

**7. Attachment G – Offset Potential at 55 Wallaby Court,  
Garfield North**

Colin Hines  
Project Development Manager  
Hanson Construction Materials Pty Ltd  
Ground Floor,  
601 Doncaster Road  
Doncaster, VIC 3108

Date: 28 November 2014

Our reference: 6427

Dear Colin,

**Re: Offset Potential at 55 Wallaby Court, Garfield North**

## **1. Introduction**

Ecology and Heritage Partners Pty Ltd was commissioned by Hanson Construction Materials Pty Ltd (Hanson) to provide advice pertaining to the native vegetation credits, which can be generated through the protection and enhanced management of remnant vegetation on a property located at 55 Wallaby Court, Garfield North (the study area) (Figure 1).

It is understood that Hanson are in the process of investigating the feasibility of purchasing this property to assist with meeting the offset obligations generated by the vegetation removal associated with the proposed adjacent Garfield Quarry development. Offset obligations generated by the proposed Garfield Quarry development were calculated in Ecology and Heritage Partners 2014a, and are summarised in Table 1.

The purpose of this report is to provide advice relating to potential offset credits that can be generated through the management and permanent protection of remnant vegetation within the study, and the viability of establishing an offset site within the study area.

## **2. Study Area**

The study area is located at 55 Wallaby Court, Garfield North, approximately 80 kilometres south-east of Melbourne's CBD (Figure 1). The study area is bound by private property containing extensive tracts of remnant vegetation to the west, north and south, and the proposed Garfield Quarry site to the east. The study area is privately-owned and contains high quality remnant vegetation through-out the majority of the property.

According to the Department of Environment and Primary Industries (DEPI) Biodiversity Interactive Map (DEPI 2014a), the study area occurs within the Highlands – Southern Fall bioregion. It is located within the jurisdiction of the Port Phillip and Westernport Catchment Management Authority (CMA) and the Cardinia Shire municipality.

The study area is predominantly zoned Green Wedge Zone – Schedule 1 (GWZ1), and is covered by a Bushfire Management Overlay (BMO), and an Environmental Significance Overlay – Schedule 1 (ESO1) (DTPLI 2014).

### 3. Methods

#### 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 DEPI Biodiversity Interactive Map (DEPI 2014a) for:
  - modelled data for location risk, remnant vegetation patches, scattered trees and habitat for rare or threatened species; and
  - the extent of historic and current EVCs.
- DEPI's Native Vegetation Information Tool (NVIM) (DEPI 2014b) for the modelled Strategic Biodiversity Score (SBS) of the study area;
- The Victorian Department of Transport, Planning and Linear Infrastructure's (DTPLI) Planning Maps Online to ascertain current zoning and environmental overlays (DTPLI 2014); and,
- Aerial photography of the study area.

#### Site Inspection

A site inspection of the study area was undertaken by a qualified and DEPI accredited ecologist on 3 November 2014. The study area was assessed, with all observed flora species recorded, any significant records mapped and the overall condition and extent of vegetation noted (via the habitat hectare methodology). Remnant vegetation in the local area was also investigated to assist in determining the pre-European vegetation within the study area. EVCs were determined with reference to DEPI pre-1750 and extant EVC mapping and their published descriptions (DEPI 2014c).

**Table 1.** Offset requirements for the proposed Garfield Quarry development.

Offset requirements	General Offsets Required (BEU)	0.009
	Specific Offsets Required (BEU)	33.712 specific units of habitat for Spotted Gum 37.491 specific units of habitat for Cobra Greenhood 37.347 specific units of habitat for Green Scentbark
	Vicinity (catchment / LGA)	Port Phillip and Westernport CMA / Cardinia Shire Council (For General BEUs) No Restrictions (for Specific BEUs)
	Minimum Strategic Biodiversity Score*	0.125

**Note:** BEU = Biodiversity Equivalence Units; \* Minimum strategic biodiversity score is 80% of the weighted average score across habitat zones where a general offset is required.

## 4. Results

The assessment recorded 7.655 hectares of remnant vegetation comprising one remnant EVC within the study area: Lowland Forest (EVC 16), broken up into five different quality zones (Table 2). This assessment is consistent with the extant (2005) DEPI mapping that shows the study area to be dominated by Lowland Forest (EVC 16) (DEPI 2014a).

