

Biodiversity Assessment, 40-42 Newcombe Street and 41-47 Elgin Street, Drysdale, Victoria

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1 Introduction

Ecology and Heritage Partners Pty Ltd was commissioned by St. Quentin Consulting Pty Ltd on behalf of Barwon Water to conduct a Biodiversity Assessment at 40-42 Newcombe Street and 41-47 Elgin Street, Drysdale, Victoria. It is understood that the two land parcels and connecting road reserve ('study area') are being considered for potential subdivision and development. The purpose of this report is to identify the ecological values known to, or likely to occur within the study area, assess the native vegetation proposed to be removed and to provide information on the implications of 'Victoria's Permitted clearing of native vegetation – Biodiversity assessment guidelines' (the Guidelines) (DEPI 2013).

The following sections describe our assessment methodology and provide information on the potential regulatory and legislative implications associated with the proposed action.

2 Study Area

The study area is located at 40-42 Newcombe Street and 41-47 Elgin Street, Drysdale, Victoria, approximately 700 metres south-west of Drysdale's town centre. The site covers approximately 1.16 hectares and is bound by Newcombe Street and private property to the north, a drainage corridor to the south, and private land to the east and west. The unnamed road reserve connecting the two parcels of land was also assessed as works would be required on this land to allow access to the proposed development.

According to the Victorian Department of Environment, Land, Water and Planning (DELWP) Biodiversity Interactive Map (DELWP 2015a), the study area occurs within the Otway Plain bioregion. It is located within the jurisdiction of the Corangamite Catchment Management Authority (CMA) and the City of Greater Geelong municipality.

3 Methods

3.1 Desktop Assessment

Relevant literature, online-resources and numerous databases were reviewed to provide an assessment of flora and fauna values associated with the study area. The following information sources were reviewed:

- The DELWP Biodiversity Interactive Map (DELWP 2015a) for the extent of historic and current EVCs;

- The Native Vegetation Information Management (NVIM) Tool (DELWP 2015c) for modelled biodiversity data;
- The VBA (DEPI 2014), Flora Information System (FIS) (Viridans 2013a) and Atlas of Victorian Wildlife (AVW) (Viridans 2013b) for previously documented flora and fauna records within the project locality;
- The Federal Department of Environment (DoE) Protected Matters Search Tool (PMST) for matters of National Environmental Significance (NES) protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (DoE 2015);
- The DELWP Planning Maps Online to ascertain current zoning and environmental overlays (DELWP 2015b);
- Aerial photography of the study area; and,
- Relevant environmental legislation and policies .

3.2 Site Inspection

A rapid assessment of the study area was undertaken by a qualified ecologist on 12 March and 11 September 2015. The inspections sought primarily to provide ground-truthing of information provided by the desktop assessment, particularly in relation to the following:

- Modelled data for remnant vegetation patches, scattered trees and habitat for rare or threatened species; and,
- Potential habitat for species and ecological communities listed under the EPBC Act and FFG Act.

3.3 Permitted Clearing Assessment (the Guidelines)

The clearing of native vegetation is assessed under the 'Permitted clearing of native vegetation - Biodiversity assessment guidelines' (the Guidelines) (DEPI 2013). The Guidelines manage the impacts on biodiversity from native vegetation removal using a risk-based approach. Two factors – extent risk and location risk – are used to determine the risk associated with an application for a permit to remove native vegetation. The location risk (A, B or C) has been determined for all areas in Victoria and is available on DELWP's Native Vegetation Information Management (NVIM) Tool (DELWP 2015c). Determination of risk-based pathway is summarised in Table 1.

