

Hamilton Environmental Services ABN: 89 108 410 911



VEGETATION ASSESSMENT, MOYHU TOWN ENVIRONS





Vegetation Assessment, Moyhu Town Environs

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Cover Photo: Looking east along Bartley Street Moyhu.

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1. INTRODUCTION

The Rural City of Wangaratta (RCoW) is seeking information on the vegetation of the Moyhu township area to support strategic justification to apply a *Vegetation Protection Overlay* to the location with the prospect of likely future development proposals (Justin Britt pers. comm. 2022).

In December 2021, Hamilton Environmental Services (HES) was engaged by the RCoW to undertake such an assessment on an agreed extent of investigation.

Dr. Steve Hamilton undertook field evaluation of the site on the 12th January 2022, and this report presents the findings from this investigation.

2. BACKGROUND

2.1 Site Location and Description

The area of investigation of 220 ha is centred on the township of Moyhu, approximately 25 km SSE of the Wangaratta CBD (Vicroads 48 H3; Figures 2-1 and 2-2).

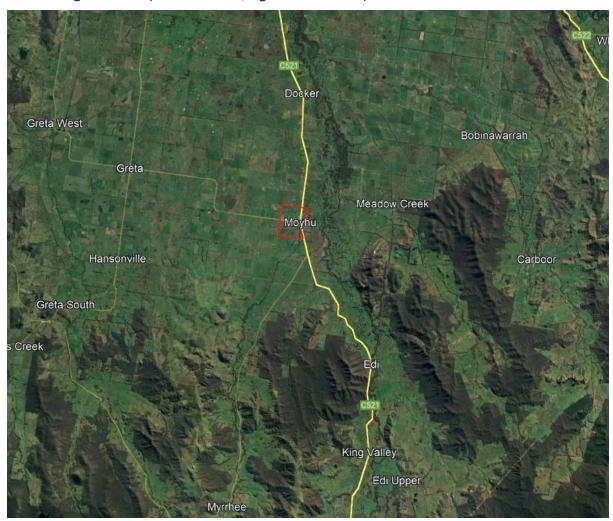


Figure 2-1 Aerial image of the general area assessed outlined with a solid red border (Image from Google Earth 2022).

The investigation area has been mostly cleared of indigenous woody vegetation.

Large sections of the area are fenced and utilised as grazing paddocks, and while these areas retain some scattered remnant trees, there is no indigenous shrub layer, and as a consequence of long-term stock grazing impact, the ground layer vegetation is dominated by a range of introduced annual and perennial species. Some plantations of mostly non-indigenous native species are found within these areas as windbreaks.

The smaller residential lots within the town have been substantially modified; while some remnant indigenous trees are found within some of these parcels, the predominant woody vegetation is garden amenity plantings of exotic and non-indigenous native species, with the ground layer vegetation being a range of introduced annual and perennial species that is regularly mown and maintained.

There are some areas of public land within the township, such as the Moyhu Recreation Reserve and the Memorial Hall reserve. Again, while some remnant indigenous trees are found within some of these parcels, the predominant woody vegetation is garden amenity plantings of exotic and non-indigenous native species, with the ground layer vegetation being a range of introduced annual and perennial species that is regularly mown and maintained.

The Boggy Creek corridor does contain a more-or-less continuous canopy of remnant mostly mature trees, interspersed with a range of typical woody trees and shrubs, and a wholly introduced ground layer.

Sawmill Lane (south of Bartley Street) does retain some scattered trees and patches of remnant mature trees, with a wholly introduced ground layer.

2.2 Bioregion and Ecological Vegetation Class

The whole proposed development area within the Victorian Riverina Bioregion (Department of Environment, Land, Water and Planning [DELWP] 2022a).

In Victoria, DELWP have developed an on-line mapping layer that categorises pre-1750 and 2005 natural vegetation communities into Ecological Vegetation Classes (EVCs), and have developed EVC Benchmark Statements for each of these EVCs that represent the best known example of this EVC.

Pre-1750 EVC mapping suggests that prior to European settlement, the vegetation of the investigation area would have been Plains Grassy Woodland Ecological Vegetation Class (EVC)(EVC 55; Bioregional Conservation Status [BCS] Endangered) on the floodplains, and Creekline Grassy Woodland EVC (EVC 68; BCS Endangered) along the Boggy Creek corridor (see Fig. 2-3; DELWP 2022a and 2022b).

There was insufficient remnant native vegetation (trees) to more definitively confirm the likely presence of these pre-1750 EVCs as mapped, and amping is assumed to be accurate.

The EVC Benchmark statements can be found in Appendix C.

2.3 Land Tenure and Planning Scheme Overlays

The investigation area is wholly within the Rural City of Wangaratta, Parish of Moyhu (DELWP 2022d).

Outside of the residential lots within the town, which are a mixture of *Town Zone*, *Low Density Residential Zone* 1 or *Public Use Zone*, the balance of the investigation area is *Farming Zone*; most of the Boggy Creek floodplain is subject to a *Floodway Overlay* or a *Land Subject to Inundation Overlay*, and sections of the floodplain are further subject to a *Bushfire Management Overlay* (DELWP 2022d).



Figure 2-2 The investigation area (image from ESRI Australia 2022).



Figure 2-3 The mapped 1750 Ecological Vegetation Classes (EVCs) of the investigation area at Moyhu: blue shading is Plains Grassy Woodland EVC, and green shading is Creekline Grassy Woodland EVC (DELWP 2022a and 2022b)(Image from ESRI Australia 2022).

3. METHOD

3.1 Desktop Review

The following desktop information was gathered on the property assessed before field evaluation:

- Aerial imagery;
- Planning information;
- Both pre-1750 and current EVC mapping;
- Relevant EVC benchmark documents;
- Threatened species sightings within a 10 km radius of the site using the Victorian Biodiversity Atlas (DELWP 2022c), NatureKit (DELWP 2022b), and the Matters of National Environmental Significance search tool (Department of Agriculture, Water and Environment [DAWE]).

Following assessments, derived flora and fauna lists were checked against reference lists of rare and threatened species in Victoria (DELWP 2021).

3.2 Site assessment

The survey of the site was conducted by Dr. Steve Hamilton on the 12th January 2022, accompanied in part by Justin Britt (RCoW), and a total of 4 hours was spent in the field undertaking this assessment. At the time of observation, air temperatures were between 22 to 30°C, there was no wind, and there was no cloud (Bureau of Meteorology 2022).

Access to freehold land was limited to one property in the west of the investigation area, and so when required, appropriate observations of the vegetation of properties were made from the fence line of an adjacent property, from public land, or from a roadside. As a consequence of this relative lack of access, there were some sections of the investigation area that were not able to be observed from close proximity.

The assessed area was traversed on foot and by vehicle, and the vegetation attributes assessed including:

- Compilation of a flora species list (of general areas, native vegetation Patches and plantations), including the attribution of cover/abundance to each species in each zone;
- The individual recording of any significant indigenous, non-indigenous native and exotic trees (i.e. > 3 m in height) across the area, including their geo-location by GPS, diameter at breast height (dbh), their health, and presence of hollows. If a tree was being observed from a distance, then a rangefinder was utilised to determine its distance to a point, and a GPS used to ascertain the direction of the tree (in degrees) in order to allow desktop location of the individuals;
- House blocks and their associated gardens were not assessed for their flora. Prominent trees
 within these blocks were identified and located from an adjacent property, from public land, or
 from a roadside wherever possible;
- The location and species composition of any plantations across the investigation area was also determined;
- Casual sightings of fauna noted;
- Under the *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017). there are two categories of native vegetation: *Scattered Trees* or *Patches*. A *Scattered Tree* is a native canopy tree that does not form part of a *Patch*. A *Patch* of native vegetation is either: an area of vegetation where at least 25 % of the total perennial understorey plant cover is native,

or any area with three or more native canopy trees where the drip line of each tree touches the drip line of at least one other tree, forming a continuous canopy, or any mapped wetland included in the current wetlands map, available in DELWP systems and tools and these areas were mapped (DELWP 2017);

- A Vegetation Quality Assessment was completed if any native vegetation Patches were defined;
- Recording and location of any specific instances related to land management, such as noxious weed or pest animal infestations, etc.
- Numerous digital images across the areas taken from geo-located points, and these were used in the identification, determination of characteristics and location of remote trees.

Four hundred and forty five (445) images were taken across the site during the assessment.

3.3 Taxonomy

3.3.1 Flora

Specimens were identified using the *Flora of Victoria* (Walsh and Entwisle 1994, 1996 and 1999), and *Flora of Victoria On-line* (Royal Botanic Gardens Victoria 2022).

3.3.2 Fauna

A list of fauna present across the sites was compiled, with the nomenclature based variously on the compilations of Hero *et al.* (1991), Menkhorst (1995), Cogger (1996) and Simpson and Day (1998), and utilising Triggs (1996) for identification using indirect methods, such as the presence of scats or tracks.

4. RESULTS AND DISCUSSION

4.1 Vegetation

The inventory of species noted across the area of investigation is recorded in Appendix A.

A total of 100 vascular plant species were recorded across the area; 72 of these species were introduced (of which 31 are planted and/or naturalised) and 28 indigenous (of which 1 is planted)(Appendix A; Table 4-1).

Table 4-1 The	number of indigenous and	l introduced spec	cies across the ass	essed zones.
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Zone	Introduced species	Indigenous species	Total species
Rural land	38	16	54
Town land	64	6	70
Tree patches	38	23	61
Total	72	28	100

There were no threatened species observed across the area (DELWP 2021).

As indicated, the investigation area has been mostly cleared of indigenous woody vegetation.

Large sections of the area are fenced and utilised as grazing paddocks, and while these areas retain some scattered remnant trees, there is no indigenous shrub layer, and as a consequence of long-term stock grazing impact, the ground layer vegetation is dominated by a range of introduced annual



Plate 4-1

Views across the investigation area: looking south across the north-western section (top left), the north-western corner (top right), looking south along Sawmill Lane from Bartley Street (middle left), the Moyhu Recreation Reserve (middle right), looking north along Sawmill Lane (bottom left), and looking across the south-western section (bottom right). Pertinent trees are numbered in white.

and perennial species, such as Sweet Vernal Grass, Great and Soft Brome, Cocksfoot, Shepherd's Purse, Yorkshire Fog-grass, Barley Grass, Cat's Ear, Burr Medic, Common Stork's-bill, Hensbit, Wimmera Ryegrass, Water Couch, Paspalum, Toowoomba Canary Grass, Wireweed, Subterranean Clover and Rat's-tail Fescue (95 % projective foliage cover, counting cured plant material); indigenous ground layer species such as Common Love-grass, *Juncus* spp., Common Windmill Grass, Blown Grass, False Loosestrife, Curly Windmill Grass, Weeping Grass, Blown Grass, Wallaby-grasses

and Rigid Panic are found as scattered plants or in small patches, but at very low abundance (< 1 % projective foliage cover; Appendix A).

Ten plantations of mostly non-indigenous native or exotic species are found within the rural areas as windbreaks (see mapping in Appendix E for their locations), all with a ground layer dominated by a range of introduced annual and perennial species. The woody composition of these plantations is as follows:

- Plantations 1, 2 and 3 Red Box (*Eucalyptus polyanthemos*), River Red Gum, Yellow Box, *Callistemon* sp. and Red Ironbark (*E. sideroxylon*);
- Plantation 4 River Red Gum, Manna Gum (E. viminalis), Desert Ash, Broad-lead Privet (Ligustrum lucidum), Willow-leaved Hakea (Hakea salicifolia);
- Plantations 5 and 6 Poplar;
- Plantation 7 Desert Ash;
- Plantation 8 Cypress;
- Plantation 9 Chestnut;
- Plantation 10 English Elm.

The smaller residential lots within the town have been substantially modified; while some remnant indigenous trees – mostly mature River Red Gum and Yellow Box - are found within some of these parcels, the predominant woody vegetation is garden and street amenity plantings of exotic and non-indigenous native species, including species such as Desert Ash, Red Flowering Gum, Yellow Gum, Blue Gum, Silky Oak, Sugar Gum, River She-oak, Prickly-leaved Paperbark, Flax-leaf Paperbark, White Cedar, Southern Mahogany, Crepe Myrtle, Cypress, English Elm, European Beech, English Oak, London Plane, European Olive, White Willow and Spanish Swamp Oak, with the ground layer vegetation being a range of introduced annual and perennial species that is regularly mown and maintained, including species such as Sweet Vernal Grass, Great and Soft Brome, Flax-leaf Fleabane, Stinkwort, Annual Veldtgrass, Treasure Flower, Yorkshire Fog-grass, Barley Grass, Cat's Ear, Common Stork's-bill, Prickly Lettuce, Small-flowered Mallow, Red-flowered Mallow, Hensbit, Wimmera Ryegrass, Water Couch, Paspalum, Toowoomba Canary Grass, Wireweed, White and Subterranean Clover and Rat's-tail Fescue (60 % projective foliage cover, counting cured plant material); indigenous ground layer species such as Common Windmill Grass and Blown Grass, are found as scattered plants, but at very low abundance (<< 1 % projective foliage cover; Appendix A).

There are some areas of public land within the township, such as the Moyhu Recreation Reserve and the Memorial Hall reserve. Again, while some remnant indigenous trees – all mature River Red Gums - are found within some of these parcels, the predominant woody vegetation is garden amenity plantings of exotic, indigenous and non-indigenous native species, including species such as River Red Gum, Desert Ash, Red Flowering Gum, Yellow Gum, Southern Mahogany, English Elm, English Oak, London Plane and Spanish Swamp Oak, with the ground layer vegetation being a range of introduced annual and perennial species that is regularly mown and maintained, with a similar composition as that outlined above for the township more general (see Appendix A).

The Boggy Creek corridor does contain a more-or-less continuous canopy of remnant mostly mature trees, interspersed with a range of typical woody trees and shrubs, including a very sparse layer of indigenous Silver Wattle, Blackwood, Hedge and Ovens Wattle, Tree Violet, Burgan and Sweet Bursaria, and a dense layer of woody weeds, such as Black Locust, Poplar, White Willow, Blackberry and Sweet Briar, and a dominant introduced ground layer of species including St. John's Wort, Prickly Lettuce, Small-flowered Mallow, Curled Dock, Stinkwort, Flax-leaf Fleabane, Milk Thistle, Toowoomba Canary Grass, Cocksfoot, Water Couch, Paspalum, Great Brome, Yorkshire Fog-grass, Wild Oat, Cleavers, Wimmera Ryegrass and Barley Grass (90 % projective foliage cover, counting cured plant material); indigenous ground layer species such as Common Windmill Grass, *Juncus* spp., False Loosestrife, Common Reed, Cumbungi, Common Tussock Grass, Rigid Panic, Curly Windmill

Grass and Blown Grass, are found as scattered plants or small patches, but at low abundance (5 % projective foliage cover; Appendix A).



