to assess the quality of the vegetation on the study site in accordance with relevant planning and legislative requirements and the Department of Environment, Land, Water and Planning (DELWP) guidelines.

1.1 Site Description

The study site is located within the Euroa township. The site is mainly a cleared paddock, with three scattered *Eucalyptus* trees and a single-storey dwelling and backyard located in the south-west corner of the site. In addition, there is a gravel accessway adjacent to the dwelling. Gravel was found throughout sections of the site.

Topographically the study site is flat, with a shallow drainage line to the western side of the property.

There are a number of exotic trees in the backyard of the house, along a fence adjacent to Campbell Street. At some stage, the paddock appears to have been grazed by livestock.



1.1.1 Bioregion and Ecological Vegetation Class (EVC)

The study site lies within the Victorian Riverina bioregion.

The historical, pre-1750, Ecological Vegetation Class (EVC) mapped as once occurring on the study site is EVC 55_61: Plains Grassy Woodland. The EVC has a bioregional conservation status of being endangered (DELWP Naturekit).

As of 2005 only a very small area of the study site is mapped as having EVC 55_61 occurring on it.

Plains Grassy Woodland (EVC 55_61) is described as, "an open eucalypt woodland to 15 m tall. Occupies well drained, fertile soils on flat or gently undulating plains at low elevations in areas with >600 mm annual rainfall. The understorey consists of a few sparse shrubs over a species – rich grassy and herbaceous ground layer characterised by summer – growing grasses" (DSE 2004a).

The EVCs and the natural ecological community have largely been removed. All that remains are three scattered remnant *Eucalyptus* trees and some *Juncus* and *Carex* in the drainage-line.

Ecological Communities

The EPBC Act (1999) significant ecological communities (or matters of national environmental significance [MNES]) suggested to occur in the immediate area:

- endangered Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions;
- endangered Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia;
- critically endangered Natural Grasslands of the Murray Valley Plains;
- critically endangered White box yellow box Blakely's red gum grassy woodlands.

The listed ecological communities do not exist at the study site.



1.2 General Planning & Legislation

This VQA adheres to the relevant local, state and federal planning regulations and legislation.

Local government area (Council): Strathbogie

Catchment Management Authority (CMA): Goulburn Broken CMA

Zoning

General Residential Zone – Schedule 1: Purpose of this zone is to:

Is for the construction or extension of residential premises. There are no specified neighbourhood character objectives (Strathbogie Planning Scheme).

Overlays

Land Subject to Inundation Overlay Schedule.

Planning Clause 52.17

Also applicable is Planning Clause 52.17 which covers Native Vegetation – Victorian species, Under Clause 52.17 there is the need to:

1. Avoid the removal, destruction or lopping of native vegetation.

2. Minimise impacts from the removal, destruction or lopping of native vegetation that cannot be avoided.

3. Provide an offset to compensate for the biodiversity impact if a permit is granted to remove, destroy or lop native vegetation.

A number of exemptions exist under the clause. In some instances, native vegetation can removed, destroyed or lopped to *minimum extent necessary*.

Planted native vegetation can also be removed without the requirement of a planning permit or an offset: "Native vegetation that is to be removed, destroyed or lopped that was either planted or grown as a result of direct seeding" (Planning Clause 52.17, DELWP 2017 b).

Re-growth native vegetation that is less than 10 years old growing on previously cleared land can be cleared without a permit (though there may be a consequential loss and the requirement of an offset) (Planning Clause 52.17).

Under Planning Clause 52.17 all native vegetation that is not indigenous to Victoria are considered environmental weeds. In addition, naturally occurring non-indigenous native

vegetation are considered weeds (DSE 2004). For example, the native tree *Pittosporum undulatum* (Sweet Pittosporum), indigenous to the forests of East Gippsland and perhaps West Gippsland (Flora Victoria), is a significant environmental weed outside of its natural range. Thus, non-indigenous native vegetation may be cleared without the need of a permit.

For further details refer to Planning Clause 52.17-7 table of exemptions.

Legislation Pertinent to the Study

Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth Environment Protection and Biodiversity Conservation Act (1999) (EPBC Act) applies to sites where proposed developments or projects may have a significant impact on 'matters of national environmental significance' (MNES). There are currently seven MNES:

- World Heritage Properties
- National Heritage Place
- nationally listed threatened species and ecological communities
- listed migratory species
- Ramsar wetlands of international importance
- Commonwealth marine areas
- nuclear actions (including uranium mining)

Under the EPBC Act (1999), a proponent must refer proposed actions that may have a significant impact on matters on national environmental significance to the Australian Government Environment Minister (or delegate).

The Flora and Fauna Guarantee Act 1988

The Flora and Fauna Guarantee Act 1988 (FFG Act) was legislated to ensure the continued survival of all Victorian species of flora and fauna and all Victorian communities of plants and animals. The FFG Act provides a number of ways to assist in achieving its objectives, including:

• listing of threatened taxa, communities of flora or fauna and potentially threatening processes, and creation of Action Statements and Management Plans for all listed taxa communities of flora or fauna and processes

• declaration of a Critical Habitat if the habitat is critical for the survival of a species or a community of flora or fauna, if listed as Critical Habitat, the Minister for Environment may then make an Interim Conservation Order (ICO) to conserve the Critical Habitat (NB: no Critical Habitat has been declared in the State)

• protection of flora and fauna through listing offences such as penalties relating to not following an ICO and taking, trading in, keeping, moving or processing protected flora without a licence (NB: this does not apply to taking protected flora from private land (other than land which is part of the critical habitat for the flora) except for taking tree-ferns, grass, trees or sphagnum moss for the purpose of sale)

• the Department of Environment, Land, Water and Planning (DELWP) is the referral authority for matters under the FFG Act.

Environment and Planning Act 1987

The Act sets out procedures for preparing and amending the Victoria Planning Provisions and planning schemes. It is an enabling legislation and does not specifically define the scope of, or how planning should be done in detailed rules. The functions of the Act are to

- Set broad objectives for planning in Victoria.
- Set the main rules and principles for how the Victorian planning system works.
- Set up the key planning procedures and legal instruments in the Victorian planning system.
- Define the roles of responsibilities of the Minister, councils, government departments, the community and other stakeholders in the planning system.

Planning Clause 52.17, 52.16 fall under this Act.

Wildlife Protection Act 1975 & Associated Regulations

All native wildlife in Victoria is protected by the Wildlife Protection Act (1975) and subsequent regulations.

Under the Act a person must not hunt, take or destroy endangered, notable or protected wildlife; this includes all native vertebrate animals, all kinds of deer, non-indigenous quail, pheasants, and partridges, and all terrestrial invertebrate animals listed under the *Flora and Fauna Guarantee Act* (1988). The Wildlife Regulations 2013 provide further detail relating to the Act, including that a person not to damage, disturb or destroy any wildlife habitat (s42). Although, this does not apply if the person is authorised to do so under any other Act such as the *Planning and Environment Act* (1987).

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Catchment & Land Protection Act 1994

Under section 20 of the CaLP Act, all landowners, including the Crown, public authorities and licensees of Crown lands, must, in relation to their land, take all reasonable steps to (Agriculture Victoria):

- avoid causing or contributing to land degradation which causes or may cause damage to land of another landowner;
- eradicate regionally prohibited weeds;
- prevent the growth and spread of regionally controlled weeds on their land;
- prevent the spread of, and as far as possible, eradicate established pest animals.

2 Methodology

Survey conducted on 10/02/2022

The vegetation survey was carried out referring to the *Vegetation Quality Assessment Manual* – guidelines for applying the habitat hectares scoring method (Version 1.3 DSE, DELWP 2004). In addition, Kent and Coker (1995) were utilised. Kent and Coker (1995) provide the random walk methodology to survey the ground covering vegetation of the study site, whilst adhering to the Vegetation Quality Assessment Manual (DSE 2004 a) and other DELWP guidelines.