Table 1. Risk-based pathways for applications to remove remnant patches of native vegetation and scattered trees (DEPI 2013)

	Extent*	Location		
		A	B	C
Remnant Patch	< 0.5 hectares	Low	Low	High
	≥ 0.5 hectares and < 1 hectare	Low	Moderate	High
	≥ 1 hectare	Moderate	High	High
Scattered Tree	< 15 scattered trees	Low	Moderate	High
	≥ 15 scattered trees	Moderate	High	High

* For the purpose of determining the risk-based pathway of an application to remove native vegetation the extent includes any other native vegetation that was permitted to be removed on the same contiguous parcel of land with the same ownership as the native vegetation to be removed, where the removal occurred in the five year period before an application to remove native vegetation is lodged.

Native vegetation (as defined in Table 2) is assessed using two key parameters: extent (in hectares) and condition. Extent is determined through a site assessment. The condition score for Moderate and High Risk-based pathways must be assessed through a habitat hectare assessment conducted by a qualified ecologist. The condition score for Low Risk-based pathways may be based on either modelled data available on the NVIM Tool (DELWP 2015c), or through a habitat hectare assessment.

The methodology for undertaking a habitat hectare assessment is described in the Vegetation Quality Assessment Manual (DSE 2004).

Table 2. Definition of native vegetation (DEPI 2013)

Category	Definition	Extent	Condition
Remnant Patch	An area of native vegetation where at least 25 per cent of the total perennial understorey plant cover is native plants. OR An area with three or more native canopy trees where the canopy foliage cover is at least 20 per cent of the area.	Measured in hectares. Based on hectare area of the remnant patch.	Vegetation Quality Assessment Manual (DSE 2004).
Scattered Tree	A native canopy tree that does not form part of a patch.	Measured in hectares. Each scattered tree is assigned an extent of 0.071 hectares (30m diameter).	Scattered trees are assigned a default condition score of 0.2.

Offsets are divided into two categories: General and Specific. Specific offsets are required when the removal of native vegetation has a significant impact on habitat for a rare or threatened species¹. Otherwise, a General offset is required.

3.4 Limitations

The field assessment was undertaken during a sub-optimal season for the identification of flora and fauna species (early Autumn and early Spring). The short duration and sub-optimal timing of the survey meant

¹ Only species listed as ‘critically endangered’, ‘endangered’, ‘vulnerable’ or ‘rare’ on DEPI’s advisory lists (DSE 2005; DSE 2013) for flora and fauna are considered a rare or threatened species.

that migratory, transitory or uncommon fauna species may have been absent from typically occupied habitats at the time of the field assessment. In addition, annual or cryptic flora species such as those that persist via underground tubers may also be absent. Targeted flora or fauna surveys were not undertaken, as this was beyond the preliminary scope. Nevertheless, the terrestrial flora and fauna data collected during the field assessment and information obtained from relevant desktop sources is considered adequate to provide an accurate and indicative assessment of the ecological values present within the study area.

4 Results

4.1 Vegetation

No remnant native vegetation was recorded within the study area. Vegetation within the study area comprised of managed lawns and planted ornamental trees and shrubs (Giant Honey Myrtle *Melaleuca armillaris*, Scented Paperbark *Melaleuca squarrosa*, Pepper Tree *Schinus molle*, Tuart *Eucalyptus gomphocephala*, Ash *Fraxinus* spp., and Plum *Prunus* spp.) (Plate 1 and 2; Figure 1).

Dominant introduced species included Prairie Grass *Bromus catharticus*, Couch *Cynodon dactylon*, Kikuyu *Cenchrus clandestinus*, Cape Weed *Arctotheca calendula*, Ox-Tongue *Helminthotheca echioides* and Ribwort *Plantago lanceolata*. Two nationally significant weeds, Gorse *Ulex europaeus* recorded regenerating in mown areas, and Flax-leaf Broom *Genista linifolia* recorded along a drainage line within the road reserve, were also present.

Two small River Red-gums *Eucalyptus camaldulensis* were recorded in the south east corner of the eastern parcel (Plate 3 and 4; Figure 1). These trees were mature and greater than three metres in height and would be classed as scattered trees under the Guidelines definition (Table 2). However, based on historical aerial imagery and assessment of the surrounding area, these trees are considered to be either regrowth less than ten years old or planted vegetation and are therefore exempt under Clause 52.17-7 of the planning scheme. Under this exemption, no further assessment of these trees is required.