Lowland Forest is typically an open forest dominated by Messmate Stringybark and Narrow-leaf Peppermint with an understorey of shrubby ericoid species, saw-sedges and wire-grasses (Oates and Taranto 2001). It generally occurs within lowland plains and lower foothill slopes on moderately fertile soils (Oates and Taranto 2001).

The vegetation within the site is generally of high to very high quality (i.e. habitat hectare score above 0.50), with only the areas around the existing dwelling being modified to an extent due to understorey clearance of shrubs to varying degrees. Even with a modified shrub layer in some areas, diversity is high due to the high number of species of grasses, herbs and forbs.

**Table 2. Habitat Hectare Assessment of Wallaby Court**

Vegetation Zone		1	2	3	4	5
<b>Bioregion</b>		Highlands Southern Fall	Highlands Southern Fall	Highlands Southern Fall	Highlands Southern Fall	Highlands Southern Fall
<b>EVC</b>		Lowland Forest	Lowland Forest	Lowland Forest	Lowland Forest	Lowland Forest
<b>EVC Number</b>		16	16	16	16	16
<b>EVC Conservation Status</b>		Least Concern	Least Concern	Least Concern	Least Concern	Least Concern
<b>Patch Condition</b>	Large Old Trees /10	9	9	0	5	5
	Canopy Cover /5	5	5	2	4	4
	Under storey /25	20	10	10	20	15
	Lack of Weeds /15	11	7	7	9	9
	Recruitment /10	10	3	6	10	6
	Organic Matter /5	5	5	5	5	5
	Logs /5	5	2	2	0	4
	Treeless EVC Multiplier	1	1	1	1	1
	Subtotal =	65	41	32	53	48
<b>Landscape Value /25</b>		12	12	12	12	12
<b>Habitat Points /100</b>		77	53	44	65	60
<b>Habitat Score</b>		<b>0.77</b>	<b>0.53</b>	<b>0.44</b>	<b>0.65</b>	<b>0.6</b>
<b>Total Area (ha)</b>		5.277	0.908	0.204	0.650	0.612

The offset site is located within the Port Phillip and Westernport CMA and Cardinia Shire Council.

Through the protection and management of 7.655 hectares of Lowland Forest vegetation, the native vegetation credits that can be generated, and their attributes are summarised in Table 3, and detailed in Appendix 1:

**Table 3 – Native vegetation credits generated in Wallaby Court**

Native Vegetation Credits	Offset Site type	Remnant Protection
	General BEUs*	<b>0.526 BEUs<sup>@</sup></b>
	Specific BEUs	<b>1.398 BEUs</b> for Green Scentbark <i>Eucalyptus fulgens</i>
	Vicinity (catchment / LGA)	Port Phillip and Westernport CMA / Shire of Cardinia
	Strategic Biodiversity Score (SBS)	0.266 (average)
	Minimum SBS of a clearing site <sup>#</sup>	0.333

**Notes: \* BEUs = Biodiversity Equivalence Units; # Minimum strategic biodiversity score is 80% of the weighted average score across habitat zones where a general offset is required.**

A total of **0.526 general BEUs**, or 0.131 general BEUs and 1.398 specific BEUs for Green Scentbark *Eucalyptus fulgens* can be gained through the protection and management of 7.655 hectares of remnant Lowland Forest vegetation over a period of 10 years<sup>1</sup> (Appendix 1).

### Native Vegetation Credits

Minimum management commitments/arrangements to generate native vegetation credits at a site with existing remnant vegetation, or a site proposed for revegetation can be broken up into two main strategies; 1) maintenance and 2) improvement. Some of these techniques include:

#### Maintenance

- Retention of all remnant trees (both alive and dead specimens).
- Removal of woody and herbaceous weeds.
- Foregoing allowed uses such as grazing and slashing activities.

#### Improvement

- Control/eradication of environmental or noxious weeds including those that are a threat to existing remnant vegetation.
- Fencing to restrict public/grazing access into areas of ecological value.
- Control of introduced animals such as foxes, rabbits and feral cats.

<sup>1</sup> Note that some biodiversity equivalence units may be alternates. The use of any biodiversity equivalence units of one type within a BCA will result in a proportional reduction in biodiversity equivalence units of other types within that BCA. See Appendix 1 for BEU breakdown details.