Plate 4-2 Views across the investigation area: looking east along Bartley Street (top left), looking west along Bartley Street (top right), the Moyhu-Meadow Creek road near the intersection (middle left), looking north along the eastern boundary (middle right), looking south-west across the south-eastern section (bottom left), and looking across the south-eastern corner (bottom right). Pertinent trees are numbered in white.

Sawmill Lane (south of Bartley Street) does retain some scattered trees and patches of remnant mature trees – a mixture of River Red Gum, Grey Box, Yellow Box, White Box and Long-leaved Box - with a wholly introduced ground layer of Toowoomba Canary Grass, Cocksfoot, Water Couch,

Paspalum, Great Brome, Yorkshire Fog-grass, Wild Oat, Wimmera Ryegrass and Barley Grass (95 % projective foliage cover, counting cured plant material; Appendix A).



Plate 4-3

Views across the investigation area: looking north from the Memorial Hall reserve (top left), looking west from near the Bowls Club (top right), the looking south-east across the north central area (middle left), looking south-west across the north-eastern section (middle right), looking north-east across the north-eastern corner (bottom left), and looking across the central eastern section (bottom right).

Pertinent trees are numbered in white.

The Boggy Creek corridor and the two patches on Sawmill Lane are four of the six native vegetation *Patches* identified across the area (see mapping in Appendix E for their locations), all based on canopy cover, the predominant composition of which are briefly described below:



Plate 4-4 Views of the plantations of the investigation area: Plantation 1 (top left),
Plantation 2 (top middle), Plantation 3 (top right), Plantation 4 (middle left),
Plantations 5 and 6 (right to left; middle middle), Plantation 8 (middle right),
Plantation 9 (bottom left), and Plantation 10 (bottom right).

- Patch A A patch of juvenile River Red Gum found within the Moyhu Recreation Reserve;
- Patch B Found on Sawmill Lane and composed of mature River Red Gum and Yellow Box (as described above);
- Patch C Found on Sawmill Lane and composed of mature River Red Gum, Yellow Box, White Box and Long-leaved Box (as described above);
- Patch D Found along the Boggy Creek corridor on the north eastern boundary of the area, and composed of mature River Red Gum, Blackwood, Silver Wattle, and dense woody weeds Box Elder, Black Locust, White Willow and Blackberry (as described above);
- Patch E Found along the Boggy Creek corridor on the south-eastern boundary of the area, and composed of mature River Red Gum, Blackwood, Silver Wattle, and dense woody weeds White Willow, Sweet Briar and Blackberry (as described above);
- Patch F Found in the north-eastern corner of the area within a grazing paddock, and is of mature River Red Gum.

The six identified native vegetation *Patches* were all based on canopy cover; there were no identified native vegetation *Patches* across the investigation area defined because of their perennial understorey cover. This is not a surprise given the extent of modification and disturbance across the area.

Victorian Biodiversity Atlas, NatureKit and Natters of National Environmental Significance searches revealed that there were records of seven (7) threatened flora recorded or likely to occur within a 10 km radius; however, likelihood analysis based on the significant site disturbance, on-going management practices, and available habitat of the assessed area, indicates that none of these species were likely to be found across the site or would recruit into it (DELWP 2022c, DAWE 2022; Appendix D).

Matters of National Environmental Significance searching also identified as the nationally critically endangered *White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland* community and the nationally endangered *Grey Box Grassy Woodlands and Derived Native Grasslands of South-eastern Australia* and the *Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions* communities occur within a 10 km radius of the site (DAWE 2022). No Buloke were found across the site, while some White Box, Yellow Box and Grey Box individuals were found. It is likely that the assessed area would have been a Yellow Box-Grey Box-White Box-River Red Gum mixed woodland before pre-European settlement; however, only scattered remnant tree individuals are now found as remnants of this community.

4.2 Fauna

There were 15 species of bird observed or their presence inferred during the assessment period.

There were no threatened species observed (DELWP 2021).

The species that were noted are typically those observed in peri-urban environments, such as the indigenous Eastern Grey Kangaroo, Australian Magpie, Australian King-parrot, Crimson Rosella, Crested Pigeon, Sulphur-crested Cockatoo, Galah, Noisy Miner, Willie Wagtail and Magpie-lark, and the introduced Common Blackbird, Common Mynah, House Sparrow, European Rabbit and Brown Hare. Feral/semi-domestic/domestic cats, Red Foxes and domestic/semi-domestic dogs were not observed, but are likely to be present, and the presence of these predators across the assessed area does severely limit the range of indigenous fauna that can potentially occupy it.

Notwithstanding the relatively low overall survey effort, the low observed or inferred species diversity is not surprising, given:

- significant and on-going disturbance within the assessed area with its role as either grazing
 paddocks, or as a manicured/landscaped gardens or street scapes, resulting in a simplified and
 sparse woody vegetation structure and no indigenous understorey dominated by compacted
 ground or manicured lawn, with no woody vegetation regeneration;
- that while there are large trees with abundant hollows scattered across the area and some
 patches of trees, there is very little fallen wood left on ground or standing dead trees across the
 assessed area, even within close proximity to the Boggy Creek corridor. The lack of fallen timber
 would limit reptiles and some bird species residency;
- the presence of domestic/semi-domestic dogs, Red Fox and feral/semi-domestic/domestic cat populations;
- while the assessed areas is in close proximity to the Boggy Creek corridor (on the eastern boundary of the area), and the King River corridor is within 1 km of the eastern boundary, for the majority of the area, there is no continuous vegetation connectivity to these corridors, and the areas between the corridor and the site are highly urbanised and/or cleared of native vegetation.

On this basis, there are minimal habitat opportunities for fauna in terms of residence (e.g. no timber on ground), and there are reduced opportunities in terms of a simplified vegetation structure (i.e. no

shrub or emerging tree layer, meaning fewer opportunities for food collection and shelter/protection).

Victorian Biodiversity Atlas, NatureKit and Matters of National Environmental Significance searches revealed that there were records of thirty five (35) threatened fauna within a 10 km radius (Appendix D; DELWP 2022c and DAWE 2022). The likelihood of the presence of these species and their likelihood of utilisation of the investigation area was considered, and rated based on the prevailing habitat and habitat quality of the area, the habitat preferences for the species, the poor landscape connectivity, currency of known records for species, and the composition and structure of the indigenous vegetation (Appendix D). On this basis, it was considered that the available habitat — the scattered paddock trees, and specifically the patches of trees along Boggy Creek, and to a lesser extent, Sawmill Lane - were still appropriate for five (5) species that may still utilise them — Murray River Turtle, Painted Honeyeater, Squirrel Glider, Turquoise Parrot and White-throated Needletail. As the site has been predominantly cleared and modified, is poorly connected to larger remnant habitats, and does not contain significant riparian or aquatic habitat, the other 30 species are unlikely to be present (Appendix D).

It can be reasonably assumed that there is some likelihood that the 5 listed threatened species have some likelihood of utilising the scattered paddock trees, patches of trees along Boggy Creek, and to a lesser extent, Sawmill Lane, infrequently for transit or foraging/hunting on an opportunistic basis.

4.3 Significant Trees

A total of 517 trees and shrubs were assessed across the investigation area.

The location of all the 517 assessed trees and shrubs can be seen in the maps in Appendix E, and the characteristics of all trees found in the table in Appendix C.

As indicated, access to freehold land was limited to one property in the west of the investigation area, and so when required, appropriate observations of the vegetation of properties were made from the fence line of an adjacent property, from public land, or from a roadside. As a consequence of this relative lack of access, there were some sections of the investigation area that were not able to be observed from close proximity.

House blocks and their associated gardens were not assessed, and trees within plantations and native vegetation patches were not separately assessed. Prominent trees within these blocks were identified and located from an adjacent property, from public land, or from a roadside wherever possible.

Of the 517 trees and shrubs assessed:

- 155 are indigenous remnant trees;
 - 130 are remnant River Red Gum, of which 94 are Large Trees according to the pertinent EVC benchmark diameter (see Appendix B), and of which 5 are standing dead trees (Trees 1, 49, 58, 151 and 229). Only twenty one of these trees are found within the small parcels within the town, with the remainder being scattered trees on rural parcels;
 - 19 are remnant Yellow Box, of which 9 are Large Trees according to the pertinent EVC benchmark diameter (see Appendix B), with no standing dead trees. All of the Yellow Box are found within or in the vicinity of Sawmill Lane;
 - 4 are remnant Grey Box, all of which are Large Trees according to the pertinent EVC benchmark diameter (see Appendix B), with no standing dead trees;
 - 2 are remnant White Box, both of which are Large Trees according to the pertinent EVC benchmark diameter (see Appendix B), with no standing dead trees. Both of these individuals are found within or in the vicinity of Sawmill Lane;

- 32 are planted indigenous trees, all of which are River Red Gum, found mostly around the Moyhu Recreation Reserve or an adjacent parcel;
- 330 are planted or naturalised trees and shrubs, most of which are found as street plantings or within amenity plantings on smaller residential lots or on public land within the town;
 - 136 are planted Desert Ash;
 - 24 are planted English Oak;
 - 17 are planted Poplars;
 - 14 are planted Flax-leaf Paperbarks;
 - 11 are planted Spanish Swamp Oak;
 - 10 are planted Southern Mahogany;
 - 9 are planted London Plane;
 - 8 are planted Yellow Gum.

4.4 Patches

As indicated, the Boggy Creek corridor and the two patches on Sawmill Lane are four of the six native vegetation *Patches* identified across the area (see mapping in Appendix E for their locations), all based on canopy cover.

The Vegetation Quality Assessment of the designated *Patches* has been determined by Steve Hamilton (VQA Competency HH129) according to DSE (2004).

The pertinent characteristics and Habitat Scores for these patches are briefly described below:

- Patch A A patch of 0.06 ha of only juvenile River Red Gum found within the Moyhu Recreation Reserve, and a Habitat Score of 17/100 has been determined;
- Patch B A patch of 0.22 ha found on Sawmill Lane and composed of mature River Red Gum and Yellow Box (as described above). Six Large Trees, according to the pertinent EVC benchmark diameter, are found in this patch, and a Habitat Score of 21/100 has been determined;
- Patch C A patch of 0.34 ha found on Sawmill Lane and composed of mature River Red Gum, Yellow Box, White Box and Long-leaved Box (as described above). Eleven Large Trees, according to the pertinent EVC benchmark diameter, are found in this patch, and a Habitat Score of 21/100 has been determined;
- Patch D A patch of 2.28 ha found along the Boggy Creek corridor on the north-eastern boundary of the area, and composed of mature River Red Gum, Blackwood, Silver Wattle, and dense woody weeds Box Elder, Black Locust, White Willow and Blackberry (as described above). At least 30 Large Trees, according to the pertinent EVC benchmark diameter, are found in this patch, and a Habitat Score of 39/100 has been determined;
- Patch E A patch of 1.35 ha found along the Boggy Creek corridor on the south-eastern boundary of the area, and composed of mature River Red Gum, Blackwood, Silver Wattle, and dense woody weeds White Willow, Sweet Briar and Blackberry (as described above). At least 20 Large Trees, according to the pertinent EVC benchmark diameter, are found in this patch, and a Habitat Score of 39/100 has been determined;
- Patch F A patch of 0.13 ha found in the north-eastern corner of the area within a grazing paddock, and is of mature River Red Gum. Seven Large Trees, according to the pertinent EVC benchmark diameter, are found in this patch, and a Habitat Score of 26/100 has been determined.

As indicated, the six identified native vegetation *Patches* were all based on canopy cover; there were no identified native vegetation *Patches* across the investigation area defined because of their perennial understorey cover. This is not a surprise given the extent of modification and disturbance across the area.



Plate 4-5 Views of the native vegetation *Patches* of the investigation area: *Patch* A (top left), *Patch* B (top right), *Patch* C (middle left), *Patch* D (middle right), *Patch* E (bottom left), and *Patch* F (bottom right).

5. SUMMARY

In summary, the investigation area has been subject to a significant level of clearance, modification and disturbance, and while the area of investigation does not retain any indigenous understorey patches, the area still does retain a significant number of remnant scattered mature hollow-bearing trees, as well as the six defined patches of trees, five of which also contain a significant number of mature hollow-bearing trees.

As significant biodiversity assets within such a highly cleared landscape, these mature hollow-bearing trees are an irreplaceable resource within the area, that provide habitat for some indigenous fauna and continue to provide some landscape connectivity, and every effort should be made to retain these trees.

Under the *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017) there are two categories of native vegetation: *Scattered Trees* or *Patches*.

A *Patch* of native vegetation is either: an area of vegetation where at least 25% of the total perennial understorey plant cover is native, or any area with three or more native canopy trees where the drip line of each tree touches the drip line of at least one other tree, forming a continuous canopy, or any mapped wetland included in the current wetlands map, available in DELWP systems and tools and these areas were mapped (DELWP 2017).

A Scattered Tree is a native canopy tree that does not form part of a Patch (DELWP 2017).

The imposition of a *Vegetation Protection Overlay* across the investigation area – presumably through a separate pertinent schedule - would provide a greater level of protection for indigenous remnant trees within the township and its environs beyond the normal permitted native vegetation removal process for the *Native Vegetation Removal Regulations 2017*, as described in the *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP 2017), and would require development proponents to provide a greater justification for the removal of significant vegetation, and place more emphasis on the avoidance of impact on such vegetation.

6. REFERENCES

Bureau of Meteorology (2022). Wangaratta climate data for 12th January 2022. Retrieved 2nd March 2022 from: http://www.bom.gov.au/climate/dwo/202201/html/IDCJDW3081.202201.shtml

Cogger, H.G. (1996). Reptiles and Amphibians of Australia, 5th edition. Read Press, Sydney.

Department of Agriculture, Water and Environment (DAWE)(2022). Species Profile and Threats Database. Retrieved 2nd March 2022 from: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl

Department of Environment, Land, Water and Planning (DELWP)(2017). *Guidelines for the removal, destruction or lopping of native vegetation*. December 2017. Department of Environment, Land, Water and Planning, East Melbourne.