The vegetation within the study site was initially surveyed to determine what was exotic, what was naturally occurring (not planted) or planted native vegetation, and whether any EVCs were present or significant flora.

By definition, only indigenous canopy trees can be considered either scattered or a patch of native vegetation. A patch of native vegetation occurs when three or more canopy trees outer driplines touches the dripline of at least one tree, thus, forming a continuous patch of native vegetation. Additionally, a patch of native vegetation can be defined as an area where at least 25 percent of total perennial plant understorey cover is native (DELWP 2017a).

Any patches of native vegetation were marked out by walking around the edge of the extent of the understorey vegetation or around the edge of the canopy of trees (DELWP 2018). If present, patches of indigenous native vegetation were measured and marked out by GPS, whilst walking around the outer canopy drip-line of the trees or the edge of the area of understorey vegetation. Scattered or patches of indigenous understorey were identified and, if present, large old canopy trees were recorded.

Native trees that were planted are not considered in the assessment. As aforementioned, under Planning Clause 52.17 planted native vegetation may be removed without the need of a permit or offset (Planning Clause 52.17, DELWP 2017 b).

If necessary the diameter at breast height (trunk circumference) was measured for indigenous *Eucalyptus* canopy trees. The diameter at breast height (DBH) of a tree trunk is measured at 1.3 metres above ground level; the circumference at breast height (CBH) of a tree trunk is also measured at 1.3 metres above ground level.

The extent and final habitat hectare results of the Vegetation Quality Assessment (VQA) of patches of native vegetation are incorporated into a shape file. Also included in the shape file were numbers of large and small scattered canopy size trees and including the assigned extents of coverage given to these trees. The incorporated VQA data on the shape file is sent to DELWP to generate a Native Vegetation Removal (NVR) report. If the extent of native vegetation is less than 0.5 hectares in size and is not in a detailed location category then the Native Vegetation Information Management (NVIM) tool is used to generate a NVR report.

Any indigenous native vegetation present are identified on-site and through the taking of samples, and using relevant keys, texts and the *Flora of Victoria*.

Large scattered indigenous canopy trees (or the removal of a canopy tree from a patch of

native vegetation) are assigned an area value of 0.0707 hectares and smaller indigenous canopy trees have an area value of 0.0314 hectares per tree (DELWP-ENSym NVR tool). The large tree (*Eucalyptus* spp.) benchmark is DBH 80 centimetres (cm) for EVC 55_61 Plains Grassy Woodland Victorian Riverina bioregion.

The locations of native vegetation for Victoria are as follows (DELWP location categories – DELWP 2017 a):

and the second	Location category		
Extent of native vegetation	Location 1	Location 2	Location 3
Less than 0.5 hectares and not including any large trees	Basic	Intermediate	Detailed
Less than 0.5 hectares and including one or more large trees	Intermediate	Intermediate	Detailed
0.5 hectares or more	Detailed	Detailed	Detailed

Location 1 – includes all remaining locations in Victoria. These are low-risk areas of native vegetation loss having an impact upon the habitat for rare or threatened species (DELWP 2017 a).

Location 2 – includes locations that are mapped as endangered EVCs and or sensitive wetlands and coastal areas are not included in Location 3.

Location 3 native vegetation – includes locations where the removal of less than 0.5 hectares of native vegetation could have a significant impact on habitat for a rare or threatened species.

The study site is within a **location 1 – Intermediate** category, as one large tree is going to be removed.

2.1 Significant Fauna

Threatened species records were generated using the Victorian Biodiversity Atlas (VBA), which provides species lists within a 5 km radius of the study site. This list is cross-referenced with DELWP Flora and Fauna Guarantee Act (1988) lists and EPBC Act (1999) threatened species status. In addition, online sources such as Birdlife Australia and Museums Victoria are utilised. With this information, it is determined whether the site provides suitable habitat for any threatened or listed native fauna.

A general fauna survey is conducted in conjunction with the vegetation quality assessment. The search effort is conducted for a minimum of 2 person-hours (or longer), during this time the study site is slowly traversed, any species directly sighted or heard are recorded. Trees bearing hollows and burrows are recorded, animal scats and footprints are also noted.

Birds are identified on site with binoculars and listening for their species-specific vocalisations. Simpson and Day (1999) 'Field Guide to the Birds of Australia 6th edn' is

referred to on-site to make identifications, in addition, a desktop search is conducted utilising sources such as Birdlife Australia to confirm identifications.

Records of endangered or threatened fauna species within a 5 km radius of the site are given in Appendix 2.1

2.2 Limitations

Limitations were GPS drift and the estimating (subjective) process of the VQA (Habitat Hectares) methodology (DSE [DELWP] 2004). In addition, there was lack of flowering material due to the very dry conditions and plants in some instances having set seed. Optimal survey time is in the spring.



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3 Results & Discussion

7 native and 21 exotic species were recorded during the survey.

Plains Grassy Woodlands has been virtually removed from the study site – the ground layer has been mostly removed and heavily degraded. The drainage line contained small patches of *Juncus* spp. and *Carex* spp. However, the drainage line also had a strong presence of exotic species, particularly Umbrella Sedge *Cyperus erygrostis* and Dock *Rumex* spp. In other sections of the drainage line *Juncus flavidus* is scattered and would not provide 25 percent perennial plant coverage.

Though, generally the study site was found to be heavily weedy, having been invaded by agricultural exotic species and undergone grazing and other land altering processes in the past. Within the paddock area *very* isolated and scattered perennial native species persist amongst the weedy ground covering – the exotic species typically outcompete indigenous plants.

In addition, the canopy layer has been mostly removed; within the study site only three (3) scattered *Eucalyptus blakeyi* exist, one being large.

Apart from the three *Eucalyptus blakelyi* trees, there is a group of six exotic *Schinus molle* trees and one *Fraxinus angustifolia* tree within the paddock close to the Campbell Street fenceline. The backyard of the house at 42 Bury Street has exotic trees and shrubs growing in it. Exotics can be removed without the need of a permit or offset.

Native Flora Recorded		
Scientific Name	Common Name	Notes
Carex tereticaulis	Poong'ort	Within drainage line: patch 1.
Chloris truncata	Windmill-grass	Isolated and scattered
Eucalyptus blakelyi	Blakely's red gum	3 scattered
Euphorbia dallachyana	Mat spurge	Isolated and scattered
Juncus flavidus	Gold Rush	Within drainage line: patches 1 & 2.
Portulaca oleracea*	Pigweed	*Establishment means uncertain; doubtfully native in Victoria (Vicflora).
Rytidosperma species	Wallaby grass	Isolated and scattered

3.1 Compromised Native Vegetation

Approximately 0.142 hectares of native vegetation, inclusive of one (1) large *Eucalyptus blakelyi*, are assumed lost to the proposed subdivision.

As all the proposed lots are less the 0.4 hectares in size all native vegetation within the study site is assumed a consequential loss and requires an offset at the time of subdivision: 'Any native vegetation remaining on small lots has a reduced environmental value and therefore is assumed lost' (DELWP 2017, p. 22; DELWP 2018).

Scattered Trees

The study site contained three (3) *Eucalyptus blakelyi* trees. These trees areassumed lost to the proposed subdivision.

No.	Species	DBH	TRZ	Notes
1	Eucalyptus blakelyi	52	6.24	Small
2	Eucalyptus blakelyi	134	16.08	Large
3	Eucalyptus blakelyi	70	8.4	Small

Patch 1	Maximum Score Possible	Score for study site patch of
		native vegetation
Large Trees	10	0
Tree Canopy Cover	5	0
Lack of Weeds	15	2
Understorey	25	5
Recruitment	10	0
Organic Litter	5	2
Logs	5	0
EVC Standardiser	1x	1x
Standardised site Condition Score	75	7
Patch Size	10	1
Neighbourhood	10	0
Distance to Core Area	5	1
Final Habitat Score (out of a	100	9
possible score of 100)		
Final Score divided by a 100	1	0.9
Area of patch (hectares)		0.005 ha

Patches of Native Perennial Understorey

Patch 1 is located in the drainage line. Native species within this patch provide 25 percent perennial plant cover of *Juncus flavidus* and *Carex tereticaulis*.