- Revegetation and/or supplement planting of locally indigenous tree, shrub and understorey species in appropriate areas (need to consider ecological function).

### *Enhanced management of on-site remnant vegetation*

Retained native vegetation within a site which is considered protected can be used to generate native vegetation credits. Gain scoring through management of existing remnant vegetation operates by allocating a certain score based on the vegetation management actions that maintain vegetation quality, or at a higher level, improve vegetation quality, and from increasing the security arrangement, and from recognition of past management. The guidelines and methodology for gain scoring are presented in DEPI (2013) and are used to determine the 'gain' from activities such as, vegetation protection, maintenance and improvement activities, and increased security. Any offset site also requires management skills and long-term resourcing (at least a 10-year period).

### **Importance of the Strategic Biodiversity Score**

The Strategic Biodiversity Score (SBS) is a modelled score between 0-1.000. The whole of Victoria has been allocated a modelled SBS, and it tends to be a reflection of the connectedness of the native vegetation and its significance to Victoria's biodiversity. The higher the SBS of the credit/offset site, the higher the number of credits that will be generated (as the number of BEUs equals the site gain per habitat hectare x the SBS of the site) (See Appendix 1 for these details). Please note that Permit holders with offset requirements must purchase offsets which have an SBS of at least 80% of the SBS of the cleared native vegetation. Therefore, the higher the SBS of a credit/offset site, the more likely that those credits will be suitable for all offset requirements that arise within that CMA or LGA. The SBS of the study area is low to moderate (between 0.2 and 0.3). Therefore, any potential credits generated at these sites are not likely to meet the offset requirements for the clearance of higher value native vegetation elsewhere (i.e. grassland areas to the west of Melbourne, or woodland area to the north and east of Melbourne). However they will meet the general offset requirements for those general offset obligations generated by the proposed Garfield Quarry development.

### **Value of Native Vegetation Credits**

Based on an average price of \$150,000.00 per BEU for the sale of both General and Specific credits within Port Phillip and Westernport CMA, the credits available within the site at Wallaby Court would be worth:

General units only (BCA 1 - 0.131 BEU and BCA 2 – 0.395 BEU):	\$78,900.00 (including GST);
Specific (BCA 2 – 1.398 BEU) and general units (BCA 1 – 0.131 BEU):	\$229,350.00 (including GST).

### **Approximate costs to establish an offset credit site**

Management actions would include securing the site in perpetuity via a land title agreement, erecting permanent fencing, controlling weeds and pest animals, and potentially supplementary planting of native vegetation. To secure and register a site on-title with DEPI using a Section 69 agreement, and conduct general management obligations, the following costs are involved (all prices excluding GST):

- Prepare Bushbroker Landowner Agreement and Management Plan \$6,000.00
- Contracting a suitably qualified Surveyor to prepare the 'Site Plan' \$3,500.00
- DEPI Landowner submission fee \$1,000.00
- Fencing of offset area (pest-proof) \$1,500 per 100 metres
- General management costs (per year) \$6 - 10,000.00
- Reporting and auditing (for each relevant reporting year) \$7,500.00

It should be noted that active management (pest plant and animal control, supplementary planting, additional maintenance activities) is required for a 10 year period at a minimum.

## 5. Conclusion

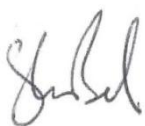
As the remnant vegetation within the Wallaby Court site is already of high quality, there is less 'gain' that can be generated through ongoing management of the site. The 'gain' generated from a high quality site is generally less than that from a moderate quality site (although the management costs for a moderate quality site would be higher). As such, given the area of the site, the relatively low SBS, and the existing quality of the vegetation, there are relatively few native vegetation BEU credits able to be generated.

The general offset obligation (of 0.009 BEUs – Table 1) could either be purchased via 3<sup>rd</sup> party for approximately \$2,600.00 (including GST) (according to the prices within our database), or met by the general units available within the quarry buffer area, or the equestrian site on Tonimbuk Road (Ecology and Heritage Partners 2014b). In addition, given the offset obligations generated by the vegetation removal associated with the proposed Garfield Quarry development, the establishment of an offset site at Wallaby Court would contribute only a very small percentage of the overall specific units required (and for only one of the species).