DELWP (2021). Flora and Fauna Guarantee Act 1988 - Threatened List. August 2021. Department of Environment, Land, Water and Planning, East Melbourne.

DELWP (2022a). EVC bioregional conservation status and benchmark data. Retrieved 2nd March 2022 from:

http://www.dse.vic.gov.au/DSE/nrence.nsf/LinkView/6FB4886C86D894CACA256F1F00224A8C806 2D358172E420C4A256DEA0012F71C DELWP (2022b). DELWP NatureKit, Department of Environment, Land, Water and Planning. Retrieved 2nd March 2022 from: http://maps.biodiversity.vic.gov.au/viewer/?viewer=NatureKit

DELWP (2022c). Results from specific 10 km radius searches of the Victorian Biodiversity Atlas from the centre of the property. Retrieved 2nd March 2022 from: https://vba.dse.vic.gov.au/vba/login.jsp#/

DELWP (2022d). Various property planning reports. Retrieved 2nd March 2022 from: http://services.land.vic.gov.au/maps/pmo.jsp

Department of Primary Industries (2008). *Declared Noxious Weeds – Listed by Common Name*. Landcare Note March 2008. Department of Primary Industries, East Melbourne.

Department of Sustainability and Environment (DSE)(2004). *Vegetation Quality Assessment Manual – Guidelines for Applying the Habitat Hectares Scoring Method*. Version 1.3. Department of Sustainability and Environment, East Melbourne.

Hero, J., Littlejohn, M. and Marantelli, G. (1991). *Frogwatch Field Guide to Victorian Frogs*. Department of Natural Resources and Environment, Melbourne.

Hnatiuk, R.J. (1990). *Census of Australian Vascular Plants. Australian Flora and Fauna Series Number* 11. Bureau of Flora and Fauna, Canberra.

Menkhorst, P. (ed.)(1995). *Mammals of Victoria. Distribution, Ecology and Conservation*. Oxford University Press, Melbourne.

Royal Botanic Gardens Victoria (2022). Flora of Victoria On-line. https://vicflora.rbg.vic.gov.au/

Simpson, K. and Day, N. (1998). *The Claremont Field Guide to the Birds of Australia*, 5th edition. Penguin Books, Sydney.

Triggs, B. (1996). *Tracks, Scats and Other Traces: a Field Guide to Australian Mammals*. Oxford University Press, Melbourne.

Walsh, N.G. and Entwisle, T.J. (eds)(1994). Flora of Victoria. Volume 2. Ferns, Conifers, and Monocotyledons. Inkata Press.

Walsh, N.G. and Entwisle, T.J. (eds)(1996). Flora of Victoria. Volume 3. Dicotyledons. Winteraceae to Myrtaceae. Inkata Press.

Walsh, N.G. and Entwisle, T.J. (eds)(1999). Flora of Victoria. Volume 4. Dicotyledons. Comaceae to Asteraceae. Inkata Press.

6.1 Personal Communication

Britt, Justin (2022). Strategy Planner, Rural City of Wangaratta.

APPENDIX A FLORA INVENTORY OF THE INVESTIGATION AREA

Vascular flora have been recorded for presence on the basis of the assessed area using a cover-abundance scale that is shown in the Table immediately below.

An asterisk denotes an introduced species.

Each plant species present were assessed for cover-abundance using the scale outlined below. Nomenclature and taxonomy of plants based variously on Hnatiuk (1990), and Walsh and Entwistle (1994, 1996 and 1999).

Visual assessment of cover/abundance						
Symbol	Description					
0	rare, cover < 5%					
1	Uncommon, cover < 5 %					
2	Very common, cover < 5 % or cover 5-25 % with any number of individuals					
3	Cover 25-50 % with any number of individuals					
4	Cover 50-75 % with any number of individuals					
5	Cover 75-100 % with any number of individuals					

Common name	Scientific name	Lifeform#	Rural land	Town land	Tree patches
Cootamundra Wattle	Acacia baileyana*	MS		1	
Silver Wattle	Acacia dealbata	MS			1
Blackwood	Acacia melanoxylon	MS			1
Hedge Wattle	Acacia paradoxa	MS			+
Ovens Wattle	Acacia pravissima	MS			1
Box Elder	Acer negundo*	Т			1
Sweet Vernal Grass	Anthoxanthum odoratum*	MTG	2	2	2
Capeweed	Arctotheca calendula*	МН	1	1	1
Spear-grasses	Austrostipa spp.	MTG	+		
Wild Oat	Avena fatua*	LTG	1	1	1
Kurrajong	Brachychiton populneus*	Т		+	
Large Quaking-grass	Briza maxima*	MTG		1	1

Common name	Scientific name	Lifeform#	Rural land	Town land	Tree patches
Prairie Grass	Bromus catharticus*	MTG	1		2
Great Brome	Bromus diandrus*	LTG	2	1	2
Soft Brome	Bromus mollis*	MTG	2	1	2
Sweet Bursaria	Bursaria spinosa	MS			+
Shepherd's Purse	Capsella bursa-pastoris*	LH	1		1
Slender Thistle	Carduus pycnocephalus*	LH	+	1	1
Chestnut (planted)	Castanea sativa*	Т		1	
River She-oak (planted)	Casuarina cunninghamii*	Т		1	
Windmill Grass	Chloris truncata	MTG	1	1	1
Spear Thistle	Cirsium vulgare*	LH	1	1	2
Flax-leaf Fleabane	Conyza bonariensis*	LH	1	2	2
Red Flowering Gum (planted)	Corymbia ficifolia*	Т		+	
Hawthorn	Crataegus monogyna*	Т			1
Cypress (planted)	Cupressus spp.*	Т		1	
Cocksfoot	Dactylis glomerata*	LTG	2	+	2
Stinkwort	Dittrichia graveolens*	LH	1	1	1
Paterson's Curse	Echium plantigineum*	MH	1		
Annual Veldtgrass	Ehrharta longifolia*	MTG		2	
Curly Windmill Grass	Enteropogon acicularis	MTG	1		+
Common Love-grass	Eragrostis brownii	MTG	1		
Common Storksbill	Erodium cicutarium*	MH	1	1	
White Box	Eucalyptus albens	Т	1		
Southern Mahogany (planted)	Eucalyptus botryoides*	Т		1	
River Red Gum (remnant)	Eucalyptus camaldulensis	Т	2	1	2
River Red Gum (planted)	Eucalyptus camaldulensis	Т	2	1	
Sugar Gum (planted)	Eucalyptus cladocalyx*	Т		+	

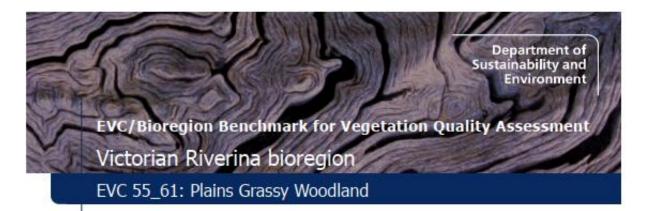
Common name	Scientific name	Lifeform#	Rural land	Town land	Tree patches
Long-leaved Box (remnant)	Eucalyptus goniocalyx	Т			+
Yellow Gum (planted)	Eucalyptus leucoxylon*	Т		1	
Yellow Box (remnant)	Eucalyptus melliodora	Т	1	2	1
Grey Box (remnant)	Eucalyptus microcarpa	Т			1
European Beech (planted)	Fagus sylvatica*	Т		1	
Desert Ash (planted/naturalised)	Fraxinus spp.*	Т	2	2	2
Cleavers	Galium aparine*	SC			1
Treasure Flower	Gazania rigens*	МН		2	
Silky Oak (planted)	Grevillea robusta*	Т		1	
Common Heliotrope	Heliotropium europeum*	МН	1	1	1
Ox's Tongue	Helminthotheca echioides*	LH		1	1
Yorkshire Fog-grass	Holcus lanatus*	MTG	2	1	2
Barley Grass	Hordeum leporinum*	MTG	2	2	2
St. John's Wort	Hypericum performatum*	МН	1	1	1
Cat's Ear	Hypochaeris radicata*	SH	2	2	2
Rush	Juncus spp.	LTG	1		2
Burgan	Kunzea ericoides	MS			+
Blown Grass	Lachnagrostis filiformis	MTG	1	1	1
Prickly Lettuce	Lactuca serriola*	LH	+	2	2
Crepe Myrtle (planted)	Lagerstroemia indica*	MS		2	
Hensbit	Lamium amplexicaule*	МН	2	2	+
Privet	Ligustrum sp.*	MS		1	
Perennial Ryegrass	Lolium perenne*	MTG	1		
Wimmera Ryegrass	Lolium rigidum*	MTG	2	2	2
African Boxthorn	Lycium ferocissimum*	MS		+	+
False Loosestrife	Lythrum hyssopifolia	SH	1		1

Common name	Scientific name	Lifeform#	Rural land	Town land	Tree patches
Small-flowered Mallow	Malva parviflora*	MTG	1	2	2
Burr Medic	Medicago polymorpha*	МН	1		
Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*	MS		2	
Prickly-leaved Paperbark (planted)	Melaleuca stypheloides*	MS		2	
White Cedar (planted)	Melia azedarach*	Т		+	
Tree Violet	Melicytus dentatus	MS			+
Weeping Grass	Microlaena stipoides	MNG	1		
Red-flowered Mallow	Modiola caroliniana*	SH		1	
Paspalum	Paspalum dilitatum*	MNG	2	2	2
Water Couch	Paspalum distichum*	MNG	2	2	2
Toowoomba Canary Grass	Phalaris aquatica*	LTG	2	1	3
Date Palm (planted)	Phoenix dactylifera*	MS		+	
Common Reed	Phragmites australis	LNG			1
Plantain	Plantago lanceolata*	MH	1	2	
London Plane (planted)	Platanus x acerifolius*	Т		1	
Common Tussock Grass	Poa labillardiera	LTG			+
Wireweed	Polygonum aviculare*	МН	1	2	
Poplar (planted/naturalised)	Populus spp.*	Т	2	2	2
Prunus (planted)	Prunus spp.*	MS		1	
Spanish Swamp Oak (planted)	Quercus palustris*	Т		1	
English Oak (planted)	Quercus robur*	Т		2	
Black Locust (planted)	Robinia pseudoacacia*	Т	1	1	
Sweet Briar	Rosa rubiginosa*	MS	+	1	2
Blackberry	Rubus fruticosus complex*	MS		+	2
Swamp Dock	Rumex brownii	МН	+		1
Curled Dock	Rumex crispus*	LH	1	1	2

Common name	Scientific name	Lifeform#	Rural land	Town land	Tree patches
Wallaby-grasses	Rytidosperma spp.	MTG	+		1
White Willow (planted/naturalised)	Salix alba*	Т		1	2
Weeping Willow (planted/naturalised)	Salix babylonica*	Т		+	1
Peppercorn Tree	Schinus molle*	Т		+	+
Milk Thistle	Sonchus oleraceus*	МН	+	1	1
White Clover	Trifolium repens*	МН	1	1	2
Subterranean Clover	Trifolium subterraneum*	МН	2	1	
Cumbungi	Typha sp.	LNG			1
English Elm (planted)	Ulmus procera*	Т		1	
Rat's Tail Fescue	Vulpia myuros*	MTG	2	1	
Rigid Panic	Walwhalleya proluta	MTG	+		+

[#]abbreviations for lifeform for indigenous species are T = tree, MS = medium shrub, SS = small shrub, LH = large herb, MH = medium herb, SH = small herb, LTG = large tufted graminoid, MTG = medium tufted graminoid, STG = small tufted graminoid, MNG = medium non-tufted graminoid, SC = scrambler/climber, GF = ground fern, P = parasite.

APPENDIX B EVC BENCHMARK DESCRIPTIONS



Description:

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.

Large trees:

 Species
 DBH(cm)
 #/ha

 Eucalyptus spp.
 80 cm
 10 / ha

Tree Canopy Cover:

%cover Character Species Common Name
10% Eucalyptus camaldulensis River Red Gum
Yellow Box

Understorey:

onder store y.			
Life form	#Spp	%Cover	LF code
Immature Canopy Tree	1000	5%	IT
Understorey Tree or Large Shrub	1	5%	T
Medium Shrub	3	10%	MS
Small Shrub	2	1%	SS
Prostrate Shrub	1	1%	PS
Large Herb	3	5%	LH
Medium Herb	8	15%	MH
Small or Prostrate Herb	3	5%	SH
Large Tufted Graminoid	2	5%	LTG
Medium to Small Tufted Graminoid	12	45%	MTG
Medium to Tiny Non-tufted Graminoid	2	5%	MNG
Bryophytes/Lichens	na	10%	BL
Soil Crust	na	10%	S/C

LF Code MS	Species typical of at least part of EVC range Acada pycnantha	Common Name Golden Wattle
MS	Acacia paradoxa	Hedge Wattle
MS	Acacia acinacea s.l.	Gold-dust Wattle
MS	Bursaria spinosa	Sweet Bursaria
SS	Pimelea humilis	Common Rice-flower
PS	Astroloma humifusum	Cranberry Heath
PS	Bossiaea prostrata	Creeping Bossiaea
MH	Oxalis perennans	Grassland Wood-sorrel
MH	Chrysocephalum apiculatum s.l.	Common Everlasting
MH	Acaena echinata	Sheep's Burr
MH	Eryngium ovinum	Blue Devil
SH	Dichondra repens	Kidney-weed
LTG	Austrostipa spp.	Spear-grass
MTG	Themeda triandra	Kangaroo Grass
MTG	Elymus scaber var. scaber	Common Wheat-grass
MTG	Austrodanthonia setacea	Bristly Wallaby-grass
MTG	Austrodanthonia racemosa var. racemosa	Stiped Wallaby-grass
MNG	Microlaena stipoides var. stipoides	Weeping Grass



EVC 55_61: Plains Grassy Woodland - Victorian Riverina bioregion

Recruitment:

Continuous

Organic Litter:

10 % cover

Logs: 10 m/0.1 ha.