Weed coverage is estimated at 80%. The weeds within the drainage line would outcompete many native species and prevent their further establishment.

Patch 2	Maximum Score Possible	Score for study site patch of
		native vegetation
Large Trees	10	0
Tree Canopy Cover	5	0
Lack of Weeds	15	2
Understorey	25	5
Recruitment	10	0
Organic Litter	5	2
Logs	5	0
EVC Standardiser	1x	1x
Standardised site Condition Score	75	9
Patch Size	10	1
Neighbourhood	10	0
Distance to Core Area	5	1
Final Habitat Score (out of a	100	9
possible score of 100)		
Final Score divided by a 100	1	0.9
Area of patch (hectares)		0.005 ha

Organic litter appears to be mainly derived from weeds and would provide less than 5% coverage.

Patch 2 is located within the drainage line near patch 1. It consists of 25 percent perennial coverage of *Juncus flavidus*.

Weed coverage is approximately 90 percent. Organic litter which appears to be mainly derived from weeds would be less than 5 percent coverage. Though there is a very small amount of bark from a close by *Eucalyptus* tree.



3.2 Native Vegetation Removal Report

The parameters of the VQA result for the two patches of native vegetation and three (3) scattered *E. blakeyi's* were uploaded into the NVIM tool to generate a NVR report. The NVR report outlines the offset required if a permit is granted to remove the native vegetation, and also the potential threat the proposed development may have towards threatened species. The NVR is provided as appendix 4.

Assessment Pathway	Intermediate Assessment Pathway
Extent including past and proposed native vegetation removal	0.142 hectares
No. large trees	1 large tree(s)
Location category	Location 1
	The native vegetation is not in an area mapped as an endangered Ecological Vegetation Class*, sensitive wetland or coastal area. Removal of less than 0.5 hectares will not have a significant impact on any rare or threatened species.

3.2.1 Offset

The offset requirement that will apply if the native vegetation is approved to be removed:

Offset type	General Offset
General offset amount	0.30 general habitat units
Vicinity	Goulburn Broken Catchment Management
	Authority (CMA) or Strathbogie Shire
	Council
Minimum strategic biodiversity value score	0.264
Large tree	1 large tree(s)

A third-party offset will be obtained. .

3.2.2 Avoid and Minimise Statement

Due to the lots being less than 0.4 hectares the native vegetation within the site is assumed consequentially lost; these losses are assumed unavoidable.

The only way to potentially avoid the losses of native vegetation would be to alter the plans to make for larger lots.

Due to the general lack of native vegetation and weediness of the site, the proposed subdivision and loss of 0.142 should not significantly impact upon the biodiversity and conservational value of the area; it would not significantly impact on any rare and threatened species.

However, it should be noted that the three (3) *Eucalyptus blakeyi* inclusive of a large old tree, would provide habitat for a number of common native fauna species.



Facing east: Large E. blakelyi (no. 2); assumed lost.



Facing south. E. blakelyi (no. 3); assumed lost.



3.3 Weeds

The majority of the study site can be considered an exotic pastureland. Approximately 21 exotic species were identified, some are considered noxious.

Weeds of National Significance (WoNS) are invasive weeds that are federally determined to pose a significant socio-economic and environmental risk to the community and environs. Presently there are 20 WoNS.

Under the Catchment and Land Protection Act 1994 (CaLP Act) it is the *responsibility of the landowner* to control and eradicate regionally controlled weeds. The CaLP Act defines 4 categories of noxious weeds:

State Prohibited: weeds that do not occur in Victoria but pose a significant threat to the community and environs; or weeds that are present in Victoria yet pose a significant threat and are expected to be eradicated. The Victorian Government bears responsibility for their eradication, however under the CaLP Act section 70(1) it is expected that the landowner prevents their spread.

Regionally Prohibited: weeds that are not widely distributed in a region but are invasive and have the potential to spread. Landowners must take reasonable steps to control or eradicate regionally prohibited weeds.

Regionally Controlled: Invasive weeds that are usually widespread in a region. Landowners must control or eradicate regionally controlled weeds to prevent their spreading and growth.

Restricted Weeds: Weeds that pose a significant and unacceptable risk of spreading within that state and are a threat to other states and territories.

Scientific Name	Common Name	Status
Alternanthera pungens	Khaki weed	Controlled GBCMA
Avena spp	Wild oats	
Briza maxima	Greater quaking grass	
Centaurium erythraea	Common centaury	
Cynodon dactylon	Bermuda grass	
Cyperus erygrotis	Umbrella sedge	
Fraxinus angustifolia	Desert Ash	Planted
Hordeum leporinum	Barley grass	
Hypochaeris radicata	Cat's ear	
Lactuca serriola	Prickly Lettuce	
Lepidium africanum	African Pepperwort	
Malva parviflora	Cheeseweed	
Marrubium vulgare	Horehound	Controlled GBCMA
Panicum millaceum	French Millet	
Paspalum dilatatum	Dallis grass	
Paspalum distichum	Water couch	
Plantago lanceolata	Ribwort	
Polygonum aviculare	Knotgrass	
<i>Rumex</i> spp.	Dock	

Schinus molle	Peppercorn tree	Planted
Trifolium spp.	Clover	
Notes: GBCMA = Goulburn Broken Catchment Management Authority		

3.4 Fauna

3.4.1 Fauna Observed

No threatened or endangered species were recorded during the survey.

During the survey there appeared to be a general lack of native species inhabiting the study site – this likely reflects the lack of native vegetation within the study site and its location within the Euroa township and on the corner of frequently travelled roads.

Road traffic has a number of ecological effects on nearby habitats and native wildlife, these impacts range from breeding disturbance and physiological stressors caused by noise from traffic and flash of headlights at night (Parris & Schneider 2008).

The presence of Indian Myna's may have also contributed to the lack of fauna, particularly birds. At the time of the survey there was a flock of Indian (Common) mynas *Acridotheres tristis*. Indian mynas are an introduced species that often out-compete or displace native birds, particularly cavity-nesting and smaller bird species (Laughing Kookaburra, Crimson Rosellas, Striated pardalote etc.,) (Grarock et al. 2012).

Scientific Name	Common Name	Notes
Acanthiza species	Thornbill	Heard in tree canopy
Acridotheres tristis	Common or Indian Myna	Introduced
Gymnorhina tibicens	Australian Magpies	
Platycercus elegans	Crimson Rosella	Seen flying overhead

3.4.2 Threatened & Endangered Fauna

As discussed above, the study site is highly unlikely to provide suitable habitat for threatened and endangered species.

The large *E. blakelyi* may provide some roosting habitat. However, in the context of the site, it is unlikely to provide long-term quality habitat.

Given Euroa's proximity to the Strathbogie Ranges and Balmattum Nature Conservation Reserve, there is a chance that some threatened or endangered bird species will be seen travelling through the area.

Species list is given in Appendix 2.1

4 Conclusion

It is proposed 42 Bury Street, Euroa be subdivided into thirteen lots. The study lies within the Euroa township, on the corner of Bury Street and Campbell Street. The site contains an existing single-storey dwelling and gravel accessway in the south-western corner of the property, in addition there is a drainage line within the west that cuts through the site.

The study site was found to be heavily weedy - EVC 55_61 Plains Grassy Woodland has been virtually removed from the site, with only three (3) *Eucalyptus blakelyi* (one large) and two (2) patches of native perennial species within the drainage line.

Overall, the study site was considered to be exotic pastureland, with few examples of mostly scattered and isolated native species. It was determined to be of rather low conservational value.

Due to the proposed subdivision lots being less than 0.4 hectares in size all the native vegetation within the study site is assumed loss, or consequentially lost to the proposed development. In total, 0.142 hectares will be lost to the proposed subdivision.