Although it is acknowledged that it will be difficult to acquire the full extent of specific BEU offsets summarised in Table 1, it is our recommendation that, due to the relatively small contribution this site makes, it should only be considered as an offset site to meet State offset obligations if the native vegetation credits were required to meet the overall offset obligation, after the remainder of credits for the Green Scentbark were sourced elsewhere. However, it should be noted that should the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) listed Southern Brown Bandicoot *Isodon obesulus* be recorded within the proposed quarry site, then the Wallaby Court site may contribute towards a suitable offset for this species under the EPBC Act.

Please feel free to contact me if you would like to discuss the implications of this report in further detail.

Yours Sincerely



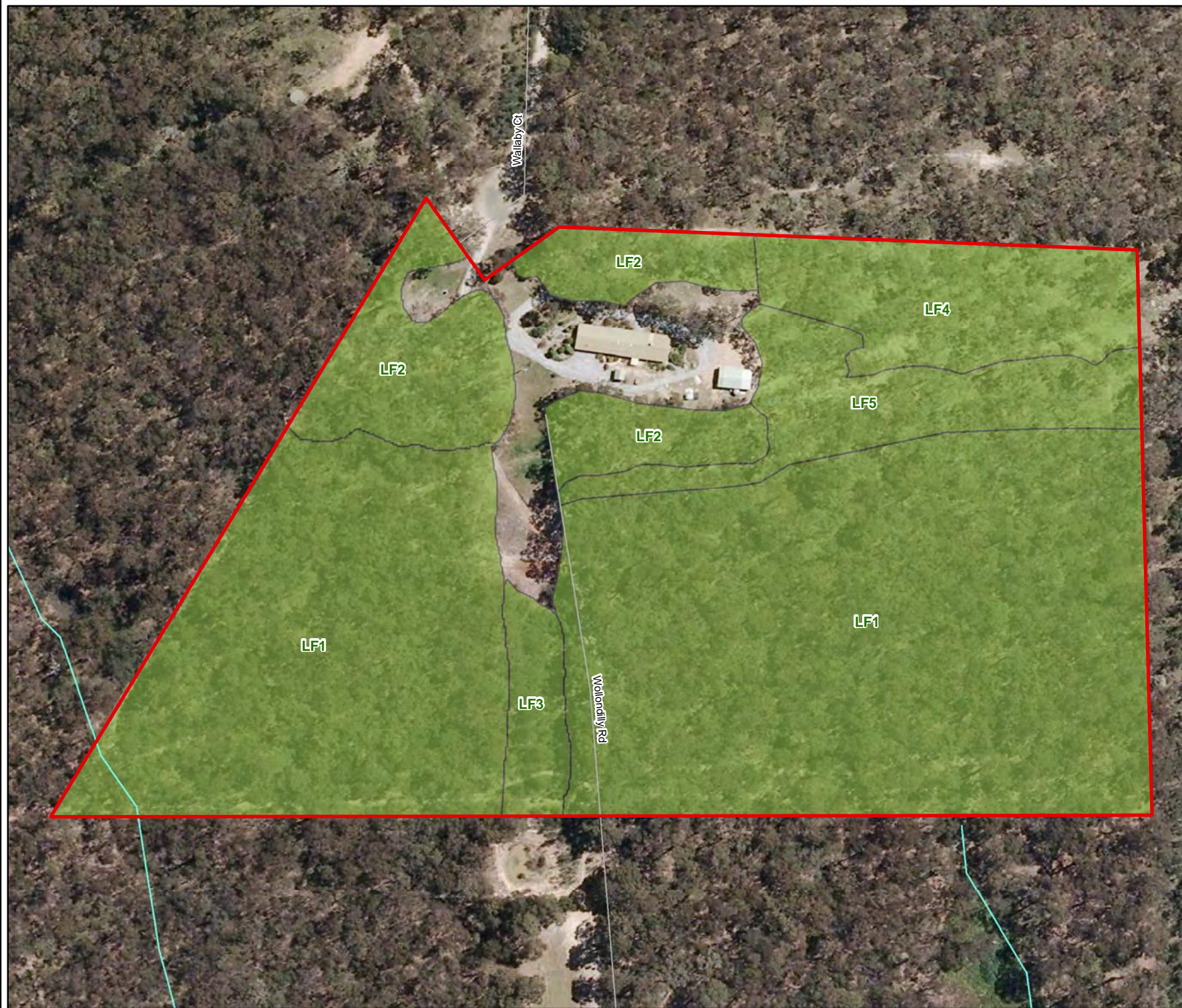
Shannon LeBel

Consultant Botanist - Ecology and Heritage Partners Pty Ltd

## References

- DEPI 2013. Native vegetation gain scoring manual: Version 1. Published by the Victorian Government Department of Environment and Primary Industries, Melbourne, May 2013.
- DEPI 2014a. Biodiversity Interactive Map [WWW Document]. URL <http://mapshare2.dse.vic.gov.au/MapShare2EXT/imf.jsp?site=bim>. Victorian Department of Environment and Primary Industries.
- DEPI 2014c. Ecological Vegetation Class (EVC) Benchmarks for each Bioregion [WWW Document]. URL <http://www.dse.vic.gov.au/conservation-and-environment/native-vegetation-groups-for-victoria/ecological-vegetation-class-evc-benchmarks-by-bioregion>. Victorian Department of Environment and Primary Industries.
- DEPI 2014b. Native Vegetation Information Management Tool [WWW Document] URL <http://nvim.depi.vic.gov.au/> Victorian Department of Environment and Primary Industries.
- DTPLI 2014. Planning Maps Online [www Document]. URL <http://services.land.vic.gov.au/landchannel/jsp/map/PlanningMapsIntro.jsp>.
- Oates & Taranto 2001. *Vegetation Mapping of the Port Phillip and Westernport Region*. Department of Sustainability & Environment, Victoria.
- Ecology and Heritage Partners Pty Ltd 2014a. Ecological Assessment for a Proposed Quarry on Sanders Road, Garfield, Victoria Report prepared for Hanson Construction Materials Pty Ltd. November 2014.
- Ecology and Heritage Partners Pty Ltd 2014b. Offset Potential at 195 Tonimbuk Road, Garfield North. Report prepared for Hanson Construction Materials Pty Ltd.





## Legend

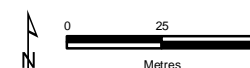
Offset site

## Ecological Vegetation Classes

Lowland Forest



**Figure 1**  
Ecological features in the  
proposed offset site  
55 Wallaby Court, Garfield



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## Appendix 1 – Offset Report – Wallaby Court