		п			

weeamess:				
LF Code	Typical Weed Species	Common Name	Invasive	Impact
MS	Lycium ferocissimum	African Box-thorn	high	high
LH	Cirsium vulgare	Spear Thistle	high	high
LH	Sonchus oleraceus	Common Sow-thistle	high	low
LH	Plantago lanceolata	Ribwort	high	low
MH	Hypochoeris radicata	Cat's Ear	high	low
LNG	Holcus lanatus	Yorkshire Fog	high	high
MTG	Vulpia bromoides	Squirrel-tail Fescue	high	low
MTG	Romulea rosea	Onion Grass	high	low
MTG	Briza minor	Lesser Quaking-grass	high	low
MTG	Briza maxima	Large Quaking-grass	high	low

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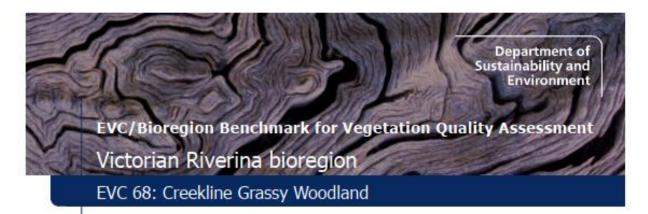
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Description:

Eucalypt-dominated woodland to 15 m tall with occasional scattered shrub layer over a mostly grassy/sedgy to herbaceous ground-layer. Occurs on low-gradient ephemeral to intermittent drainage lines, typically on fertile colluvial/alluvial soils, on a wide range of suitably fertile geological substrates. These minor drainage lines can include a range of graminoid and herbaceous species tolerant of waterlogged soils, and are presumed to have sometimes resembled a linear wetland or system of interconnected small ponds.

Large trees: Species Eucalyptus spp. DBH(cm) #/ha 15 / ha 80 cm

Tree Canopy Cover:

%cover	Character Species	Common Name
15%	Eucalyptus camaldulensis	River Red-gum
nderstorev:		

Un

Life form	#Spp	%Cover	LF code
Immature Canopy Tree	1000000	5%	IT
Understorey Tree or Large Shrub	1	5%	T
Medium Shrub	4	10%	MS
Small Shrub	3	5%	SS
Large Herb	2	5%	LH
Medium Herb	9	15%	MH
Small Herb*	3	5%	SH
Large Tufted Graminoid	2	10%	LTG
Large Non-tufted Graminoid	1	5%	LNG
Medium to Small Tufted Graminoid	16	35%	MTG
Medium to Tiny Non-tufted Graminoid	3	5%	MNG
Bryophytes/Lichens	na	10%	BL

LF Code	Species typical of at least part of EVC range	Common Name Silver Wattle
Ť	Acacia melanoxylon	Blackwood
MS	Acacia pycnantha	Golden Wattle
MS	Melaleuca parvistaminea	Rough-barked Honey-myrtle
MS	Acacia retinodes var. retinodes	Wilrida
SS	Pimelea humilis	Common Rice-flower
PS	Astroloma humifusum	Cranberry Heath
LH	Senecio tenuiflorus	Slender Fireweed
LH	Senecio quadridentatus	Cottony Fireweed
MH	Centipeda cunninghamii	Common Sneezeweed
MH	Hypericum gramineum	Small St John's Wort
SH	Dichondra repens	Kidneyweed
LTG	Carex appressa	Tall Sedge
LNG	Phragmites australis	Common Reed
MTG	Poa labillardierei	Common Tussock-grass
MTG	Elymus scaber var. scaber	Common Wheat-grass
MTG	Juncus spp.	Rush
MTG	Cyperus spp.	Flat-sedge
MNG	Microlaena stipoides var. stipoides	Weeping Grass



EVC 68: Creekline Grassy Woodland - Victorian Riverina bioregion

Recruitment:

Continuous

Organic Litter:

40 % cover

Logs:

30 m/0.1 ha.

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Typical Weed Species	Common Name	Invasive	Impact
Cirsium vulgare	Spear Thistle	high	high
Sonchus oleraceus	Common Sow-thistle	high	low
Hypochoeris radicata	Cat's Ear	high	low
Anagallis arvensis	Pimpernel	high	low
Hypochoeris glabra	Smooth Cat's-ear	high	low
Gallium murale	Small Goosegrass	high	low
Oxalis pes-caprae	Soursob	high	high
Juncus acutus	Spiny Rush	high	high
Phalaris aquatica	Toowoomba Canary-grass	high	high
Briza maxima	Large Quaking-grass	high	low
Briza minor	Lesser Quaking-grass	high	low
Romulea rosea	Onion Grass	high	low
Vulpia bromoides	Squirrel-tail Fescue	high	low
Bromus hordeaceus ssp. hordeaceus	Soft Brome	high	low
Aira elegantissima	Delicate Hair-grass	high	low
Vulpia muralis	Wall Fescue	high	low
Bromus madritensis	Madrid Brome	high	low
	Typical Weed Species Cirsium vulgare Sonchus oleraceus Hypochoeris radicata Anagallis arvensis Hypochoeris glabra Galium murale Oxalis pes-caprae Juncus acutus Phalaris aquatica Briza maxima Briza minor Romulea rosea Vulpia bromoides Bromus hordeaceus ssp. hordeaceus Aira elegantissima Vulpia muralis	Cirsium vulgare Sonchus oleraceus Hypochoeris radicata Anagaliis arvensis Hypochoeris glabra Galium murale Ovalis pes-caprae Juncus acutus Phalaris aquatica Briza maxima Briza minor Romulea rosea Vulpia bromoides Bromus hordeaceus Ara elegantissima Vulpia muralis Common Sow-thistile Co	Typical Weed Species Cirsium vulgare Sonchus oleraceus Hypochoeris radicata Anagallis arvensis Hypochoeris glabra Galium murale Ovalis pes-caprae Juncus acutus Spiny Rush Phalaris aquatica Briza maxima Briza minor Romulea rosea Uulpia bromoides Bromus hordeaceus ssp. hordeaceus Air elegantissima Uulpia muralis Common Name Invasive high high high Pimpernel high Pimpernel high Pimpernel high Smooth Cat's-ear high Soursob high Spiny Rush Toowoomba Canary-grass high Large Quaking-grass high Romulea rosea Union Grass Squirrel-tail Fescue high Air a elegantissima Vulpia muralis Vulpia muralis Vul Fescue high Vulpia muralis Vul Fescue high

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APPENDIX C SIGNIFICANT TREE LOCATIONS

Tree		Calantifian	Dia	Tree le	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
1	River Red Gum (remnant)	Eucalyptus camaldulensis	75 (dead)	443670	5952022
2	River Red Gum (remnant)	Eucalyptus camaldulensis	150	443641	5952015
3	River Red Gum (remnant)	Eucalyptus camaldulensis	140	443660	5952060
4	River Red Gum (remnant)	Eucalyptus camaldulensis	160	443712	5952112
5	River Red Gum (remnant)	Eucalyptus camaldulensis	160	443779	5952156
6	River Red Gum (remnant)	Eucalyptus camaldulensis	150	443725	5952022
7	River Red Gum (remnant)	Eucalyptus camaldulensis	180	443724	5951980
8	River Red Gum (remnant)	Eucalyptus camaldulensis	160	443686	5951955
9	River Red Gum (remnant)	Eucalyptus camaldulensis	170	443663	5951970
10	River Red Gum (remnant)	Eucalyptus camaldulensis	180	443772	5952021
11	Desert Ash (planted)	Fraxinus spp.*		443896	5952036
12	Desert Ash (planted)	Fraxinus spp.*		443912	5952031
13	River Red Gum (remnant)	Eucalyptus camaldulensis	190	443872	5951872
14	Poplar (planted)	Populus spp.*		443761	5951908
15	Poplar (planted)	Populus spp.*		443769	5951892
16	Poplar (planted)	Populus spp.*		443820	5951886
17	Poplar (planted)	Populus spp.*		443795	5951889
18	River Red Gum (remnant)	Eucalyptus camaldulensis	190	443923	5952000
19	River Red Gum (remnant)	Eucalyptus camaldulensis	60	443957	5951994
20	River Red Gum (planted)	Eucalyptus camaldulensis		443959	5951950
21	River Red Gum (planted)	Eucalyptus camaldulensis		443957	5951941
22	River Red Gum (planted)	Eucalyptus camaldulensis		443957	5951937
23	River Red Gum (planted)	Eucalyptus camaldulensis		443956	5951933
24	River Red Gum (planted)	Eucalyptus camaldulensis		443956	5951926
25	River Red Gum (planted)	Eucalyptus camaldulensis		443956	5951922
26	River Red Gum (planted)	Eucalyptus camaldulensis		443955	5951919
27	River Red Gum (planted)	Eucalyptus camaldulensis		443954	5951909
28	River Red Gum (planted)	Eucalyptus camaldulensis		443953	5951904
29	River Red Gum (planted)	Eucalyptus camaldulensis		443952	5951897
30	River Red Gum (remnant)	Eucalyptus camaldulensis	130	443990	5952016
31	Desert Ash (planted)	Fraxinus spp.*		443998	5951952
32	Desert Ash (planted)	Fraxinus spp.*		443997	5951949
33	Desert Ash (planted)	Fraxinus spp.*		443997	5951945
34	Desert Ash (planted)	Fraxinus spp.*		443996	5951942
35	Desert Ash (planted)	Fraxinus spp.*		443996	5951937
36	Desert Ash (planted)	Fraxinus spp.*		444007	5951936
37	Desert Ash (planted)	Fraxinus spp.*		444007	5951941
38	Desert Ash (planted)	Fraxinus spp.*		443977	5951932
39	Desert Ash (planted)	Fraxinus spp.*		443976	5951928
40	Desert Ash (planted)	Fraxinus spp.*		443976	5951924
41	Desert Ash (planted)	Fraxinus spp.*		443976	5951921
42	Desert Ash (planted)	Fraxinus spp.*		443968	5951920

Tree	0	C-ikifi	D :1	Tree le	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
43	Desert Ash (planted)	Fraxinus spp.*		443969	5951923
44	Desert Ash (planted)	Fraxinus spp.*		443969	5951926
45	Desert Ash (planted)	Fraxinus spp.*		443970	5951930
46	Desert Ash (planted)	Fraxinus spp.*		443970	5951933
47	River Red Gum (remnant)	Eucalyptus camaldulensis	180	443952	5952132
48	River Red Gum (remnant)	Eucalyptus camaldulensis	200	443963	5952134
49	River Red Gum (remnant)	Eucalyptus camaldulensis	130 (dead)	443546	5952109
50	English Oak (planted)	Quercus robur*		443550	5952110
51	River Red Gum (remnant)	Eucalyptus camaldulensis	75 (fallen)	443582	5952106
52	Grey Box (remnant)	Eucalyptus microcarpa	90	443515	5952267
53	Grey Box (remnant)	Eucalyptus microcarpa	80	443503	5952263
54	River Red Gum (remnant)	Eucalyptus camaldulensis	130	443418	5952258
55	River Red Gum (remnant)	Eucalyptus camaldulensis	95	443434	5952369
56	River Red Gum (remnant)	Eucalyptus camaldulensis	160	443499	5952476
57	River Red Gum (remnant)	Eucalyptus camaldulensis	110	443704	5952210
58	River Red Gum (remnant)	Eucalyptus camaldulensis	120D	443708	5952181
59	River Red Gum (remnant)	Eucalyptus camaldulensis	40	443906	5952173
60	River Red Gum (remnant)	Eucalyptus camaldulensis	55	443896	5952168
61	River Red Gum (remnant)	Eucalyptus camaldulensis	190	443597	5951938
62	River Red Gum (remnant)	Eucalyptus camaldulensis	130	443568	5951942
63	River Red Gum (remnant)	Eucalyptus camaldulensis	38/35/30/30	443534	5951934
64	River Red Gum (remnant)	Eucalyptus camaldulensis	18/15	443540	5951956
65	River Red Gum (remnant)	Eucalyptus camaldulensis	80	443547	5951986
66	River Red Gum (remnant)	Eucalyptus camaldulensis	140	443552	5951874
67	Yellow Box (remnant)	Eucalyptus melliodora	25	443687	5951868
68	European Olive (planted)	Olea europea*		443699	5951899
69	European Olive (planted)	Olea europea*		443708	5951893
70	European Olive (planted)	Olea europea*		443701	5951883
71	Yellow Box (remnant)	Eucalyptus melliodora	20	443691	5951868
72	Yellow Box (remnant)	Eucalyptus melliodora	25	443693	5951861
73	River Red Gum (remnant)	Eucalyptus camaldulensis	110	443650	5951835
74	Cypress (planted)	Cupressus spp.*		443565	5951807
75	Cypress (planted)	Cupressus spp.*		443564	5951798
76	Cypress (planted)	Cupressus spp.*		443564	5951793
77	Cypress (planted)	Cupressus spp.*		443563	5951787
78	Cypress (planted)	Cupressus spp.*		443562	5951783
79	Yellow Box (remnant)	Eucalyptus melliodora	60	443507	5951568
80	River Red Gum (remnant)	Eucalyptus camaldulensis	120	443510	5951552
81	Southern Mahogany (planted)	Eucalyptus botryoides*		443329	5951976
82	Southern Mahogany (planted)	Eucalyptus botryoides*		443328	5951963
83	Southern Mahogany (planted)	Eucalyptus botryoides*		443324	5951992
84	Southern Mahogany (planted)	Eucalyptus botryoides*		443319	5951981