4.1 References

Agriculture Victoria: Victoria's consolidated lists of declared noxious weeds and pest animals:http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/protectingvictoria/legislationpolicy-and-permits/declared-noxious-weeds-and-pest-animals-in-victoria

Agriculture Victoria: http://agriculture.vic.gov.au/agriculture/pests-diseasesandweeds/protectingvictoria-from-pest-animals-and-weeds/legislation-policy-andpermits/noxiousweed-and-pestanimal-management-your-legal-roles-and-responsibilities

Agriculture Victoria: http://agriculture/farm-management/business-management/legal-information-for-victorian-landholders/noxious-weed-and-pest-management

Agriculture Victoria 2017. Victorian Noxious Weeds List. 20th of July 2017 Birds in Backyards: http://www.birdsinbackyards.net/

DELWP: Victorian Department of Environment, Land, Water and Planning

DELWP - ENSym NVR tool-spatial data standards:

https://ensym.biodiversity.vic.gov.au/nvr_tool/

DELWP 2017 a. Guidelines for the Removal, destruction or lopping of native vegetation.

DELWP 2017 b. Exemptions from requiring a planning permit to remove, destroy or lop native vegetation. Guidance.

DELWP 2017. Exemptions from requiring a planning permit to remove, destroy or lop native vegetation: Guidance.

DELWP 2018. Assessors handbook. Applications to remove, destroy or lop native vegetation.

DELWP. Nature Kit: https://www.environment.vic.gov.au/biodiversity/naturekit

DELWP. Native Vegetation Information Management system (NVIM): https://www.environment.vic.gov.au/native-vegetation/native-vegetation-informationmanagement

DELWP 2017, Our Wildlife Fact Sheet: Common Froglet. DELWP. Victorian Biodiversity Atlas: https://www.environment.vic.gov.au/biodiversity/victorianbiodiversity-atlas

DELWP, Strathbogie Planning Scheme. https://planningschemes.api.delwp.vic.gov.au/__data/assets/pdf_file/0011/463988/Strathbogie_PS_Ordinanc e.pdf DSE: former Victorian Department of Sustainability and the Environment (now DELWP)

DSE 2004. EVC 55_61 Plains Grassy Woodland, Victorian Riverina bioregion, , EVC/Bioregion Benchmark for Vegetation Quality Assessment.

DSE 2004. Vegetation Quality Assessment Manual – Guidelines for applying the habitat hectares scoring method. Version 1.3

DSE (DELWP) 2009. Advisory List of Threatened Invertebrate Fauna in Victoria - 2009

DSE (DELWP) 2013. Advisory List of Threatened Vertebrate Fauna in Victoria – 2013

DSE (DELWP) 2014, Advisory List of Rare or Threatened Plants in Victoria - 2014

EPBC Act (1999): Commonwealth, The Environment Protection and Biodiversity Conservation Act 1999

EPBC Act (1999) – Species Profile and Threats Database: https://www.environment.gov.au/epbc/about/epbc-act-lists

FFG Act (1988): Victorian, The Flora and Fauna Guarantee Act 1988

Flora of Melbourne (2001), 3rd Edition, 2001, Hyland House Melbourne

Flora of Victoria: https://vicflora.rbg.vic.gov.au/

Grarock K, Tidemann CR, Wood J, Lindenmayer DB 2012 Is It Benign or Is It a Pariah? Empirical Evidence for the Impact of the Common Myna (*Acridotheres tristis*) on Australian Birds, PLoS ONE 7(7): e040622. <u>https://doi.org/10.1371/journal.pone.0040622</u>

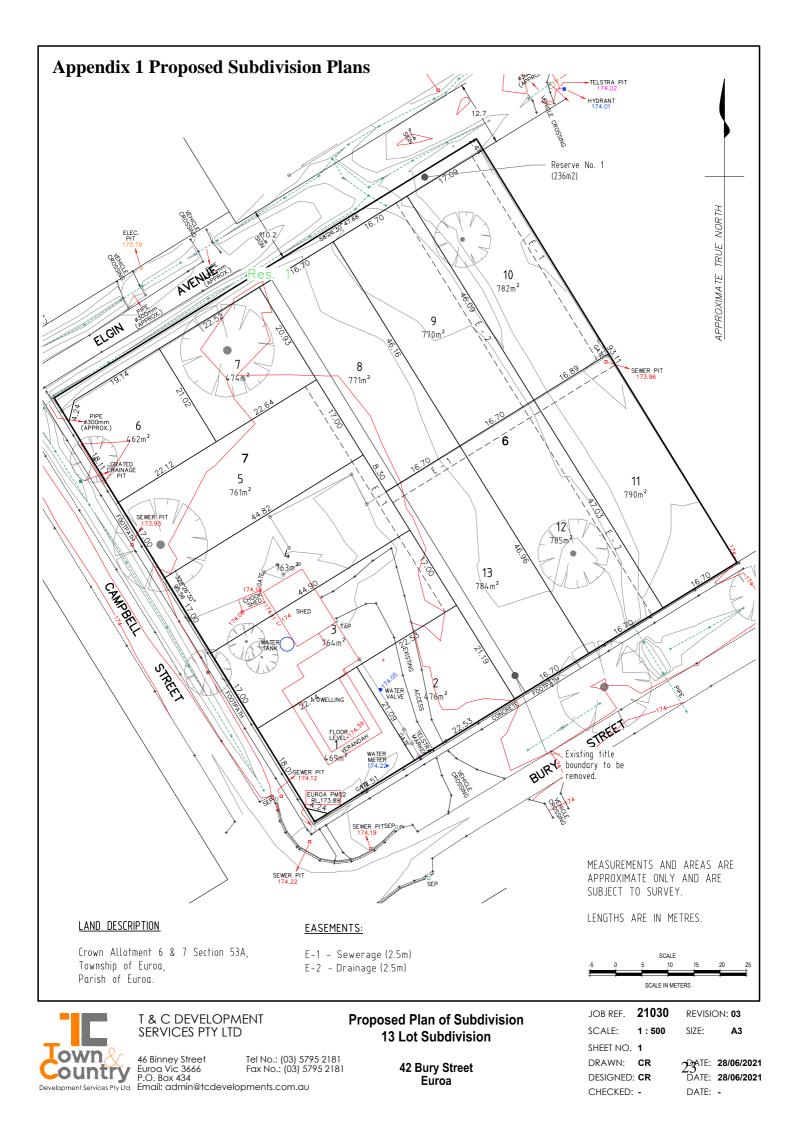
Kent M. & Coker P. 1995. Vegetation Description and Analysis. A Practical Approach. John Wiley & Sons Ltd., Chichester, England.

Parris, K. M., and A. Schneider 2008. Impacts of traffic noise and traffic volume on birds of roadside habitat. Ecology and Society 14(1): 29. http://www.ecologyandsociety.org/vol14/iss1/art29/

Planning Clause 52.17: http://planningschemes.dtpli.vic.gov.au/schemes/vpps/52_17.pdf

Appendices

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Appendix 2 Threatened & Rare Flora: 5km Radius

The study site is too disturbed and degraded to provide habitat for threatened and rare flora. They would be out-competed by exotics.