# Offset site report

This report provides information about native vegetation offset sites in accordance with the *Permitted clearing of native vegetation – Biodiversity assessment guidelines*. The information in this report is based on spatial information and site gain in habitat hectares, provided by the offset provider (or their representative), about the offset site to DEPI. Any changes to this input information will change the amount of offsets available at the offset site and will require this report to be reissued.

This report should be read in conjunction with the *Native vegetation offset market fact sheet* that provides information on how offsets are measured and categorised, and how they can be used to satisfy conditions on permits to remove native vegetation and traded as credits in the offset market.

**Date of issue:** 19/11/2014

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<b>Project ID</b>	EHP6427_Garfield_WalOS
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## Summary of offset site

<b>Total extent</b>	7.655 ha
Remnant patches	7.655 ha
Revegetation	0 ha
<b>Number of biodiversity class areas (BCAs)</b>	2
<b>Catchment Management Authority and Municipal district</b>	Port Phillip and Westernport CMA, Cardinia Shire Council

## Summary of biodiversity equivalence units available at offset site

The offset site has the following general and specific biodiversity equivalence units.

<b>General biodiversity equivalence units</b>	0.526 general units*
<b>Specific biodiversity equivalence units</b>	1.398 specific units* of habitat for Green Scentbark

\*Note that some biodiversity equivalence units may be alternates. The use of any biodiversity equivalence units of one type within a BCA will result in a proportional reduction in biodiversity equivalence units of other types within that BCA.

NB: Values presented in tables throughout this document may not add to totals due to rounding.

# Offset site report

## Offset site details

### Biodiversity equivalence units available and attributes by BCA

The biodiversity equivalence units and attributes for each BCA are as follows:

BCA	Offset type	Biodiversity equivalence units	Offset attributes
1	General	0.131 general units	0.296 strategic biodiversity score Port Phillip and Westernport CMA or the local municipal district of the offset site

BCA	Offset type	Biodiversity equivalence units	Offset attributes
2	General	0.395 general units	0.237 strategic biodiversity score Port Phillip and Westernport CMA or the local municipal district of the offset site
	Specific	1.398 specific units	Habitat for 505175, Green Scentbark, Eucalyptus fulgens

### Site gain in habitat hectares

Site gain in habitat hectares is calculated for each biodiversity class area (BCA) in the offset site using the extent and site gain per hectare scores in the GIS data provided.