Tree	0	Colombis'	Diament 1	Tree lo	ee location ²	
number	Common name	Scientific name	Diameter ¹	Easting	Northing	
85	Southern Mahogany (planted)	Eucalyptus botryoides*		443315	5951969	
86	Southern Mahogany (planted)	Eucalyptus botryoides*		443314	5951960	
87	Southern Mahogany (planted)	Eucalyptus botryoides*		443318	5951954	
88	Southern Mahogany (planted)	Eucalyptus botryoides*		443313	5951947	
89	River Red Gum (planted)	Eucalyptus camaldulensis		443311	5951937	
90	English Elm (planted)	Ulmus procera*		443343	5951963	
91	Southern Mahogany (planted)	Eucalyptus botryoides*		443341	5951948	
92	Southern Mahogany (planted)	Eucalyptus botryoides*		443339	5951937	
93	River Red Gum (planted)	Eucalyptus camaldulensis		443321	5952001	
94	River Red Gum (planted)	Eucalyptus camaldulensis		443322	5952008	
95	River Red Gum (planted)	Eucalyptus camaldulensis		443324	5952014	
96	River Red Gum (planted)	Eucalyptus camaldulensis		443325	5952019	
97	River Red Gum (planted)	Eucalyptus camaldulensis		443325	5952023	
98	River Red Gum (planted)	Eucalyptus camaldulensis		443326	5952027	
99	River Red Gum (planted)	Eucalyptus camaldulensis		443327	5952032	
100	River Red Gum (planted)	Eucalyptus camaldulensis		443331	5952043	
101	River Red Gum (planted)	Eucalyptus camaldulensis		443331	5952050	
102	River Red Gum (planted)	Eucalyptus camaldulensis		443333	5952055	
103	River Red Gum (planted)	Eucalyptus camaldulensis		443332	5952061	
104	River Red Gum (planted)	Eucalyptus camaldulensis		443332	5952069	
105	River Red Gum (planted)	Eucalyptus camaldulensis		443329	5952074	
106	River Red Gum (remnant)	Eucalyptus camaldulensis	140	443336	5952084	
107	River Red Gum (remnant)	Eucalyptus camaldulensis	130	443370	5952100	
108	London Plane (planted)	Platanus x acerifolius*		443432	5952048	
109	English Oak (planted)	Quercus robur*		443420	5952046	
110	Desert Ash (planted)	Fraxinus spp.*		443448	5952054	
111	Desert Ash (planted)	Fraxinus spp.*		443482	5952028	
112	Desert Ash (planted)	Fraxinus spp.*		443470	5952037	
113	English Oak (planted)	Quercus robur*		443398	5952032	
114	English Oak (planted)	Quercus robur*		443387	5952021	
115	Desert Ash (planted)	Fraxinus spp.*		443451	5951867	
116	Desert Ash (planted)	Fraxinus spp.*		443436	5951864	
117	Spanish Swamp Oak (planted)	Quercus palustris*		443422	5951865	
118	Spanish Swamp Oak (planted)	Quercus palustris*		443409	5951867	
119	Spanish Swamp Oak (planted)	Quercus palustris*		443395	5951871	
120	Spanish Swamp Oak (planted)	Quercus palustris*		443490	5951857	
121	Spanish Swamp Oak (planted)	Quercus palustris*		443483	5951858	
122	Spanish Swamp Oak (planted)	Quercus palustris*		443483	5951865	
123	Spanish Swamp Oak (planted)	Quercus palustris*		443490	5951864	
124	Spanish Swamp Oak (planted)	Quercus palustris*		443484	5951870	
125	Desert Ash (planted)	Fraxinus spp.*		443463	5951873	
126	London Plane (planted)	Platanus x acerifolius*		443472	5951882	

Tree		0 1 110	5: . 1	Tree le	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
127	Desert Ash (planted)	Fraxinus spp.*		443386	5951879
128	Desert Ash (planted)	Fraxinus spp.*		443363	5951882
129	Desert Ash (planted)	Fraxinus spp.*		443370	5951875
130	Desert Ash (planted)	Fraxinus spp.*		443309	5951873
131	Desert Ash (planted)	Fraxinus spp.*		443319	5951872
132	Desert Ash (planted)	Fraxinus spp.*		443327	5951870
133	Desert Ash (planted)	Fraxinus spp.*		443305	5951895
134	River Red Gum (planted)	Eucalyptus camaldulensis		443312	5951894
135	River Red Gum (planted)	Eucalyptus camaldulensis		443314	5951908
136	River Red Gum (planted)	Eucalyptus camaldulensis		443314	5951922
137	Yellow Box (remnant)	Eucalyptus melliodora	40/30/25/25	443314	5951832
138	Yellow Box (remnant)	Eucalyptus melliodora	35/25/20/15	443320	5951835
139	Yellow Box (remnant)	Eucalyptus melliodora	30/20/15	443319	5951829
140	Yellow Box (remnant)	Eucalyptus melliodora	50/40/35	443312	5951813
141	River Red Gum (remnant)	Eucalyptus camaldulensis	140	443290	5951800
142	Yellow Box (remnant)	Eucalyptus melliodora	60/15	443310	5951795
143	Yellow Box (remnant)	Eucalyptus melliodora	65/20	443305	5951784
144	River Red Gum (remnant)	Eucalyptus camaldulensis	90	443301	5951755
145	Yellow Box (remnant)	Eucalyptus melliodora	140	443303	5951744
146	River Red Gum (remnant)	Eucalyptus camaldulensis	80	443297	5951733
147	River Red Gum (remnant)	Eucalyptus camaldulensis	45/40	443295	5951714
148	Poplar (planted)	Populus spp.*		443293	5951827
149	Poplar (planted)	Populus spp.*		443296	5951839
150	Poplar (planted)	Populus spp.*		443291	5951847
151	River Red Gum (remnant)	Eucalyptus camaldulensis	100 (dead)	443572	5951594
152	River Red Gum (remnant)	Eucalyptus camaldulensis	120	443581	5951575
153	River Red Gum (remnant)	Eucalyptus camaldulensis	160	443587	5951517
154	White Box (remnant)	Eucalyptus albens	110	443374	5951535
155	White Willow (planted)	Salix alba*		443653	5951801
156	Desert Ash (planted)	Fraxinus spp.*		443668	5951767
157	Desert Ash (planted)	Fraxinus spp.*		443677	5951756
158	River Red Gum (remnant)	Eucalyptus camaldulensis	140	443688	5951608
159	Desert Ash (planted)	Fraxinus spp.*		443699	5951350
160	English Oak (planted)	Quercus robur*		443612	5951682
161	Desert Ash (planted)	Fraxinus spp.*		443602	5951674
162	Desert Ash (planted)	Fraxinus spp.*		443596	5951675
163	Desert Ash (planted)	Fraxinus spp.*		443592	5951675
164	Desert Ash (planted)	Fraxinus spp.*		443588	5951676
165	Desert Ash (planted)	Fraxinus spp.*		443583	5951676
166	Desert Ash (planted)	Fraxinus spp.*		443576	5951677
167	Desert Ash (planted)	Fraxinus spp.*		443570	5951677
168	English Oak (planted)	Quercus robur*		443615	5951797

Tree		0.1	5'1	Tree le	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
169	English Oak (planted)	Quercus robur*		443614	5951790
170	English Oak (planted)	Quercus robur*		443613	5951782
171	English Oak (planted)	Quercus robur*		443612	5951775
172	English Oak (planted)	Quercus robur*		443612	5951766
173	English Oak (planted)	Quercus robur*		443611	5951759
174	English Oak (planted)	Quercus robur*		443610	5951752
175	English Oak (planted)	Quercus robur*		443609	5951744
176	English Oak (planted)	Quercus robur*		443607	5951737
177	Desert Ash (planted)	Fraxinus spp.*		443631	5951803
178	Cypress (planted)	Cupressus spp.*		443863	5951808
179	Crepe Myrtle (planted)	Lagerstroemia indica*		443880	5951795
180	Crepe Myrtle (planted)	Lagerstroemia indica*		443872	5951796
181	Crepe Myrtle (planted)	Lagerstroemia indica*		443856	5951799
182	Crepe Myrtle (planted)	Lagerstroemia indica*		443848	5951799
183	Crepe Myrtle (planted)	Lagerstroemia indica*		443840	5951800
184	Crepe Myrtle (planted)	Lagerstroemia indica*		443832	5951801
185	Crepe Myrtle (planted)	Lagerstroemia indica*		443824	5951802
186	Crepe Myrtle (planted)	Lagerstroemia indica*		443809	5951804
187	Crepe Myrtle (planted)	Lagerstroemia indica*		443802	5951805
188	Crepe Myrtle (planted)	Lagerstroemia indica*		443899	5951793
189	Crepe Myrtle (planted)	Lagerstroemia indica*		443794	5951806
190	Crepe Myrtle (planted)	Lagerstroemia indica*		443779	5951808
191	Crepe Myrtle (planted)	Lagerstroemia indica*		443763	5951810
192	Crepe Myrtle (planted)	Lagerstroemia indica*		443757	5951810
193	Crepe Myrtle (planted)	Lagerstroemia indica*		443744	5951812
194	Crepe Myrtle (planted)	Lagerstroemia indica*		443734	5951814
195	Crepe Myrtle (planted)	Lagerstroemia indica*		443726	5951814
196	Prunus (planted)	Prunus spp.*		443813	5951853
197	Prunus (planted)	Prunus spp.*		443842	5951883
198	Prunus (planted)	Prunus spp.*		443850	5951882
199	Prunus (planted)	Prunus spp.*		443859	5951881
200	Prunus (planted)	Prunus spp.*		443832	5951882
201	Prunus (planted)	Prunus spp.*		443786	5951891
202	Prunus (planted)	Prunus spp.*		443811	5951888
203	Desert Ash (planted)	Fraxinus spp.*		444193	5951274
204	Desert Ash (planted)	Fraxinus spp.*		444215	5951271
205	Desert Ash (planted)	Fraxinus spp.*		444218	5951283
206	English Oak (planted)	Quercus robur*		444220	5951308
207	Desert Ash (planted)	Fraxinus spp.*		443947	5951369
208	Desert Ash (planted)	Fraxinus spp.*		443946	5951375
209	Desert Ash (planted)	Fraxinus spp.*		443944	5951385
210	Desert Ash (planted)	Fraxinus spp.*		443944	5951394

Tree	A	6.1	p *1	Tree le	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
211	Desert Ash (planted)	Fraxinus spp.*		443944	5951400
212	Desert Ash (planted)	Fraxinus spp.*		443944	5951408
213	Desert Ash (planted)	Fraxinus spp.*		443945	5951416
214	Poplar (planted)	Populus spp.*		444422	5951325
215	Yellow Box (remnant)	Eucalyptus melliodora	160	444270	5950930
216	Yellow Box (remnant)	Eucalyptus melliodora	120	444261	5950918
217	Yellow Box (remnant)	Eucalyptus melliodora	110	444270	5950909
218	Grey Box (remnant)	Eucalyptus microcarpa	90	443931	5951128
219	River Red Gum (remnant)	Eucalyptus camaldulensis	130	444320	5951816
220	Yellow Box (remnant)	Eucalyptus melliodora	140	444316	5951804
221	River Red Gum (remnant)	Eucalyptus camaldulensis	110	444304	5951803
222	River Red Gum (remnant)	Eucalyptus camaldulensis	60	444306	5951827
223	River Red Gum (remnant)	Eucalyptus camaldulensis	90	444293	5951829
224	English Elm (planted)	Ulmus procera*		444277	5951830
225	Desert Ash (planted)	Fraxinus spp.*		444263	5951832
226	Desert Ash (planted)	Fraxinus spp.*		444251	5951833
227	River Red Gum (remnant)	Eucalyptus camaldulensis	160	444199	5951854
228	Cypress (planted)	Cupressus spp.*		444218	5951891
229	River Red Gum (remnant)	Eucalyptus camaldulensis	60 (dead)	444205	5951908
230	River Red Gum (remnant)	Eucalyptus camaldulensis	120	444123	5951905
231	River Red Gum (remnant)	Eucalyptus camaldulensis	160	444144	5951923
232	Desert Ash (planted)	Fraxinus spp.*		444333	5952110
233	Desert Ash (planted)	Fraxinus spp.*		444330	5952101
234	Desert Ash (planted)	Fraxinus spp.*		444325	5952095
235	Poplar (planted)	Populus spp.*		444337	5952093
236	European Beech (planted)	Fagus sylvatica*		444339	5952079
237	River Red Gum (remnant)	Eucalyptus camaldulensis	150	444182	5952011
238	River Red Gum (remnant)	Eucalyptus camaldulensis	130	444229	5952036
239	Desert Ash (planted)	Fraxinus spp.*		444102	5952088
240	Desert Ash (planted)	Fraxinus spp.*		444103	5952072
241	Desert Ash (planted)	Fraxinus spp.*		444099	5952053
242	Desert Ash (planted)	Fraxinus spp.*		444125	5952033
243	Desert Ash (planted)	Fraxinus spp.*		444131	5952064
244	Desert Ash (planted)	Fraxinus spp.*		444133	5952082
245	Desert Ash (planted)	Fraxinus spp.*		444142	5952122
246	River Red Gum (planted)	Eucalyptus camaldulensis		444142	5952133
247	Blue Gum (planted)	Eucalyptus globulus*		444243	5952088
248	River Red Gum (remnant)	Eucalyptus camaldulensis	70	444286	5952084
249	Blue Gum (planted)	Eucalyptus globulus*		444240	5952067
250	Blue Gum (planted)	Eucalyptus globulus*		444242	5952059
251	Blue Gum (planted)	Eucalyptus globulus*		444260	5952090
252	Blue Gum (planted)	Eucalyptus globulus*		444241	5952050

Tree		Colombis'	Diament 1	Tree lo	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
253	English Elm (planted)	Ulmus procera*		444264	5952070
254	English Elm (planted)	Ulmus procera*		444265	5952079
255	River Red Gum (planted)	Eucalyptus camaldulensis		444110	5952138
256	River Red Gum (planted)	Eucalyptus camaldulensis		444108	5952127
257	European Olive (planted)	Olea europea*		444142	5952189
258	River Red Gum (remnant)	Eucalyptus camaldulensis	100	444123	5952246
259	River Red Gum (remnant)	Eucalyptus camaldulensis	180	444151	5952302
260	River Red Gum (remnant)	Eucalyptus camaldulensis	140	444149	5952285
261	River Red Gum (remnant)	Eucalyptus camaldulensis	140	444194	5952372
262	River Red Gum (remnant)	Eucalyptus camaldulensis	120	444082	5952429
263	River Red Gum (remnant)	Eucalyptus camaldulensis	140	444304	5952412
264	River Red Gum (remnant)	Eucalyptus camaldulensis	130	444225	5952570
265	River Red Gum (remnant)	Eucalyptus camaldulensis	90	444362	5952446
266	River Red Gum (remnant)	Eucalyptus camaldulensis	40/30	444430	5952475
267	River Red Gum (remnant)	Eucalyptus camaldulensis	60	444436	5952496
268	River Red Gum (remnant)	Eucalyptus camaldulensis	160	444425	5952498
269	River Red Gum (remnant)	Eucalyptus camaldulensis	60	444664	5952436
270	River Red Gum (remnant)	Eucalyptus camaldulensis	90	444678	5952455
271	River Red Gum (remnant)	Eucalyptus camaldulensis	120	444668	5952465
272	River Red Gum (remnant)	Eucalyptus camaldulensis	160	444642	5952452
273	River Red Gum (remnant)	Eucalyptus camaldulensis	85	444652	5952446
274	River She-oak (planted)	Casuarina cunninghamii*		443383	5951828
275	River She-oak (planted)	Casuarina cunninghamii*		443373	5951829
276	River She-oak (planted)	Casuarina cunninghamii*		443364	5951830
277	River She-oak (planted)	Casuarina cunninghamii*		443356	5951831
278	River She-oak (planted)	Casuarina cunninghamii*		443349	5951831
279	River She-oak (planted)	Casuarina cunninghamii*		443338	5951832
280	Poplar (planted)	Populus spp.*		443397	5951832
281	Poplar (planted)	Populus spp.*		443417	5951830
282	Poplar (planted)	Populus spp.*		443439	5951827
283	Poplar (planted)	Populus spp.*		443463	5951824
284	River She-oak (planted)	Casuarina cunninghamii*		443329	5951835
285	London Plane (planted)	Platanus x acerifolius*		443379	5951889
286	Desert Ash (planted)	Fraxinus spp.*		443373	5951902
287	White Cedar (planted)	Melia azedarach*		443356	5951906
288	Poplar (planted)	Populus spp.*		443336	5951898
289	London Plane (planted)	Platanus x acerifolius*		443352	5951922
290	River Red Gum (stump; remnant)	Eucalyptus camaldulensis		443322	5951945
291	Desert Ash (planted)	Fraxinus spp.*		443467	5952055
292	Desert Ash (planted)	Fraxinus spp.*		443490	5952053
293	Desert Ash (planted)	Fraxinus spp.*		443496	5952032
294	Desert Ash (planted)	Fraxinus spp.*		443495	5951994