Key:

No = Species habitat not present. Unlikely = small (low) chance that the species may occur Likely = Species likely to occur/site contains suitable habitat Yes = Detected during survey Rationale provided in comments

DELWP/VICFLORA	FFG	EPBC
x = Presumed extinct	ex = extinct ew = extinct in wild	EX = Extinct
e = Endangered	cr = critically endangered	CR = Critically Endangered
v = vulnerable	en = endangered	EN = Endangered
r = rare	vu = vulnerable	VU = Vulnerable
k = poorly known	P = Protected (public land only)	# = PMST
	*Last Victoria Biodiversity Recording of Species	

Scientific Name	Common Name	Habitat/Distribution	Conserv	vation	Status	VBA*
			DELWP	FFG	EPBC	
Acacia penninervis var penninervis	Hickory Wattle	Mostly rocky habitats along the eastern highlands of Australia, extending southward into an area north-west of Mt Tingaringy in far East Gippsland, with few outlying pockets further westward on an near the Strathbogie Ranges.	r	vu		2002
Allocasuarina luehmannii	Buloke	Usually growing in woodland with <i>Eucalyptus microcarpa</i> , on non-calcareous soils.	e	cr/P		2017
Amphibromus fluitans	River Swamp Wallaby-grass	Largely confined to permanent swamps.			VU/#	N/A
Brachyscome muelleroides	Mueller Daisy	Extremely rare. Confined to floodplains of the Murray River and its tributaries, from Tocumwal east to the Ovens River.	е	en	VU/#	N/A

Dianella tarda	Late-flower Flax-lily	Open, often grassy forests of foothills and pains of north-eastern and north-central VIC. Often on lower slopes or near gullies and watercourses, usually on clay or clay- loam soils.	V	cr		2018
Dodonaea boroniifolia	Hairy Hop-bush	Grows on or near granite or sandstaone outcrops in eucalypt woodland, shrubland and heath.	r	en		2011
Dodonaea procumbens	Trailing Hop-bush	Low-lying, often winter-wet areas in woodland, low open-forest and grasslands on sand and clays.	v		VU/#	N/A
Eucalyptus sideroxylon subsp. sideroxylon	Mugga	In Vic confined to the Chiltern area, northern Warby Range and south of Winton.	r	en		2017
Glycine latrobeana	Clover Glycine	Widespread but of sporadic occurrence and rarely encountered. Grows mainly in grasslands and grassy woodlands.	v	vu	VU/#	N/A
Goodenia macbarronii	Narrow Goodenia	Apparently confined to forest and grassy areas between Wedderburn and Moyhu in the north-east and north of the Murray River, usually in damp sandy or silty soils. Sometimes recorded from seepage areas below farm dams.	v	en		2010
Hibbertia humifusa subsp. erigens	Euroa Guinea-flower	Apparently confined to Euroa- Mansfield area, rare, occurring on shallow sandy loams in woodland.	v	cr	VU/#	2018
Lepidium monoplocoides	Winged Pepper-cress	Uncommon in north-western quarter of quarter of State, mostly on heavy soils near lakes and watercourses.	e	en	EN/#	N/A

Melaleuca armillaris subsp. armillaris	Giant Honey-myrtle	Mainly confined to near-coastal sandy heaths, scrubs slightly raised above saltmarsh, riparian scrubs, rocky coastlines and foothill outcrops eastwards from about Marlo. Occurrences to the west are naturalised from cultivated stock.	r	en		2017
Myriophyllum porcatum	Ridged Water-milfoil	Commonly grown for ornament. Rare and restricted to northern- western VIC where it has been recorded growing in temporary waterholes, lagoons, farm dams and rock holes, and on clay pans.	v	cr	VU	2011
Philotheca myoporoides subsp. euroensis	Euroa Wax-flower	Known from very few, small populations amongst granite boulders of the Strathbogie Range near Euroa.	е	cr		1988
Pimelea spinescens subp. spinescens	Plains Rice-flower	Endemic in VIC. Grows in grassland, open shrubland and occasionally woodland, often on basalt-derived soils. Mostly west of Melbourne (to near Horsham) but extending as far north as Echuca.	е	cr	CR/#	N/A
Prasophyllum diversiflorum	Gorae Leek-orchid	Extremely rare, occurring in grassland and sedgeland on heavy black loamy soils prone to inundation. Known to persist only in a few small populations in south- west VIC.	e	cr	EN/#	N/A
Pterostylis chlorogramma	Green-striped Greenhood	Apparently localised in VIC, but exact range uncertain due to confusion with closely allied species. Grows in moist areas of heathy and shrubby forest, on well-drained.	V	en	VU/#	N/A
Pultenaea vrolandii	Cupped Bush-pea	Confined to a few areas of dry forest on granite hills, between the Strathbogie Range and Pine Mountain with a disjunct occurrence north of Licola.	r	en		1988

Rytidosperma monticola	Small-flower Wallaby-grass	Mostly in dryish grassy woodland, chiefly through central and north- eastern Vic (e.g., Ararat, Warby Range), but with isolated occurrences in the far east (e.g., Mt Delegate, upper Genoa R), but rather rare in VIC.	r	en		2011
Senecio macrocarpus	Large-headed Groundsel	In VIC largely confined to remnant <i>Themeda</i> grasslands on loamy clay soils derived from basalt from near Melbourne west to Skipton area.	e	cr	VU/#	N/A

Note: FFG Amendment Act 2019 effectively made Victoria's Advisory lists obsolete. VBA records have now been updated to reflect the published FFG Threatened List (Oct 2021). For informational purposes, this flora species list retains DSE(DELWP)/Vicflora threat statuses.

FFG Amendment Act 2019 'created two categories of protected flora; 'restricted use protected flora', and all other protected flora (referred to as 'generally protected flora'). **Protected flora (P)** typically refers to species on **public land only** (other than land which is part of the critical habitat for the flora).

Descriptions taken from Flora of Victoria unless otherwise specified.

Appendix 2.1 Threatened & Endangered Fauna: 5km

Key:

No = Species habitat not present.

Unlikely = small (low) chance that the species may occur

Likely = Species likely to occur/site contains suitable habitat

Yes = Detected during survey

Rationale provided in comments

VICADV/DELWP	EPBC
CR = critically endangered	CR = critically endangered
EN = endangered	EN = Endangered
VU = vulnerable	VU = Endangered
NT = near threatened	M = Migratory
	m = Marine
	# = PMST
	CR = critically endangered EN = endangered VU = vulnerable

Scientific Name	Common Name	C	Conservati	on Status	Habitat	Likelihood	VBA	Comments					
		FFG	VICADV	EPBC									
Amphibia	Amphibians												
Crinia sloanei	Sloane's Froglet	en		EN/#	Temporary and permanent waterbodies including oxbows off creeks and river, farm dams, large and small natural wetlands, constructed frog ponds and temporary puddles. Prefers wetlands with aquatic and riparian vegetation – reeds that are of medium height and have small stem diameters such as Elymus repens, Paspalum pasplodes	No	N/A	There are no records of species occurring within 5km of Euroa township. No permanent waterbodies within the site; in addition, the drainage line is unsuitable, due to being heavily disturbed.					
Litoria rainiformis	Growling Grass Frog	vu	EN	VU/#	Found close to or in water or very wet areas in woodlands, shrublands, and open and disturbed areas. Eggs and tadpoles can be found in permanent lakes, swamps, dams and lagoons with still water (Frogs of Australia).	No	N/A	There are no records of species occurring within 5km of Euroa township. No permanent waterbodies within the site.					
Birds			•	•	• · · · · ·		•						
Accipiter novaehollandiae	Grey Goshawk	en	VU		Favours tall closed forests.	No	1978	Site does not contain species habitat.					
Anthochaera phyrgia	Regent Honeyeater	cr	EN	CR;#	Favour box-ironbark habitatshow a consistent preference for just four eucalypt species: Mugga Ironbark, White Box, Yellow Box and Yellow Gum. All four species flower profusely and have especially rich nectar flows (SWIFFT).	No	2005	The population appears to be mostly confined to Chiltern-Mt Pilot National/Chiltern Box-Ironbark Forest. Study Site does not contain preferred Eucalypt species.					