BCA	Site gain per hectare*	Extent (ha)	Site gain in habitat hectares
1	0.267	1.591	0.424
2	0.265	6.063	1.604
<b>TOTAL</b>			<b>2.028</b>

\* This value has been calculated using the site gain per hectare values for each habitat zone as provided with the GIS file of the offset site. The site gain per hectare value for a BCA is calculated from the weighted average of site gain per hectare values for all habitat zones that intersect with the BCA.

# Offset site report

## Offset site biodiversity equivalence unit calculations by biodiversity class area

The general biodiversity equivalence units for the biodiversity class area are calculated by multiplying the site gain in habitat hectares by the strategic biodiversity score.

Where a BCA has specific units for one or more rare or threatened species, the specific biodiversity equivalence units for each BCA is calculated by multiplying the site gain in habitat hectares by the habitat importance score for each of these species.

BCA	Site gain in habitat hectares	Offset type	General offset attributes	Specific offset attributes		Biodiversity equivalence units*
			Strategic biodiversity score	Species number, Species common name, Species scientific name	Habitat importance score	
1	0.424	General	0.296			0.131 general units
2	1.604	General	0.237			0.395 general units
		Specific		505175, Green Scentbark, Eucalyptus fulgens	0.871	1.398 specific units

\*Note that biodiversity equivalence units within a BCA are alternates. The use of any biodiversity equivalence units of one type within a BCA will result in a proportional reduction in biodiversity equivalence units of other types within that BCA.

## Next steps

Offset sites must meet eligibility criteria as outlined in the *Native vegetation gain scoring manual, version 1* available on the DEPI website and any other relevant requirements. Eligible offset sites that are intended to be banked or sold as credits must be registered on the native vegetation credit register. A habitat hectare assessment is required to be undertaken before any offset can be registered on the credit register.

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## Appendix 1 – Images of marked native vegetation