Tree	Co	Calandida	Dia	Tree le	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
295	Desert Ash (planted)	Fraxinus spp.*		443501	5951975
296	Desert Ash (planted)	Fraxinus spp.*		443504	5951958
297	London Plane (planted)	Platanus x acerifolius*		443495	5952005
298	Desert Ash (planted)	Fraxinus spp.*		443490	5952018
299	River Red Gum (remnant)	Eucalyptus camaldulensis	150	443519	5951988
300	Poplar (planted)	Populus spp.*		443507	5951968
301	Poplar (planted)	Populus spp.*		443498	5951958
302	London Plane (planted)	Platanus x acerifolius*		443511	5951929
303	English Oak (planted)	Quercus robur*		443497	5951936
304	Desert Ash (planted)	Fraxinus spp.*		443495	5951893
305	Desert Ash (planted)	Fraxinus spp.*		443498	5951905
306	Desert Ash (planted)	Fraxinus spp.*		443485	5951902
307	Desert Ash (planted)	Fraxinus spp.*		443477	5951890
308	Desert Ash (planted)	Fraxinus spp.*		443486	5951875
309	Desert Ash (planted)	Fraxinus spp.*		443487	5951879
310	London Plane (planted)	Platanus x acerifolius*		443318	5951706
311	London Plane (planted)	Platanus x acerifolius*		443339	5951703
312	Yellow Box (remnant)	Eucalyptus melliodora	110	443332	5951717
313	Yellow Box (remnant)	Eucalyptus melliodora	100	443286	5951570
314	Yellow Box (remnant)	Eucalyptus melliodora	120	443272	5951570
315	River Red Gum (remnant)	Eucalyptus camaldulensis	70	443271	5951518
316	River Red Gum (remnant)	Eucalyptus camaldulensis	220	443263	5951449
317	Yellow Box (remnant)	Eucalyptus melliodora	100	443238	5951290
318	White Box (remnant)	Eucalyptus albens	120	443215	5951248
319	Desert Ash (planted)	Fraxinus spp.*		443613	5951806
320	Desert Ash (planted)	Fraxinus spp.*		443604	5951807
321	Desert Ash (planted)	Fraxinus spp.*		443583	5951809
322	Desert Ash (planted)	Fraxinus spp.*		443557	5951812
323	River Red Gum (planted)	Eucalyptus camaldulensis		443686	5951830
324	River Red Gum (planted)	Eucalyptus camaldulensis		443687	5951837
325	Date Palm (planted)	Phoenix dactylifera*		443707	5951837
326	Desert Ash (planted)	Fraxinus spp.*		443748	5951783
327	English Elm (planted)	Ulmus procera*		443737	5951788
328	European Beech (planted)	Fagus sylvatica*		443725	5951759
329	Yellow Gum (planted)	Eucalyptus leucoxylon*		443784	5951813
330	Yellow Gum (planted)	Eucalyptus leucoxylon*		443795	5951812
331	Desert Ash (planted)	Fraxinus spp.*		443771	5951817
332	Chestnut (planted)	Castanea sativa*		443764	5951828
333	Chestnut (planted)	Castanea sativa*		443767	5951838
334	Chestnut (planted)	Castanea sativa*		443768	5951846
335	Chestnut (planted)	Castanea sativa*		443769	5951855
336	Chestnut (planted)	Castanea sativa*		443770	5951863

Tree	Common	Calambie	D:1	Tree lo	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
337	Chestnut (planted)	Castanea sativa*		443771	5951869
338	Chestnut (planted)	Castanea sativa*		443772	5951876
339	Chestnut (planted)	Castanea sativa*		443772	5951882
340	Chestnut (planted)	Castanea sativa*		443773	5951888
341	Red Flowering Gum (planted)	Corymbia ficifolia*		443793	5951840
342	Cypress (planted)	Cupressus spp.*		443831	5951812
343	Desert Ash (planted)	Fraxinus spp.*		444132	5951792
344	Desert Ash (planted)	Fraxinus spp.*		444129	5951782
345	River Red Gum (remnant)	Eucalyptus camaldulensis	85	444127	5951823
346	River Red Gum (remnant)	Eucalyptus camaldulensis	50/40	444124	5951830
347	River Red Gum (remnant)	Eucalyptus camaldulensis	80	444094	5951849
348	River Red Gum (remnant)	Eucalyptus camaldulensis	60	444169	5951846
349	River Red Gum (remnant)	Eucalyptus camaldulensis	45/40	444175	5951845
350	Yellow Gum (planted)	Eucalyptus leucoxylon*		444166	5951829
351	Desert Ash (planted)	Fraxinus spp.*		444166	5951816
352	River Red Gum (remnant)	Eucalyptus camaldulensis	28	444183	5951833
353	River Red Gum (remnant)	Eucalyptus camaldulensis	40	444053	5951857
354	Silky Oak (planted)	Grevillea robusta*		444379	5951742
355	English Oak (planted)	Quercus robur*		444369	5951713
356	Spanish Swamp Oak (planted)	Quercus palustris*		444340	5951716
357	Cypress (planted)	Cupressus spp.*		444293	5951722
358	Spanish Swamp Oak (planted)	Quercus palustris*		444302	5951771
359	Desert Ash (planted)	Fraxinus spp.*		444336	5951765
360	Desert Ash (planted)	Fraxinus spp.*		444359	5951773
361	Desert Ash (planted)	Fraxinus spp.*		444416	5951754
362	Weeping Willow (planted)	Salix babylonica*		444426	5951758
363	Desert Ash (planted)	Fraxinus spp.*		444438	5951744
364	Desert Ash (planted)	Fraxinus spp.*		444453	5951732
365	Weeping Willow (planted)	Salix babylonica*		444460	5951756
366	River Red Gum (remnant)	Eucalyptus camaldulensis	130	444456	5951700
367	River Red Gum (remnant)	Eucalyptus camaldulensis	120	444472	5951697
368	River Red Gum (remnant)	Eucalyptus camaldulensis	110	444496	5951694
369	River Red Gum (remnant)	Eucalyptus camaldulensis	130	444524	5951691
370	River Red Gum (remnant)	Eucalyptus camaldulensis	45	444570	5951684
371	River Red Gum (remnant)	Eucalyptus camaldulensis	60/40	444534	5951728
372	River Red Gum (remnant)	Eucalyptus camaldulensis	60	444537	5951741
373	River Red Gum (remnant)	Eucalyptus camaldulensis	38/30/30	444539	5951735
374	River Red Gum (remnant)	Eucalyptus camaldulensis	40/30/30	444523	5951735
375	River Red Gum (remnant)	Eucalyptus camaldulensis	35/30/25	444519	5951737
376	Prickly-leaved Paperbark (planted)	Melaleuca stypheloides*		444511	5951726
377	River Red Gum (remnant)	Eucalyptus camaldulensis	130	444487	5951744
378	Prickly-leaved Paperbark (planted)	Melaleuca stypheloides*		444565	5951732

Tree		Calantific	Dia 1	Tree lo	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
379	Prickly-leaved Paperbark (planted)	Melaleuca stypheloides*		444561	5951725
380	Prickly-leaved Paperbark (planted)	Melaleuca stypheloides*		444558	5951713
381	Prickly-leaved Paperbark (planted)	Melaleuca stypheloides*		444574	5951710
382	River Red Gum (remnant)	Eucalyptus camaldulensis	25	444512	5951764
383	River Red Gum (remnant)	Eucalyptus camaldulensis	70	444566	5951760
384	River Red Gum (remnant)	Eucalyptus camaldulensis	20/15/15/10	444571	5951773
385	River Red Gum (remnant)	Eucalyptus camaldulensis	130	444580	5951813
386	River Red Gum (remnant)	Eucalyptus camaldulensis	35/25/20	444610	5951715
387	River Red Gum (remnant)	Eucalyptus camaldulensis	28	444616	5951713
388	River Red Gum (remnant)	Eucalyptus camaldulensis	100	444632	5951716
389	River Red Gum (remnant)	Eucalyptus camaldulensis	75	444640	5951711
390	River Red Gum (remnant)	Eucalyptus camaldulensis	60	444590	5951811
391	River Red Gum (remnant)	Eucalyptus camaldulensis	50	444611	5951794
392	Desert Ash (planted)	Fraxinus spp.*		444589	5951860
393	Black Locust (planted)	Robinia pseudoacacia*		444618	5951866
394	Black Locust (planted)	Robinia pseudoacacia*		444615	5951866
395	Black Locust (planted)	Robinia pseudoacacia*		444612	5951858
396	Black Locust (planted)	Robinia pseudoacacia*		444606	5951860
397	Desert Ash (planted)	Fraxinus spp.*		444599	5951860
398	Desert Ash (planted)	Fraxinus spp.*		444592	5951861
399	River Red Gum (remnant)	Eucalyptus camaldulensis	140	444574	5951931
400	River Red Gum (remnant)	Eucalyptus camaldulensis	80	444656	5952023
401	River Red Gum (remnant)	Eucalyptus camaldulensis	120	444662	5952021
402	River Red Gum (remnant)	Eucalyptus camaldulensis	40	444658	5951993
403	River Red Gum (remnant)	Eucalyptus camaldulensis	130	444655	5951985
404	River Red Gum (remnant)	Eucalyptus camaldulensis	110	444662	5951981
405	River Red Gum (remnant)	Eucalyptus camaldulensis	70	444646	5952089
406	River Red Gum (remnant)	Eucalyptus camaldulensis	60	444645	5952120
407	River Red Gum (remnant)	Eucalyptus camaldulensis	75	444606	5951921
408	River Red Gum (remnant)	Eucalyptus camaldulensis	35	444617	5951933
409	River Red Gum (remnant)	Eucalyptus camaldulensis	25	444619	5951893
410	Poplar (planted)	Populus spp.*		444620	5951919
411	River Red Gum (remnant)	Eucalyptus camaldulensis	130	444672	5952174
412	River Red Gum (remnant)	Eucalyptus camaldulensis	140	444692	5952181
413	River Red Gum (remnant)	Eucalyptus camaldulensis	110	444711	5952196
414	River Red Gum (remnant)	Eucalyptus camaldulensis	150	444709	5952230
415	River Red Gum (remnant)	Eucalyptus camaldulensis	140	444701	5952146
416	River Red Gum (remnant)	Eucalyptus camaldulensis	170	444705	5952162
417	Black Locust (planted)	Robinia pseudoacacia*		444583	5951876
418	Black Locust (planted)	Robinia pseudoacacia*		444579	5951885
419	Black Locust (planted)	Robinia pseudoacacia*		444580	5951896
420	Black Locust (planted)	Robinia pseudoacacia*		444581	5951906

Tree		0	5 1	Tree le	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
421	Black Locust (planted)	Robinia pseudoacacia*		444583	5951914
422	Black Locust (planted)	Robinia pseudoacacia*		444620	5951900
423	Desert Ash (planted)	Fraxinus spp.*		444373	5951841
424	Desert Ash (planted)	Fraxinus spp.*		444387	5951839
425	Desert Ash (planted)	Fraxinus spp.*		444392	5951838
426	Desert Ash (planted)	Fraxinus spp.*		444377	5951834
427	Desert Ash (planted)	Fraxinus spp.*		444374	5951826
428	Desert Ash (planted)	Fraxinus spp.*		444393	5951831
429	Desert Ash (planted)	Fraxinus spp.*		444398	5951823
430	Desert Ash (planted)	Fraxinus spp.*		444391	5951826
431	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		444401	5951846
432	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		444402	5951854
433	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		444405	5951861
434	Desert Ash (planted)	Fraxinus spp.*		444369	5951819
435	Desert Ash (planted)	Fraxinus spp.*		444353	5951822
436	Desert Ash (planted)	Fraxinus spp.*		444340	5951823
437	Desert Ash (planted)	Fraxinus spp.*		444332	5951822
438	Desert Ash (planted)	Fraxinus spp.*		444333	5951814
439	European Beech (planted)	Fagus sylvatica*		444391	5951805
440	Silky Oak (planted)	Grevillea robusta*		444416	5951798
441	Desert Ash (planted)	Fraxinus spp.*		444421	5951823
442	Desert Ash (planted)	Fraxinus spp.*		444419	5951805
443	Desert Ash (planted)	Fraxinus spp.*		444420	5951813
444	London Plane (planted)	Platanus x acerifolius*		444414	5951773
445	Desert Ash (planted)	Fraxinus spp.*		444375	5951915
446	Desert Ash (planted)	Fraxinus spp.*		444377	5951925
447	Desert Ash (planted)	Fraxinus spp.*		444388	5951922
448	Desert Ash (planted)	Fraxinus spp.*		444389	5951931
449	Desert Ash (planted)	Fraxinus spp.*		444399	5951933
450	Desert Ash (planted)	Fraxinus spp.*		444388	5951914
451	Desert Ash (planted)	Fraxinus spp.*		444409	5951913
452	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		444408	5951902
453	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		444406	5951886
454	Desert Ash (planted)	Fraxinus spp.*		444433	5951918
455	Desert Ash (planted)	Fraxinus spp.*		444431	5951906
456	Desert Ash (planted)	Fraxinus spp.*		444428	5951893
457	Desert Ash (planted)	Fraxinus spp.*		444425	5951878
458	River Red Gum (remnant)	Eucalyptus camaldulensis	> 80	444547	5951892
459	River Red Gum (remnant)	Eucalyptus camaldulensis	> 80	444505	5951909
460	River Red Gum (remnant)	Eucalyptus camaldulensis	> 80	444498	5951926
461	English Oak (planted)	Quercus robur*		444354	5951957
462	English Oak (planted)	Quercus robur*		444351	5951951