Ardea alba modesta	Eastern Great Egret	vu	VU	М	Wide range of wetland habitats. Species frequents shallow waters.	No	1979	Study site does not contain wetland habitat.
Aythya australis	Hardhead	vu	VU		Freshwater swamps and wetlands, occasionally sheltered estuaries. Rarely seen on land; roost on low branches and stumps near water. Prefer deep open water and densely vegetated wetlands for breeding (Birdlife Australia).	No	2019	Study site does not contain permanent waterbodies.
Biziura lobata	Musk Duck	vu	VU		Deep water freshwater lagoons or deep water with dense reed beds: swamps, lakes etc., Dive for food. Have been observed on small farm dams and lakes, however, this is unusual (Australian Museum; McCracken 1999).	No	2001	Study site does not contain permanent waterbodies.
Botaurus poiciloptilus	Australasian Bittern	cr	EN	EN;#	Reedbeds, and other aquatic vegetation.	No	N/A	Study site does not contain permanent waterbodies or suitable aquatic vegetation.
Burhinus grallarius	Bush Stone- Curlew	cr	EN		Grassy woodlands and farmland. Shelters in tall grasses and low shrubs.	No	2018	Favoured habitat is not present.
Calidris ferruginea	Curlew Sandpiper	cr	EN	CR;#;M; m	Coastal habitats, though appear in the interior. In VIC, apparently widespread in coastal bays, inlets, and wetlands. Occur intermittently in inland wetlands (Kerang area. Mildura and western districts); (DAWE 2015 Conservation Advice Calidirs ferruginea).	No	N/A	Species has a strong preference for coastal habitats, which are not present within the study area.
Coracina (Pteropodocys) maxima	Ground Cuckoo- shrike	en	VU		Lightly timbered woodlands and grasslands.	No	1915	Study site does not contain suitable habitat to support this species.
Falco hypoleucos	Grey Falcon	vu	EN	VU;#	Arid, semi-arid Australia. Timbered lowland plains, particularly acacia shrubland. Areas with annual rainfalls less than 500 mm, except in wet years followed by drought, when species may become more widespread (DAWE 2020, Conservation Advice Falco hypoleucos).	Unlikely	N/A	Study site does not contain suitable habitat to support this species. Very unlikely to occur.
Hieraaetus morphnoides	Little Eagle	vu			Seen over woodland, forested lands and open country. Utilise Yellow Box-Red Gum grassy woodland; White Box-Yellow Box-Red Gum Grassy Woodland and derived Native Grassland (Flora and Fauna Guarantee, nomination no. 887).	Unlikely	1999	habitat to support this species. Very unlikely to occur. Last observation some years ago.
Hirundapus caudacutus	White-throated Needletail	vu	VU	VU; M;m;#	Aerial, mainly in E Aust, usually over coastal and mountain regions N Asian migrant Occurs in summer period (Simpson and Day 1999).	Unlikely	1979	Almost exclusively aerial. Possibility that it may be seen flying through area.

Grantiella picta	Painted Honeyeater	vu	VU	VU;#	Most specialised of Australia's honeyeaters. Species inhabits mistletoe in eucalypt forests, woodlands, riparian woodland of Black Box and Red River Gum, box-ironbark-yellow gum woodlands, acacia- dominated woodlands, paperbacks, casuarinas, callitris and trees on farmland or gardens. Prefers mature trees. More common in blocks of remnant woodland. Mostly located in the Warby-Chiltern Box- Ironbark Region (Commonwealth of Australia 2020, National Recovery Plan for the Painted Honeyeater).	No	N/A	Painted Honeyeaters are now mostly confined to Warby-Chiltern Box- Ironbark Region. Study site does not contain favoured habitat.
Lathamus discolor	Swift Parrot	cr	EN	CR;m;#	Breeds in Tasmania during summer, then migrates to mainland Australia for winter. Occupy habitats across all tenures, with the majority of habitats occurring outside formal conservation areas. On mainland the species forages on flowers and psyllid lerps in Eucalyptus species. In VIC predominantly found in dry forests and woodlands of the box-ironbark region on the inland slopes of Great Dividing Range (DAWE Conservation Advice Lathamus Discolor).	Unlikely	2012	Study areas doesn't appear to contain favoured habitat. May inhabit general region during winter/migratory period.
Melanodryas cucullata	Hooded Robin	vu	NT		Lightly timbered woodland, mainly dominated by acacia and/or eucalypts.	Unlikely	2019	Study site does not contain suitable habitat to support this species. Very unlikely to occur
Numenius madagascariensis	Far Eastern Curlew	cr	VU	CR;#;m; M	Intertidal mudflats and sandflats, often with beds of seagrass, on sheltered coasts, especially estuaries, mangrove swamps, bays, harbours and lagoons.	No	N/A	Species habitat is not present.
Oxyura australis	Blue-billed Duck	vu			Almost wholly aquatic, and is seldom seen on land. Non-breeding flocks, often with several hundred individuals, congregate on large, deep open freshwater dams and lakes in autumn. Daylight hours are spent alone in small concealed bays within vegetation or communally in large exposed rafts far from the shore.	No	1979	Study site does not contain permanent waterbodies or suitable aquatic vegetation.
Pedionomus torquatus	Plains-wanderer	cr	CR	CR;#	Sparse grasslands with c.50% bare ground vegetation. May use lower quality habitat, but cannot persist in agricultural landscape. Sedentary for as long as the habitat remains suitable (DAWE 2015. Conservation Advice Pedionomus torquatus).	No	N/A	Study area does not contain species preferred habitat.

Polytelis swanisonii	Superb Parrot	en	EN	VU/#	Riverina. Nests in colonies in large, living or dead trees with many hollow branches, typically near watercourses. Use at least 6 species of eucalypt, particularly reliant on E.blakelyi; assumed reliance on E.albens and E. melliodora. After breeding species utilises a wider array of habitat, including artificial habitats (DAWE Conservation Advice Polytelis swainsonii).	Unlikely	N/A	Highly unlikely that the 3 E. blakelyi would provide suitable quality habitat. Low chance of occurring.
Pomatostomus temporalis	Grey-crowned Babbler	vu	EN		Open forests and woodlands; Box-Gum Woodlands. Territories range from 1 to 50 ha, typically 10 ha, that are defended year-round. Bird generally unable to cross large open areas (NSW 2017)	No	2018	Study area does not provide sufficient habitat.
Pyrrholaemus sagittatus	Speckled Warbler	en	VU		Wide range of <i>Eucalyptus</i> dominated communities that have a grassy understorey, often on rocky ridges or in gullies; scattered native tussock grasses, a sparse shrub layer, some eucalypt regrowth and an open canopy. Large, relatively undisturbed remnant are required for the species to persist in an area. Pairs are sedentary, occupying a breeding territory of 10ha – slightly larger home-range when not breeding (NSW 2017: Speckled Warbler – profile).	No	2003	Study site too small and degraded. In addition, unlikely to occur in Euroa township environs.
Rostratula australis	Australian Painted Snipe	cr	VU	EN;#;m	Wading bird. Shallow freshwater (occasionally brackish) wetlands, both ephemeral and permanent, such as lakes, swamps, claypans, inundated or waterlogged grassland/saltmarsh, dams, rice crops, sewage farms and bore drains, generally with a good cover of grasses, rushes and reeds, low scrub, lignum, open timber or Samphire (Readers Digest 1997; cited in EPBC Act 1999 – 2013)	Unlikely	N/A	They have been observed on artificial waterbodies. Though, overall appears unlikely to occur.
Spatula rhynchotis	Australasian Shoveler	vu	VU		Wetlands, preference for large undisturbed heavily vegetated swamps. Also, along open waters and occasionally along coasts.	No	2019	Study site does not contain permanent waterbodies or suitable aquatic vegetation.
Stagonopleura guttata	Diamond Firetail	vu	NT		Mainly sedentary, occurring in small flocks. Occurs between 300-700mm rainfall in lowlands and foothills and mainly inhabit grassy woodlands or wooded farmlands containing <i>Eucalyptus camaldulensis</i> , <i>Eucalyptus leucoxylon</i> , <i>Callitris gracilis</i> or	No	2019	