Image 1. Aerial photograph showing marked native vegetation



Image 2. Strategic biodiversity score map

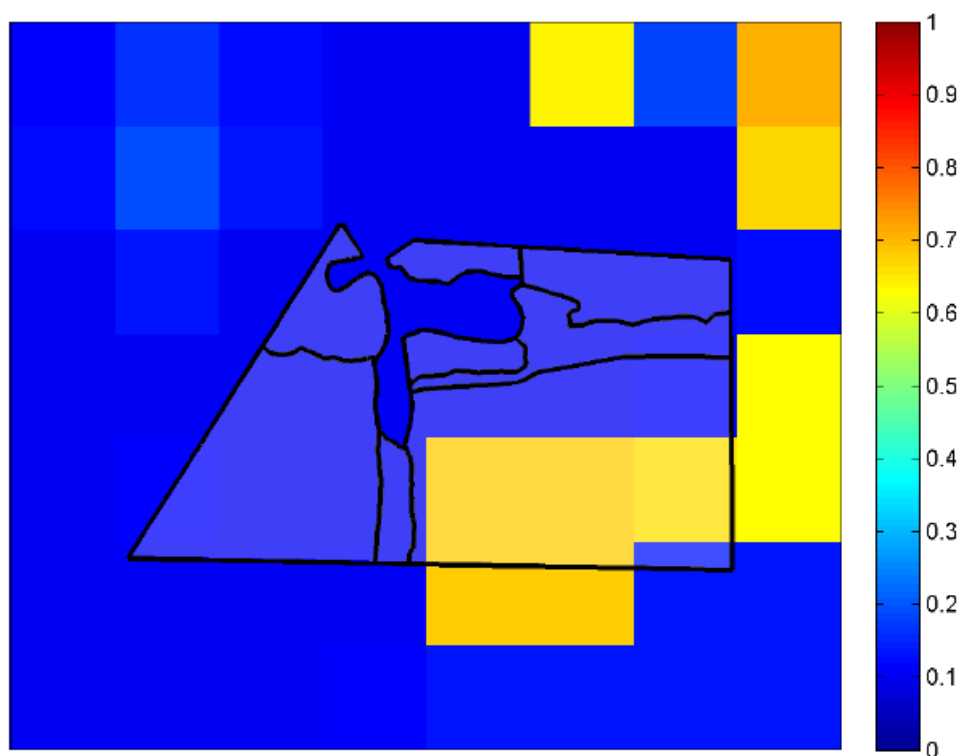
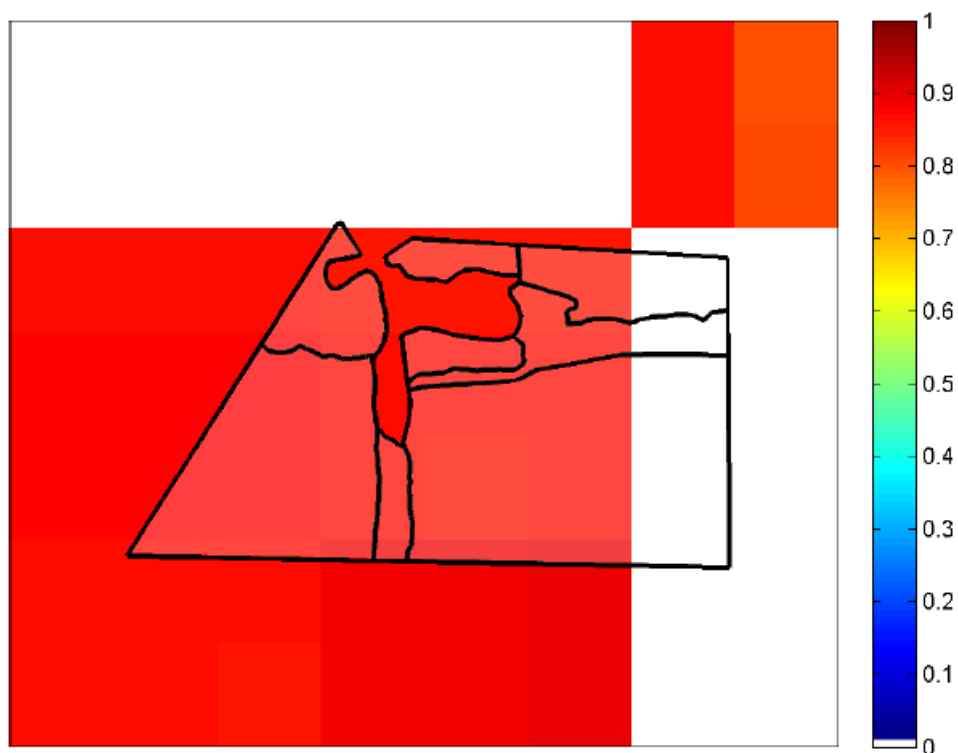


Image 3. Habitat importance map – 505175, Green Scentbark, *Eucalyptus fulgens*



# Offset site report

## Glossary

<b>Alternate offset types</b>	Offset types within a biodiversity class area (BCA) are alternates. The use of one offset type will result in the proportional reduction of all other offset types within the BCA. For example, in a BCA that has 1 general unit and 2 specific units for a particular rare or threatened species, if all of the general units are used (100 per cent) there will be no specific units remaining, as these specific units will also reduce by 100 per cent. Alternatively, if in this same BCA only half the general units were used (50 per cent) then there will be 0.5 general units and 1 specific units remaining, half the original values.
<b>Biodiversity Class Area (BCA)</b>	The BCA is the organisational unit of an offset site. BCAs are determined by the unique combination of general and specific biodiversity equivalence units calculated across the offset site.
<b>Condition score</b>	This is the site-assessed condition score for the native vegetation. Each habitat zone in the offset site is assigned a condition score according to the habitat hectare assessment method. This information has been provided by or on behalf of the applicant in the GIS file submitted for processing.
<b>General biodiversity equivalence units (general units)</b>	<p>The general biodiversity equivalence units (general units) quantify the relative overall contribution that the protection and management of native vegetation at the offset site makes to Victoria's biodiversity. The general biodiversity equivalence units is calculated as follows:</p> $\text{General biodiversity equivalence units} = \text{site gain in habitat hectares} \times \text{strategic biodiversity score}$
<b>General offset attributes</b>	The attributes of a general offset site must match those in an offset requirement that is a condition on a permit to remove native vegetation, in order for that offset site to be used to satisfy the permit condition. General offsets must be located in the same Catchment Management Authority boundary or Municipal District (local council) as the clearing site. They must also have a strategic biodiversity score that is at least 80 per cent of the clearing site. The strategic biodiversity score of a general offset is determined by the biodiversity class area the units are sold from.
<b>Habitat importance score</b>	The habitat importance score is a measure of the relative importance of the habitat located on a site for a particular rare or threatened species, compared to all other habitat for that species. The habitat importance score for a species is a weighted average value calculated from the habitat importance map for that species. The habitat importance score is calculated for each biodiversity class area where the habitat importance map indicates that species habitat occurs and where the protection of habitat across the offset agreement is greater than the threshold test.
<b>Habitat zone</b>	<p>Habitat zone is a discrete contiguous area of native vegetation that:</p> <ul style="list-style-type: none"><li>• is of a single Ecological Vegetation Class</li><li>• has the same measured condition.</li></ul>
<b>Offset type</b>	There are two types of offsets, general offset and specific offsets. All offset sites can be general offsets. Sites that are mapped as habitat for specific rare or threatened species can be specific offsets for those species habitat.