Tree	0	Calandifi	Diam . 1 1	Tree lo	ocation ²
number	Common name	Scientific name	Diameter ¹	Easting	Northing
463	English Oak (planted)	Quercus robur*		444357	5951937
464	Desert Ash (planted)	Fraxinus spp.*		444367	5951928
465	River Red Gum (remnant)	Eucalyptus camaldulensis	65	444340	5951983
466	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		444339	5952046
467	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		444339	5952018
468	European Beech (planted)	Fagus sylvatica*		444359	5952050
469	European Beech (planted)	Fagus sylvatica*		444360	5952060
470	English Oak (planted)	Quercus robur*		444383	5952181
471	English Oak (planted)	Quercus robur*		444409	5952216
472	Desert Ash (planted)	Fraxinus spp.*		444401	5952235
473	English Oak (planted)	Quercus robur*		444445	5952215
474	Desert Ash (planted)	Fraxinus spp.*		444373	5952161
475	Spanish Swamp Oak (planted)	Quercus palustris*		444379	5952046
476	Sugar Gum (planted)	Eucalyptus cladocalyx*		444459	5952065
477	Sugar Gum (planted)	Eucalyptus cladocalyx*		444469	5952064
478	Sugar Gum (planted)	Eucalyptus cladocalyx*		444476	5952062
479	Sugar Gum (planted)	Eucalyptus cladocalyx*		444492	5952059
480	White Cedar (planted)	Melia azedarach*		444449	5952042
481	White Cedar (planted)	Melia azedarach*		444449	5952057
482	Desert Ash (planted)	Fraxinus spp.*		444448	5952036
483	Desert Ash (planted)	Fraxinus spp.*		444445	5952016
484	Desert Ash (planted)	Fraxinus spp.*		444437	5951942
485	European Beech (planted)	Fagus sylvatica*		444443	5951948
486	Desert Ash (planted)	Fraxinus spp.*		444445	5952009
487	Desert Ash (planted)	Fraxinus spp.*		444467	5952020
488	Desert Ash (planted)	Fraxinus spp.*		444476	5952017
489	Yellow Gum (planted)	Eucalyptus leucoxylon*		444450	5952066
490	Yellow Gum (planted)	Eucalyptus leucoxylon*		444452	5952074
491	Yellow Gum (planted)	Eucalyptus leucoxylon*		444453	5952088
492	Yellow Gum (planted)	Eucalyptus leucoxylon*		444462	5952143
493	Yellow Gum (planted)	Eucalyptus leucoxylon*		444459	5952129
494	Yellow Gum (planted)	Eucalyptus leucoxylon*		444458	5952119
495	Desert Ash (planted)	Fraxinus spp.*		444468	5952185
496	Desert Ash (planted)	Fraxinus spp.*		444469	5952193
497	Desert Ash (planted)	Fraxinus spp.*		444474	5952235
498	Desert Ash (planted)	Fraxinus spp.*		444475	5952250
499	Grey Box (remnant)	Eucalyptus microcarpa	100	444495	5952402
500	River Red Gum (remnant)	Eucalyptus camaldulensis	140/60	444586	5952331
501	River Red Gum (remnant)	Eucalyptus camaldulensis	35/30/30/25	444585	5952343
502	River Red Gum (remnant)	Eucalyptus camaldulensis	50/20	444590	5952365
503	River Red Gum (remnant)	Eucalyptus camaldulensis	75/60	444592	5952286
504	River Red Gum (remnant)	Eucalyptus camaldulensis	40	444524	5952259

Tree	Common nome	Scientific name	Diameter ¹	Tree location ²		
number	Common name	Scientific name	Diameter	Easting	Northing	
505	River Red Gum (remnant)	Eucalyptus camaldulensis	90	444561	5952252	
506	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		444481	5952261	
507	River Red Gum (remnant)	Eucalyptus camaldulensis	90	444604	5952365	
508	River Red Gum (remnant)	Eucalyptus camaldulensis	140	444592	5952380	
509	Black Locust (planted)	Robinia pseudoacacia*		444554	5952397	
510	English Oak (planted)	Quercus robur*		444353	5951653	
511	Desert Ash (planted)	Fraxinus spp.*		444324	5951718	
512	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		443383	5951818	
513	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		443380	5951812	
514	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		443380	5951803	
515	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		443379	5951793	
516	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		443372	5951771	
517	Flax-leaf Paperbark (planted)	Melaleuca liniarifolia*		443358	5951772	

- 1. Diameter is diameter at breast height over bark in centimetres (dbhob; 1.30 m height);
- 2. Location data are northings and eastings of MGAz55 coordinates.

APPENDIX D EPBC AND VICTORIAN THREATENED SPECIES AND LIKELIHOOD OF OCCURRENCE

List of threatened flora species recorded by the Victorian Biodiversity Atlas and NatureKit in a 10 km radius around the property, and by Matters of National Environmental Significance search of the district, their status, and their likelihood of occurrence on the subject land (DELWP 2022b and 2022c; DAWE 2022).

Scientific name	Common Name	Victorian status ¹	Commonwealth status ²	Records within 10 km ³	Last record ⁴	Appropriate habitat ⁵	Likelihood of presence ⁶
Amphibromus fluitans	River Swamp Wallaby-grass		V	0		Yes	Highly unlikely
Craspedia haplorrhiza	Plains Billy-buttons	е		1	1993	Yes	Highly unlikely
Diuris punctata var. punctata	Purple Diuris	е		1	1993	Yes	Highly unlikely
Glycine latrobeana	Clover Glycine	е	V	0		Yes	Highly unlikely
Lepidium monoplocoides	Winged Peppercress	е	E	0		Yes	Highly unlikely
Pultenaea foliolosa	Small-leaf Bush-pea	е		3	1989	Yes	Highly unlikely
Swainsona recta	Mountain Swainson-pea	ce	E	0		No	Highly unlikely

- 1. x = presumed extinct in Victoria; ce = critically endangered; e = endangered in Victoria; v = vulnerable in Victoria (from DELWP 2021);
- 2. CE = critically endangered nationally; E = endangered nationally; V = vulnerable nationally (DAWE 2022);
- 3. As recorded in the Victorian Biodiversity Atlas (DELWP 2022c);
- 4. As recorded for the species in the Victorian Biodiversity Atlas (DELWP 2022c);
- 5. Determination based on known habitat preferences for the species and the assessed habitat characteristics of the site, from Royal Botanic Gardens Victoria (2022) and Walsh and Entwisle (1994, 1996 and 1999);
- 6. Based on known habitat preferences for the species and the assessed habitat characteristics of the site, known records for the species, and their proximity and time of record.

List of threatened fauna species recorded by the Victorian Biodiversity Atlas and NatureKit in a 10 km radius around the property, and by Matters of National Environmental Significance search of the district, their status, and their likelihood of occurrence on the subject land (DELWP 2022b and 2022c; DAWE 2022).

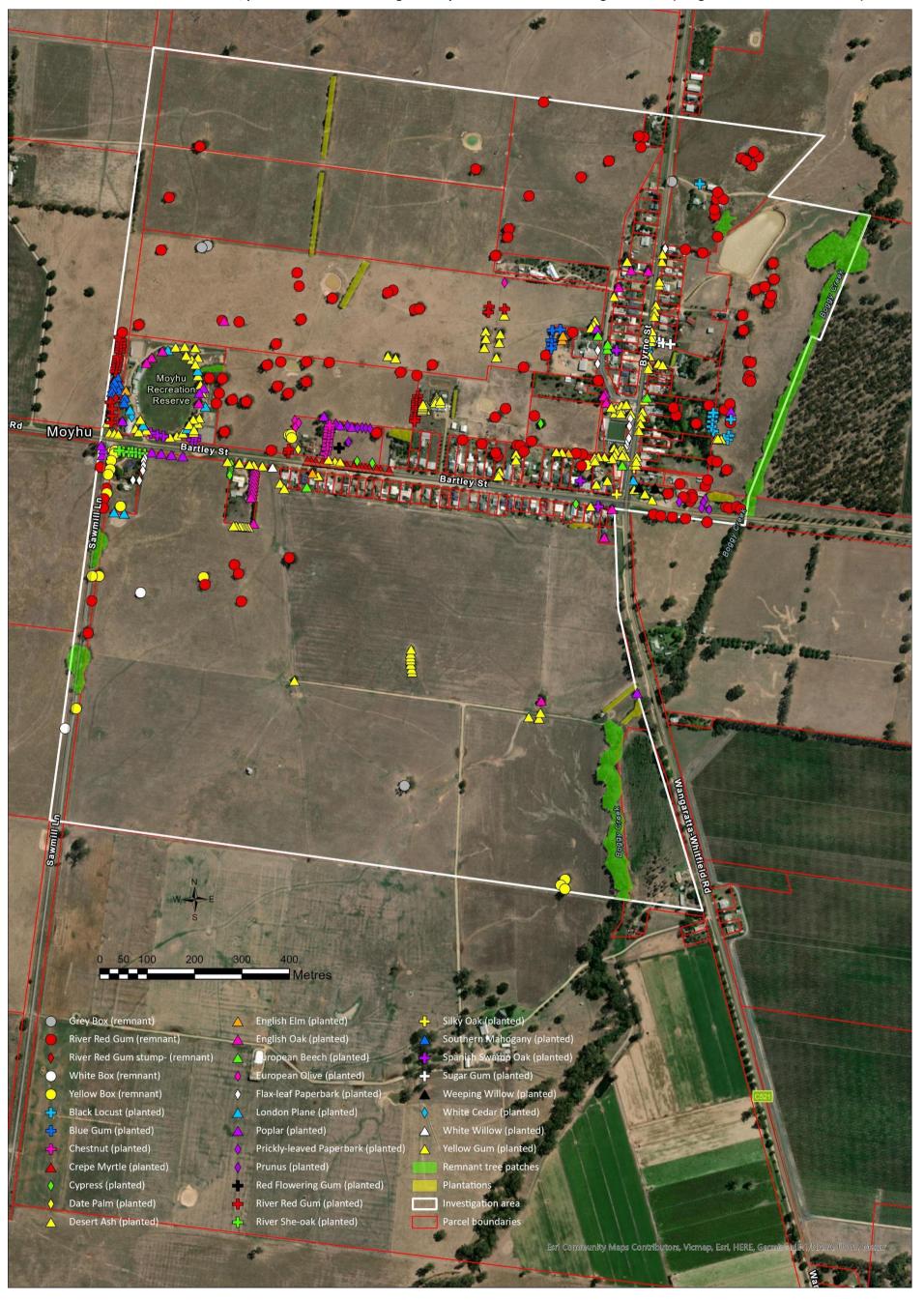
Scientific name	Common Name	Victorian status ¹	Commonwealth status ²	Records within 10 km ³	Last record ⁴	Appropriate habitat ⁵	Likelihood of presence ⁶
Botaurus poiciloptilus	Australasian Bittern	ce	E	1	1981	No	Highly unlikely
Spatula rhynchotis	Australasian Shoveler	V		6	1981	Yes	Highly unlikely
Falco subniger	Black Falcon	ce		1	1981	Yes	Unlikely
Pseudophryne bibronii	Brown Toadlet	е		2	1962	Yes	Highly unlikely
Stagonopleura guttata	Diamond Firetail	V		7	1981	Yes	Unlikely
Synemon plana	Golden Sun Moth	е	CE	0		Yes	Highly unlikely
Falco hypoleucos	Grey Falcon	е	V	0		Yes	Highly unlikely
Pomatostomus temporalis	Grey-crowned Babbler	V		6	1980	No	Unlikely
Pteropus poliocephalus	Grey-headed Flying-fox	V	V	0		No	Highly unlikely
Litoria raniformis	Growling Grass Frog	е	V	0		Yes	Highly unlikely
Aythya australis	Hardhead	V		3	1980	No	Highly unlikely
Melanodryas cucullata	Hooded Robin	V		1	1979	Yes	Unlikely
Lewinia pectoralis	Lewin's Rail	V		1	1981	No	Highly unlikely
Hieraaetus morphnoides	Little Eagle	V		3	1981	Yes	Unlikely
Egretta garzetta	Little Egret	е		1	1981	No	Highly unlikely
Macquaria australasica	Macquarie Perch	е	E	1	1981	No	Highly unlikely
Maccullochella peelii	Murray Cod	е	V	3	2005	No	Highly unlikely
Emydura macquarii	Murray River Turtle	ce		1	2016	Yes	Possible
Biziura lobata	Musk Duck	V		1	1979	No	Highly unlikely
Grantiella picta	Painted Honeyeater	V	V	1	1980	Yes	Possible
Aprasia parapulchella	Pink-tailed Worm-lizard	е	V	0		Yes	Highly unlikely
Ardea intermedia plumifera	Plumed Egret	ce		3	2004	No	Highly unlikely
Anthochaera phrygia	Regent Honeyeater	се	CE	4	1980	Yes	Highly unlikely
Crinia sloanei	Sloane's Froglet	е	E	0		Yes	Highly unlikely

Scientific name	Common Name	Victorian status ¹	Commonwealth status ²	Records within 10 km ³	Last record ⁴	Appropriate habitat ⁵	Likelihood of presence ⁶
Petauroides volans	Southern Greater Glider	е	V	0		No	Highly unlikely
Nannoperca australis (Murray-Darling lineage)	Southern Pygmy Perch (Murray-Darling lineage)	٧	V	2	1999	No	Highly unlikely
Pyrrholaemus sagittatus	Speckled Warbler	e		4	1981	Yes	Unlikely
Dasyurus maculatus maculatus	Spot-tailed Quoll	ce	E	0		No	Highly unlikely
Petaurus norfolcensis	Squirrel Glider	٧		1	2005	Yes	Possible
Delma impar	Striped Legless Lizard	е	V	0		Yes	Highly unlikely
Polytelis swainsonii	Superb Parrot	е	V	0		Yes	Unlikely
Lathamus discolor	Swift Parrot	ce	CE	1	1980	Yes	Unlikely
Maccullochella macquariensis	Trout Cod	е	Е	1	2000	No	Highly unlikely
Neophema pulchella	Turquoise Parrot	٧		3	2006	Yes	Possible
Hirundapus caudacutus	White-throated Needletail	v,L	V	0		Yes	Possible