Struthidea cinerea	Apostlebird	vu			 Allocoasuarina luehmanii near permanent water (Immelmann 1982, Emison et al. 1987 cited in SWIFFT). Open dry forests and woodlands near water. May inhabit farmlands, roadsides, orchards and golf courses 	Unlikely*	1987	Highly unlikely that the 3 E. blakelyi would provide suitable quality habitat *However, last observation some decades ago.
Insects					· ·			
Synemon plana	Golden Sun Moth	vu*	CR	VU*/#	 Distribution parallels the distribution of native grasslands dominated by the grasses of Austrodanthonia species. GSM is now located at approximately 65 sites in south-eastern Aus in small, isolated remnants of native grasslands (SPRAT). *Species appears to be downgraded as of Oct-Dec 2021. Formerly listed as critically endangered under Victoria Advisory List 2009). Formerly listed as critically endangered under EPBC Act. 	No	N/A	Species habitat is not present.
Mamma	ls							
Dasyurus maculatus maculatus	Spot-tailed Quoll	en	EN	EN/#	Rainforests, dry forests, sclerophyll forests, coastal heath and scrub. Nocturnal, climb into tree hollows for shelter (Museum Victoria Staff 2020). Preference for dense overstorey and understorey. Exist in isolated and highly fragmented populations, within east Victoria, known populations appear largely confined in discrete areas, in public lands: parks, reserves (FFG Action Statement, no.15)	No	N/A	There is not sufficient habitat within urban areas.
Petauroides volans	Greater Glider	vu	VU	VU/#	Distributed throughout the forested parts of eastern Victoria, including inland and southern falls of the Great Dividing Range, as well as the Strzelecki and Strathbogie RangesGreater Gliders are absent from high altitude alpine and sub alpine habitats, Wilson's Promontory and cleared areas [They] are dependent and prefer old tree age classes in moist forest types[and] use hollow-bearing trees for shelter and nesting, with each family group using multiple trees	No	N/A	There is not sufficient habitat within urban areas.

					within its home range. They eat mainly young eucalypt leaves (DELWP).			
Petaurus norfolcensis	Squirrel Glider	vu	EN		Wet and dry sclerophyll forests and woodlands. Appear to have a preference for vegetation areas containing one or more species of iron-bark eucalypts.	No	2020	Study site does not contain species habitat. Recent record was on Euroa Main Road; however, this was a dead specimen (apparently roadkill).
Phascogale tapoatafa	Brush-tailed Phascogale	vu	VU		Prefer dry sclerophyll open forest with sparse groundcover of herbs, grasses, shrubs or leaf litter. Also inhabit heath, swamps, rainforest and wet sclerophyll forest.	No	2016	Study site does not contain species habitat.
Pteropus poliocephalus	Grey-headed Flying-fox	vu	VU	VU/#	Found in tropical moist forest, open forest, closed and open woodlands, Melaleuca swamps, Banksia woodlands, mangroves, and commercial fruit plantations. It also occurs in urban areas where suitable foraging and roosting habitat are available. The primary food source are the flowers of Eucalyptus, Banksia, Melaleuca species, plus rainforest fruits. It roosts in colonies in patches of trees and dense vegetation. Females generally give birth to single young (Duncan <i>et al</i> 1999; D. Lunney pers. comm.).	Unlikely	N/A	Known colonies exist in Melbourne, may be seen travelling through area.
Reptile	es							-
Aprasia parapulchella	Pink-tailed Worm-Lizard	en	EN	VU/#	Cryptic species. Thought to be diurnal, majority of time is spent below the surface, though has been observed above ground during the day (DAWE 2015 Conservation Advice <i>Aprasia parapulchella</i>).	Unlikely	N/A	Study site is unlikely to provide suitable habitat.
Delma impar	Striped Legless Lizard	en	EN	VU/#	Grassland specialist, found only in areas of native grassland and nearby grassy woodland and exotic pasture. Primary habitat: Natural Temperate Grassland	No	N/A	Species habitat is not present.
Varanus varius	Lace Monitor	en	EN		Open and closed forests and forage over long distances. In cooler weather shelter in tree hollows or under fallen trees or large logs.	No	2019	Study site does not provide suitable habitat.

Note: FFG Amendment Act 2019 effectively made Victoria's Advisory lists obsolete. VBA records have now been updated to reflect the published FFG Threatened List (Oct 2021). For informational purposes, VICADV threat statuses are retained.



Facing roughly east. Note tree pictured in the far right is not within the property



Patch of Peppercorn trees along the western fenceline, adjacent to Campbell Street.



Facing north: Large *E. blakelyi* in background, exotic groundcover and gravel accessway





A report to support an application to remove, destroy or lop native vegetation in the Intermediate Assessment Pathway using the modelled condition score

This report provides information to support an application to remove native vegetation in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation*. The report <u>is not</u> an assessment by DELWP or local council of the proposed native vegetation removal. Biodiversity information and offset requirements have been calculated using modelled condition scores contained in the *Native vegetation condition map*.

Date and time:	14 February 2022 10:01 AM
----------------	---------------------------

Lat./Long.:	-36.755773214699,145.564918324753
Address:	42 BURY STREET EUROA 3666

364-20220214-003

Native vegetation report ID:

Assessment pathway

The assessment pathway and reason for the assessment pathway

Assessment pathway	Intermediate Assessment Pathway	
Extent of past plus proposed native vegetation removal	0.142 hectares	
No. large trees	1 large tree(s)	
Location category	Location 1	
	The native vegetation is not in an area mapped as an endangered Ecological Vegetation Class sensitive wetland or coastal area. Removal of less than 0.5 hectares will not have a significant impact on any habitat for a rare or threatened species.	

Offset requirement

The offset requirement that will apply if the native vegetation is approved to be removed

Offset type	General offset	
Offset amount	0.030 general habitat units	
Offset attributes		
Vicinity	Goulburn Broken Catchment Management Authority (CMA) or Strathbogie Shire Council	
Minimum strategic biodiversity 0.264 value score		
Large trees 1 large tree(s)		



Biodiversity information about the native vegetation

Description of any past native vegetation removal Any native vegetation that was approved to be removed, or was removed without the required approvals, on the same property or on contiguous land in the same ownership, in the five year period before the application to remove native vegetation is lodged is detailed below.

Permit/PIN number	Extent of native vegetation (hectares)
None entered	0 hectares

Description of the native vegetation proposed to be removed

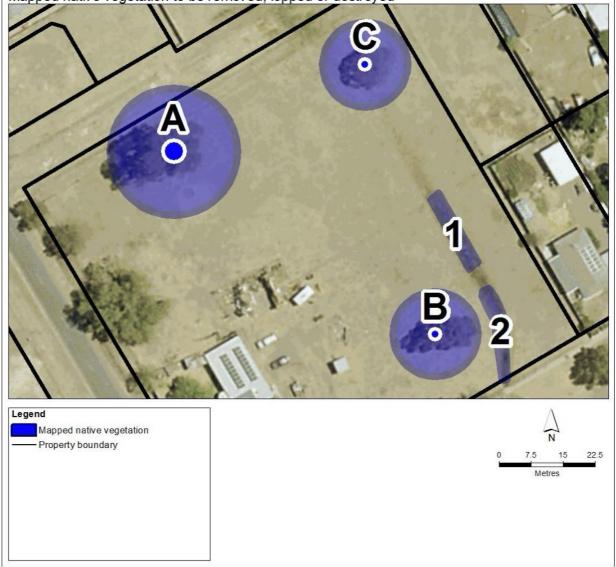
Extent of all mapped native vegetation	0.142 hectares
Condition score of all mapped native vegetation	0.209
Strategic biodiversity value score of all mapped native vegetation	0.330
Extent of patches native vegetation	0.009 hectares
1	0.005 hectares
2	0.005 hectares
Extent of scattered trees	0.133 hectares
No. large trees within patches	0 large tree(s)
No. large scattered trees	1 large tree(s)
No. small scattered trees	2 small tree(s)