# Offset site report

## Site gain in habitat hectares

Site gain in habitat hectares is a site-based measure that combines extent and site gain per hectare of native vegetation at an offset site. The site gain in habitat hectares measures both the current status of native vegetation at a site and the potential site gain from the protection and management of the native vegetation at that site. The condition of a site, or the gain in condition due to protection and management actions are multiplied by the extent (area in hectares) of native vegetation to calculate the site gain in habitat hectares value. For a biodiversity class area the site gain in habitat hectares is determined using the following formula:

$$\text{Site gain in habitat hectares} = \text{total extent (hectares)} \times \text{site gain per hectare}$$

## Site gain per hectare

This is the site-assessed gain per hectare for the native vegetation based on the agreed management and security commitments. Each habitat zone in the offset proposal is assigned a site gain per hectare according to the habitat hectare assessment and gain scoring methods. This is a number between 0 and 1. This information has been provided by or on behalf of the applicant in the GIS file. These values are aggregated to the level of the BCA in order to calculate offset amounts at the offset site.

## Specific offset attributes

The attributes of a specific offset site must match those in an offset requirement that is a condition on a permit to remove native vegetation, in order for that offset site to be used to satisfy the permit condition. Specific offsets must be located in the mapped habitat for the species that has triggered the specific offset requirement.

## Specific biodiversity equivalence units (specific units)

Specific biodiversity equivalence units (specific units) are associated with a particular rare or threatened species habitat. The specific biodiversity equivalence units quantifies the relative overall contribution that the protection and management of native vegetation at an offset site makes to the habitat of the relevant rare or threatened species. Specific units are calculated for each species in each biodiversity class area where the result of the threshold test is greater than 0.0025 per cent. Specific units are calculated as follows:

$$\begin{aligned} \text{Specific biodiversity equivalence units}_{\text{species } x} \\ = \text{site gain in habitat hectares} \times \text{habitat importance score}_{\text{species } x} \end{aligned}$$

## Strategic biodiversity score

This is the weighted average strategic biodiversity score of the marked native vegetation. The strategic biodiversity score has been calculated from the *Strategic biodiversity map* for each BCA. The strategic biodiversity score of native vegetation is a measure of the native vegetation's importance for Victoria's biodiversity, relative to other locations across the landscape. The *Strategic biodiversity map* is a modelled layer that prioritises locations on the basis of rarity and level of depletion of the types of vegetation, species habitats, and condition and connectivity of native vegetation.

## Threshold test

By default, a threshold test is applied to offset sites to limit the number of rare or threatened species for which specific biodiversity equivalence units are calculated. This is done to make organising and trading credits more manageable. The test determines if the offset site can generate specific habitat protection for any rare or threatened species above a threshold. The threshold is set at 0.0025 per cent of the total habitat for a species. When the proportion of habitat protected is above the threshold, specific biodiversity equivalence units are calculated for that species.

# Offset site report

**Total extent  
(hectares) for  
calculating site  
gain in habitat  
hectares**

This is the total area of offset site native vegetation in hectares.

The total extent of native vegetation is an input to calculating the site gain in habitat hectares at a site and in calculating the total gain in general and specific biodiversity equivalence units.