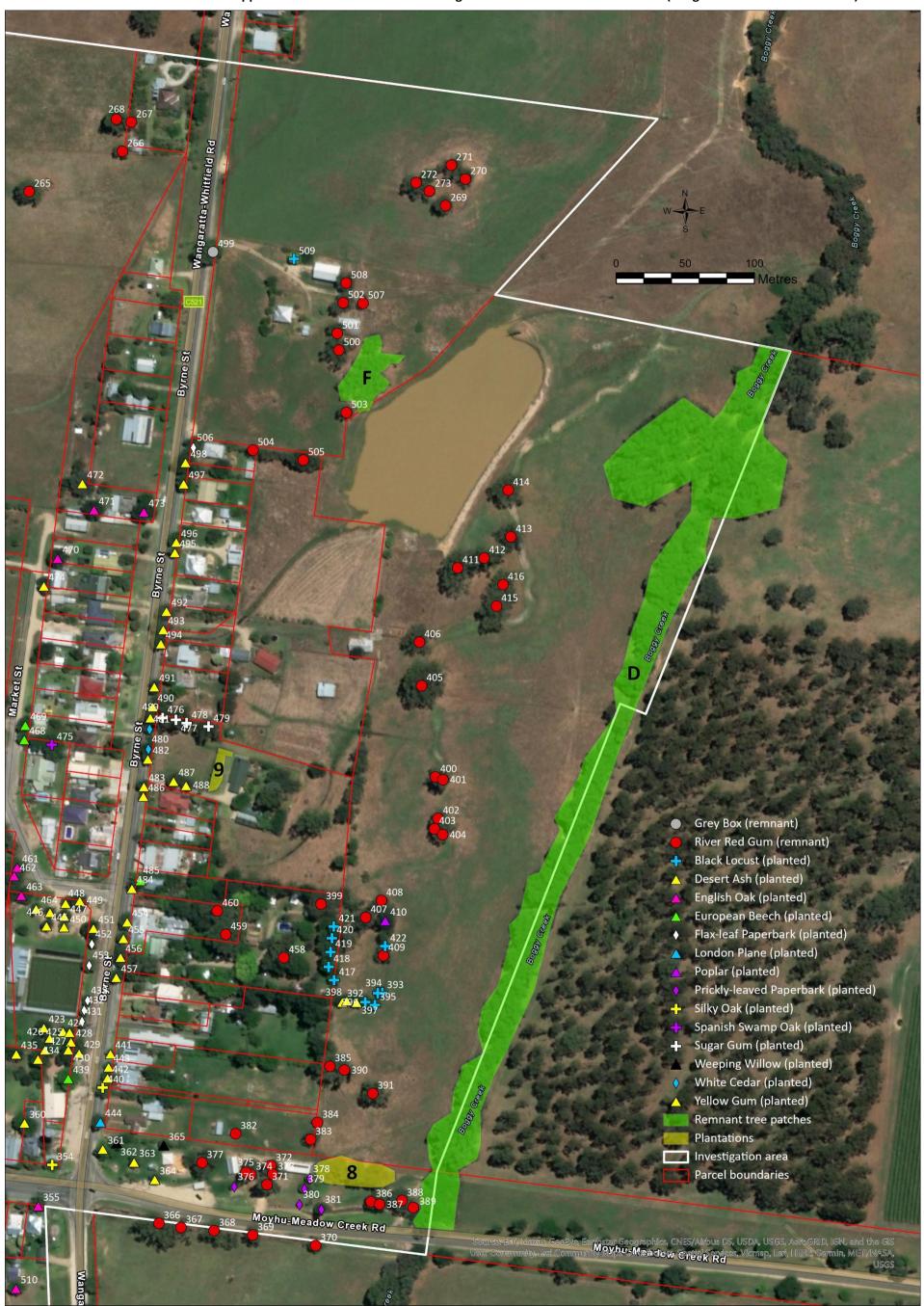
- 1. x = presumed extinct in Victoria; ce = critically endangered; e = endangered in Victoria; v = vulnerable in Victoria (from DELWP 2021);
- 2. CE = critically endangered nationally; E = endangered nationally; V = vulnerable nationally; LMS = Listed Marine Species; MTS = Migratory Terrestrial Species; MMB = Migratory Marine Bird (DAWE 2022);
- 3. As recorded in the Victorian Biodiversity Atlas (DELWP 2022c);
- 4. As recorded for the species in the Victorian Biodiversity Atlas (DELWP 2022c);
- 5. Determination based on known habitat preferences for the species and the assessed habitat characteristics of the site, from various State and Commonwealth conservation advice and listings, recovery plans, etc.;
- 6. Based on known habitat preferences for the species and the assessed habitat characteristics of the site, landscape connectivity of the site, known records for the species, and their proximity and time of records.

APPENDIX E INVESTIGATION AREA MAPPING

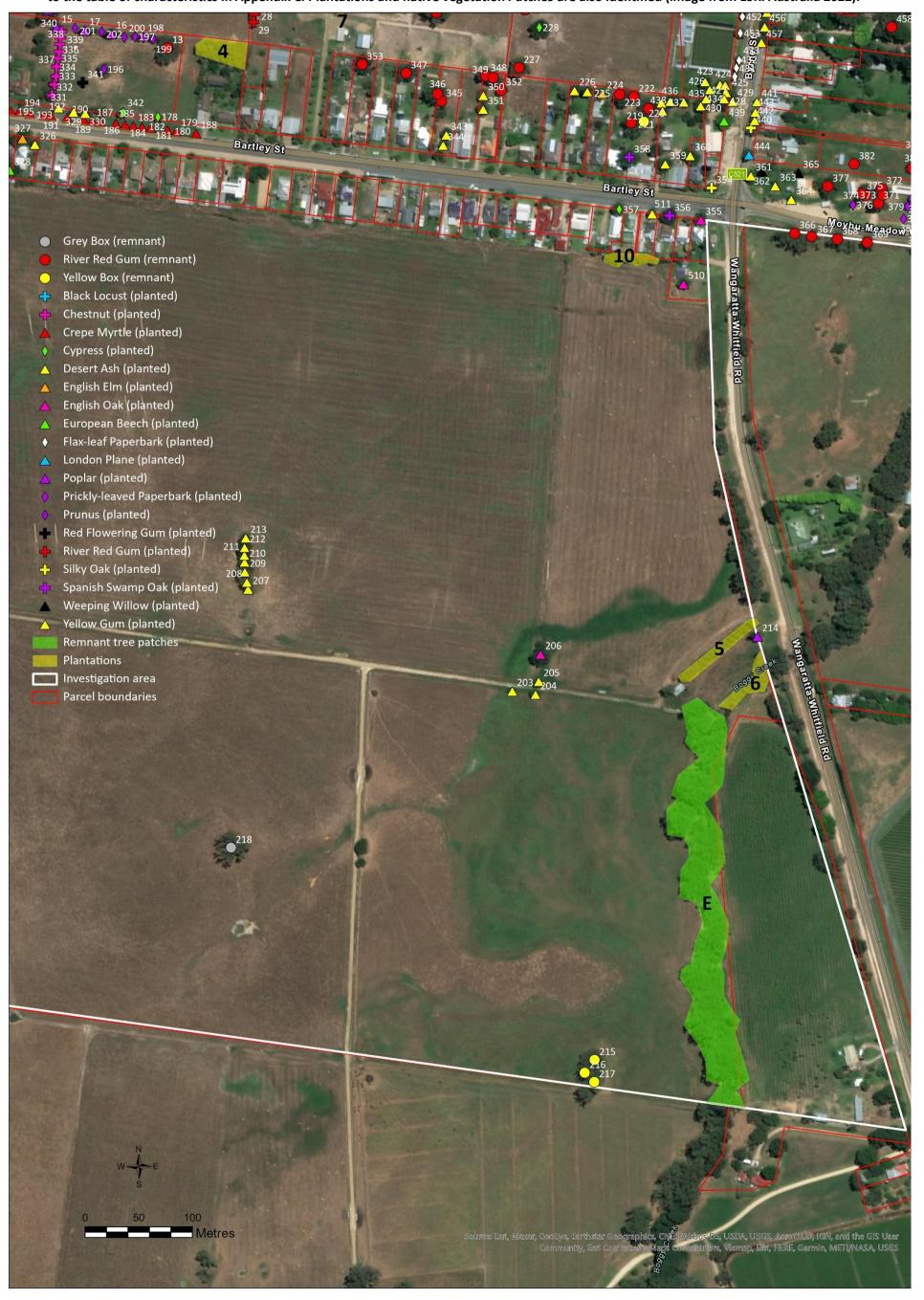
The location of all assessed trees, plantations and native vegetation patches across the Investigation Area (image from ESRI Australia 2022).



The location of all assessed trees, plantations and native vegetation patches across north-eastern section of the Investigation Area. Tree numbers refer to the table of characteristics in Appendix C. Plantations and native vegetation *Patches* are also identified (image from ESRI Australia 2022).



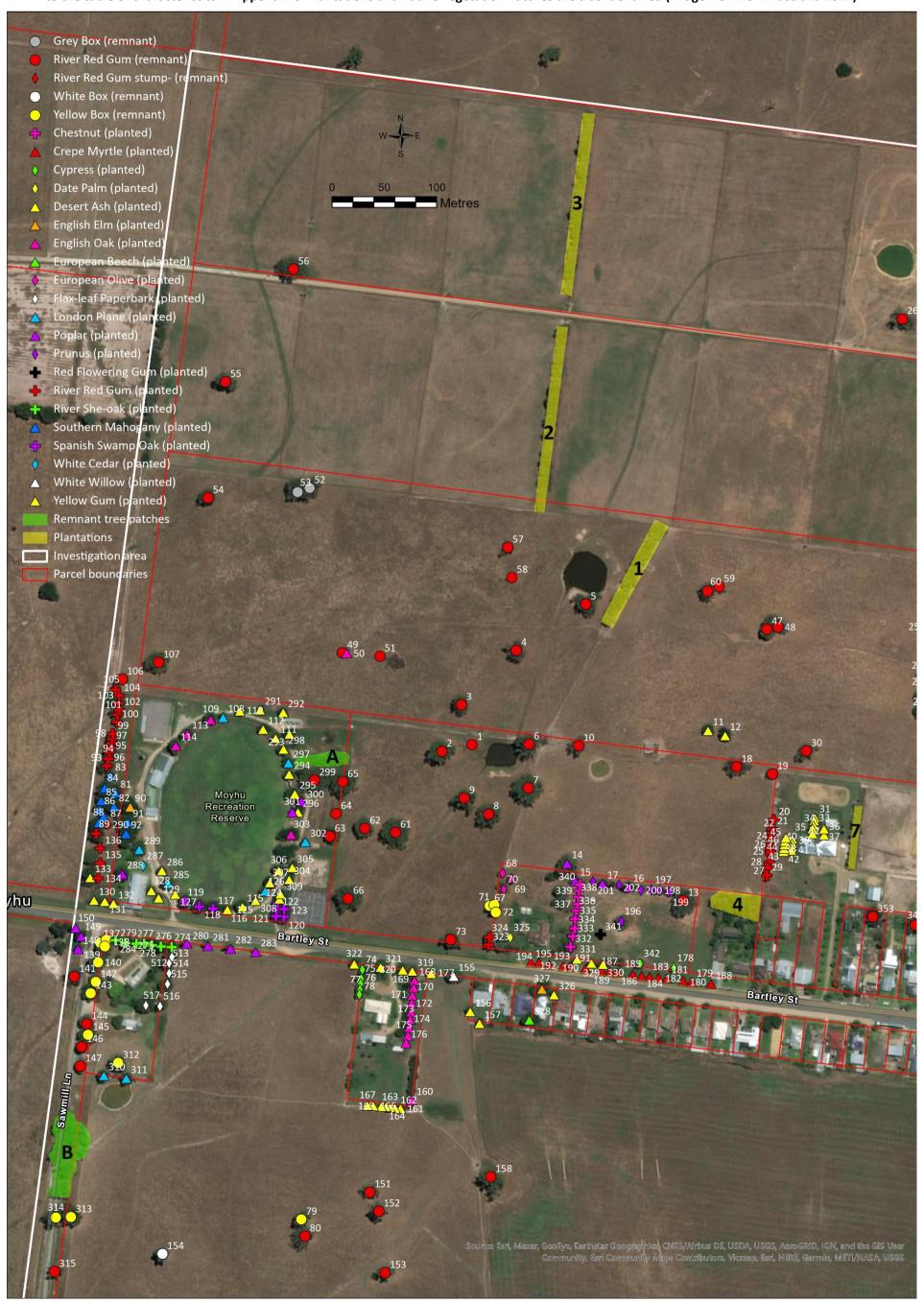
The location of all assessed trees, plantations and native vegetation patches across south-eastern section of the Investigation Area. Tree numbers refer to the table of characteristics in Appendix C. Plantations and native vegetation *Patches* are also identified (image from ESRI Australia 2022).



The location of all assessed trees, plantations and native vegetation patches across south-western section of the Investigation Area. Tree numbers refer to the table of characteristics in Appendix C. Plantations and native vegetation *Patches* are also identified (image from ESRI Australia 2022).



The location of all assessed trees, plantations and native vegetation patches across north-western section of the Investigation Area. Tree numbers refer to the table of characteristics in Appendix C. Plantations and native vegetation *Patches* are also identified (image from ESRI Australia 2022).



The location of all assessed trees, plantations and native vegetation patches across central northern section of the Investigation Area. Tree numbers refer to the table of characteristics in Appendix C. Plantations and native vegetation *Patches* are also identified (image from ESRI Australia 2022).



The location of all assessed trees, plantations and native vegetation patches across central western section of the Investigation Area. Tree numbers refer to the table of characteristics in Appendix C. Plantations and native vegetation *Patches* are also identified (image from ESRI Australia 2022).



The location of all assessed trees, plantations and native vegetation patches across central western section of the Investigation Area. Tree numbers refer to the table of characteristics in Appendix C. Plantations and native vegetation *Patches* are also identified (image from ESRI Australia 2022).