Additional information about trees to be removed, shown in Figure 1

Tree ID	Tree circumference (cm)	Benchmark circumference (cm)	Scattered / Patch	Tree size
В	163.4	251	Scattered	Small
А	421	251	Scattered	Large
С	219.9	251	Scattered	Small



Figure 1 – Map of native vegetation to be removed, destroyed or lopped



Mapped native vegetation to be removed, lopped or destroyed



Native vegetation removal report

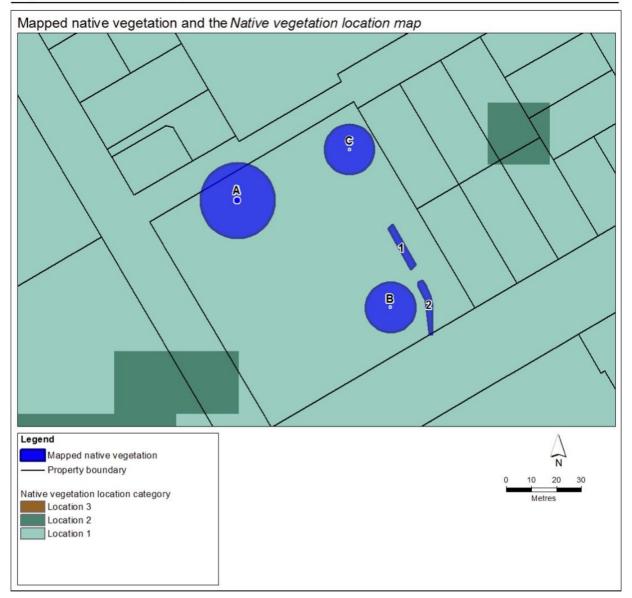
Figure 2 – Map of property in context



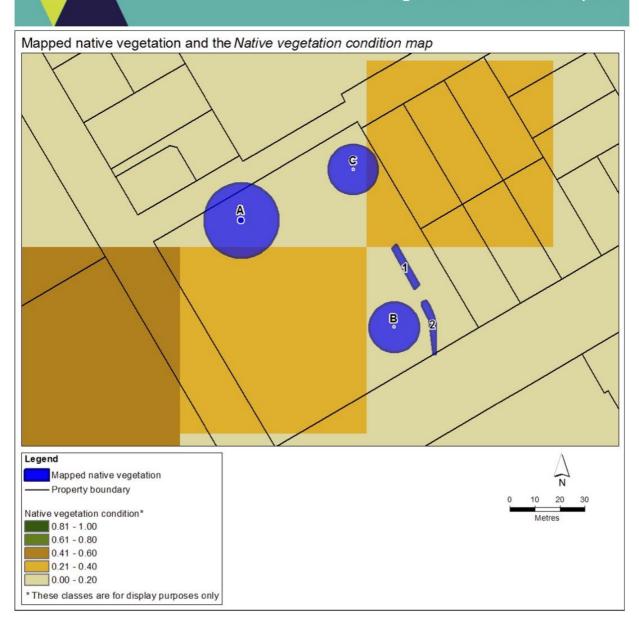


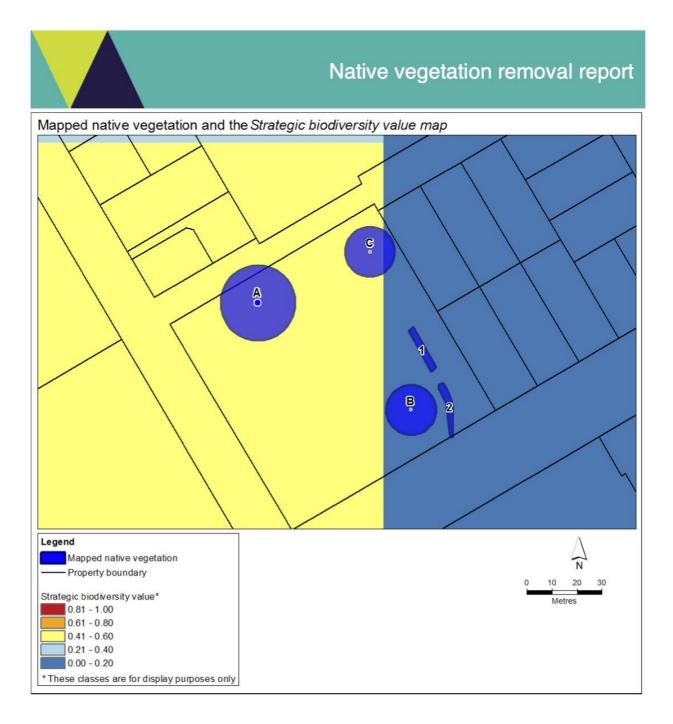
Native vegetation removal report

Figure 3 – Biodiversity information maps



Native vegetation removal report







Appendix 1 - Details of offset requirements

Native vegetation to be removed

Extent of all mapped native vegetation (for calculating habitat hectares)	0.142	The area of land covered by a patch of native vegetation and/or a scattered tree, measured in hectares. Where the mapped native vegetation includes scattered trees, each tree is assigned a standard extent and converted to hectares. A small scattered tree is assigned a standard extent defined by a circle with a 10 metre radius and a large scattered tree a circle with a 15 metre radius. The extent of all mapped native vegetation is an input to calculating the habitat hectares.	
Condition score*	0.209	The condition score of native vegetation is a site-based measure that describes how close native vegetation is to its mature natural state. The condition score is the weighted average condition score of the mapped native vegetation calculated using the <i>Native vegetation condition map</i> .	
Habitat hectares	0.030	Habitat hectares is a site-based measure that combines extent and condition of native vegetation. It is calculated by multiplying the extent of native vegetation by the condition score: Habitat hectares = extent x condition score	
Strategic biodiversity value score	0.330	The strategic biodiversity value score represents the complementary contribution to Victoria's biodiversity or location, relative to other locations across the state. This score is the weighted average strategic biodiversit value score of the mapped native vegetation calculated using the <i>Strategic biodiversity value map</i> .	
General landscape factor	0.665	The general landscape factor is an adjusted strategic biodiversity value score. It has been adjusted to redu the influence of landscape scale information on the general habitat score.	
General habitat score	0.020	The general habitat score combines site-based and landscape scale information to obtain an overall measure of the biodiversity value of the native vegetation. The general habitat score is calculated as follows: <i>General habitat score = habitat hectares x general landscape factor</i>	

* Offset requirements for partial removal: If your proposal is to remove parts of the native vegetation in a patch (for example only understorey plants) the condition score must be adjusted. This will require manual editing of the condition score and an update to the calculations that the native vegetation removal tool has provided: habitat hectares, general habitat score and offset amount.

Offset requirements

Offset type	General offset	A general offset is required when the removal of native vegetation does not have a significant impact on any habitat for rare or threatened species. All proposals in the Basic and Intermediate assessment pathways will only require a general offset.	
Offset multiplier	1.5	This multiplier is used to address the risk that the predicted outcomes for gain will not be achieved, and therefore will not adequately compensate the biodiversity loss from the removal of native vegetation.	
Offset amount (general habitat units)	0.030	The general habitat units are the amount of offset that must be secured if the application is approved. The offset requirement will be a condition to any permit or approval for the removal of native vegetation. General habitat units required = general habitat score x 1.5	
Minimum strategic biodiversity value score	0.264	The offset site must have a strategic biodiversity value score of at least 80 per cent of the strategic biodiversity value score of the native vegetation to be removed. This is to ensure offsets are located in areas with a strategic biodiversity value that is comparable to the native vegetation to be removed.	
Vicinity	Goulburn Broken CMA or Strathbogie Shire Council	MA district as the native vegetation to be removed.	
Large trees	1 large tree (s)	The offset site must protect at least one large tree for every large tree removed. A large tree is a native canopy tree with a Diameter at Breast Height greater than or equal to the large tree benchmark for the loca Ecological Vegetation Class. A large tree can be either a large scattered tree or a large patch tree.	