In addition, one scattered Swamp Gum *Eucalyptus ovata* (75cm Diameter at Breast Height) was recorded in an adjacent land parcel five metres from the south-west corner of the study area (Plate 5; Figure 1). The Tree Retention Zone of the Swamp Gum (9 metres radius) encroaches less than 10% into the study area.



Plate 1. Managed lawn and planted shrubs within the western parcel (Source EHP 12/03/2015).



Plate 2. Managed lawn and planted shrubs within the eastern parcel (Source EHP 11/09/2015).



Plate 3. Small River Red-gum -Exempt (Source EHP 11/09/2015).



Plate 4. Small River Red-gum- Exempt (Source EHP 11/09/2015).



Plate 5. Scattered Swamp Gum, adjacent to the study area (Source EHP 12/03/2015)

5 Legislative and Policy Implications

5.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) establishes a Commonwealth process for the assessment of proposed actions (i.e. project, development, undertaking, activity, or series of activities) likely to have a significant impact on matters of National Environment Significance (NES), or those that are undertaken on Commonwealth Land.

The proposed action is unlikely to have a significant impact on any matter of NES. As such, a referral to the Commonwealth Environment Minister is unlikely to be required regarding matters listed under the EPBC Act.

5.2 Flora and Fauna Guarantee Act 1988

The FFG Act is the primary legislation dealing with biodiversity conservation and sustainable use of native flora and fauna in Victoria. Proponents are required to apply for an FFG Act Permit to 'take' protected flora species, vegetation communities and fish species in areas of public land (i.e. within road reserves, drainage lines and public reserves). An FFG Act permit is generally not required for removal of species or communities on private land, or for the removal of habitat for a listed terrestrial fauna species.

No FFG Act species or communities were recorded within the study area, or considered likely to occur. As such, a permit under the FFG Act is not required.

5.3 Planning and Environment Act 1987

The *Planning and Environment Act 1987* outlines the legislative framework for planning in Victoria and for the development and administration of planning schemes. All planning schemes contain native vegetation provisions at Clause 52.17, which require a planning permit from the relevant local Council to remove, destroy or lop native vegetation on a site of more than 0.4 hectares, unless an exemption under clause 52.17-7 of the Victorian Planning Schemes applies or a subdivision is proposed with lots less than 0.4 hectares².

5.3.1 Local Planning Schemes

The study area is located within the City of Greater Geelong municipality and is zoned Public Use Zone – Category 1 (PUZ1). No environmental Overlays apply to the study area.

Based on the exemptions under Clause 52.17-7, the two River Red-gums present in the south east corner of the study area would be considered under either the ‘Regrowth’ or ‘Planted Vegetation’ exemptions and no permit will be required to remove, destroy or lop this vegetation.

Providing proposed works avoid, or are confined to less than 10% of the Tree Retention Zone of the Scattered Tree in the adjacent land parcel (Figure 1), the current proposal does not require a permit to remove, destroy or lop vegetation. Based on the current development plan, less than 10% of the Tree Retention Zone will be impacted.

5.3.2 Permitted clearing of native vegetation - Biodiversity assessment guidelines

The Victorian Planning Provisions relating to biodiversity protection and native vegetation management was amended in December 2013 to reflect the new permitted clearing of native vegetation and biodiversity policy encapsulated in the ‘Permitted clearing of native vegetation - Biodiversity assessment guidelines’ (the Guidelines) (DEPI 2013).

The two scattered River Red-gums are exempt under Clause 52.17-7 and do not require any further consideration under the Guidelines. Providing proposed works avoid, or are confined to less than 10% of the Tree Retention Zone of the Scattered Tree in the adjacent land parcel (Figure 1), the current proposal will not require any vegetation offsets in accordance with the Guidelines.

5.4 Wildlife Act 1975 and Wildlife Regulations 2002 (Victoria)

The *Wildlife Act 1975* (and associated Wildlife Regulations 2002) is the primary legislation in Victoria providing for protection and management of wildlife. Authorisation for habitat removal may be obtained under the *Wildlife Act 1975* through a licence granted under the *Forests Act 1958*, or under any other Act

² In accordance with the Victorian Civil and Administrative Tribunal’s (VCAT) decision *Villawood v Greater Bendigo CC* (2005) VCAT 2703 (20 December 2005) all native vegetation is considered lost where proposed lots are less than 0.4 hectares in area and must be offset at the time of subdivision.

such as the *Planning and Environment Act 1987*. Any persons engaged to remove, salvage, hold or relocate native fauna during construction must hold a current Management Authorisation under the *Wildlife Act 1975*.

5.5 Catchment and Land Protection Act 1994

The *Catchment and Land Protection Act 1994* (CaLP Act) contains provisions relating to catchment planning, land management, noxious weeds and pest animals. Landowners are responsible for the control of any infestation of noxious weeds and pest fauna species to minimise their spread and impact on ecological values.

Two weed listed as noxious under the CaLP Act, Gorse and Flax-leaf Broom, were recorded during the assessment. Mitigation measures should be put in place to control noxious weeds within the study area and minimise their spread.

6 Further Requirements

Further requirements associated with development of the study area, as well as additional studies or reporting that may be required, are provided in Table 3, below.

Table 3. Further requirements associated with development of the study area

Relevant Legislation	Implications	Further Action
<i>Environment Protection and Biodiversity Conservation Act 1999</i>	The proposed action is unlikely to have a significant impact on any matter of NES. As such, a referral to the Commonwealth Environment Minister is unlikely to be required regarding matters listed under the EPBC Act.	No further action required.
<i>Flora and Fauna Guarantee Act 1988</i>	No FFG Act species or communities were recorded within the study area, or considered likely to occur. As such, a permit under the FFG Act is not required.	No further action required.
<i>Planning and Environment Act 1987</i>	Providing proposed works avoid, or are confined to less than 10% of the Tree Retention Zone of the Scattered Tree in the adjacent land parcel (Figure 1), the current proposal does not require a permit to remove, destroy or lop vegetation. Based on the current development plan, less than 10% of the Tree Retention Zone will be impacted.	No further action required.
<i>Catchment and Land Protection Act 1994</i>	One weed species listed under the CaLP Act, Gorse, was recorded within the study area. To meet requirements under the CaLP Act, listed noxious weeds should be appropriately controlled throughout the study area.	Control noxious weeds within the study area.

7 References

- DELWP 2015a. Biodiversity Interactive Map [WWW Document]. URL <http://mapshare2.dse.vic.gov.au/MapShare2EXT/imf.jsp?site=bim> (accessed 1.4.12). Victorian Department of Environment, Land, Water and Planning.
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- DEPI 2013. Permitted clearing of native vegetation - Biodiversity assessment guidelines (the Guidelines). Victorian Department of Environment and Primary Industries, September 2013.
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- DSE 2004. Vegetation quality assessment manual: Guidelines for applying the habitat hectares scoring method. Version 1.3. Victorian Department of Sustainability and Environment.
- Viridans 2013a. Flora Information System. Viridans Biological Databases.
- Viridans 2013b. Victorian Fauna Database. Viridans Biological Databases.

Figure 1



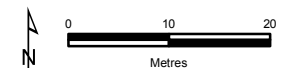
Legend

- Study Area
- Woody Weeds
- Planted Trees and Shrubs (Exempt)
- ★ Remnant Indigenous Tree
- ★ Regrowth/Planted Tree (Exempt)
- Tree Retention Zone



Figure 1

Ecological features within the study area
 40-42 Newcombe St and 41-47 Elgin St, Drysdale



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