6 February 2022

Apollo Bay Harbour Development Native Vegetation Removal - FINAL

Our ref: Matter 35296

Background

Biosis Pty Ltd (Biosis) was commissioned by Colac Otway Shire in 2019 to undertake a flora and fauna assessment of the terrestrial area of Apollo Bay Harbour in order to explore future development options and inform the forthcoming Apollo Bay Harbour Development Plan. The study area is roughly nine hectares in size and located along the terrestrial area of Apollo Bay Harbour, approximately 900 metres south-east of Apollo Bay CBD (Figure 1).

Colac Otway Shire are now in the early stages of preparing design plans in accordance with the approved Apollo Bay Harbour Development Plan and have engaged Biosis to provide advice concerning the removal of native vegetation and to provide an updated assessment against the *Guidelines for the removal, destruction or lopping of native vegetation* (the 'Guidelines'; DELWP 2017a) to accompany a planning permit application. Biosis have also been engaged by Colac Otway Shire to prepare a desktop significant impact self-assessment (SISA) for the Apollo Bay Harbour Development. This results of the SISA are not discussed within this report, however a summary of recommendations related to significant flora and fauna are provided.

Ecological values

The following key ecological values were identified within the study area during the initial site assessment
(Figure 2; Biosis 2019):

- 2.248 ha of native vegetation comprised of the following two ecological vegetation classes (EVCs), both with a bioregional conservation status (BCS) of depleted within the Otway Plain bioregion.
  - 2.178 ha of Coastal Dune Grassland EVC 160, comprised of:
    - High quality areas represented by Habitat Zones 1, 4, 8, 9, 11, 13, 15, 17.
    - Low quality areas represented by Habitat Zones 5, 6, 7, 10.
  - 0.070 ha of high quality Coastal Dune Grassland EVC, represented by Habitat Zones 2, 3, 12, 14, 16, 18, 19.

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- Five flora species protected under the Victorian *Flora and Fauna Guarantee Act 1988* (FFG Act). The following three protected FFG Act species were recorded inside the development footprint:
  - Coast Wattle *Acacia longifolia* subsp. *sophorae*
  - Coast Beard-heath *Leucopogon parviflorus*
  - Groundsel *Senecio* spp.
- The following two FFG Act threatened species:
  - Bog Gum *Eucalyptus kitsoniana* listed as critically endangered. Individuals were recorded inside the development footprint along Trafalgar Street. The specimens recorded on site are planted individuals, situated amongst other planted vegetation and non-indigenous vegetation in an area significantly modified by landscaping and land-forming works.
  - Sea Bindweed *Calystegia soldanella* listed as endangered. This species was recorded in Habitat Zone 17, outside the development footprint, and will not be impacted by the proposed development.
- Native vegetation which may be utilised as breeding habitat for several threatened shorebird species including Fairy Tern, Hooded Plover, Little Tern and Caspian Tern. The study area may also provide habitat for other threatened species including Rufous Bristlebird, Eastern Curlew, Curlew Sandpiper, Red Knot, Bar-tailed Godwit, Southern Bent-wing Bat and Leafy Greenhood.
- No significant ecological communities were deemed to be present within the study area. However, the Barham River Estuary which is approximately 300 metres south of the study area forms part of the *'Assemblages of species associated with open-coast salt-wedge estuaries of western and central Victoria ecological community'* which is listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- No Ramsar sites are present within five kilometres of the study area.
- Due to the proximity of the ocean and the Barham River estuary the site may be used a wildlife corridor for shorebird species.

Native vegetation proposed to be removed

The proposed removal of native vegetation was assessed in accordance with the concept design provided. The development proposes to remove 0.058 hectares of native vegetation (0.014 habitat hectares), comprised entirely of patch vegetation (Figure 3). The native vegetation proposed to be removed is areas of Coastal Dune Scrub across four habitat zones:

- Habitat Zone 4 (Photo 1); higher quality native vegetation. The current design proposes the removal of this entire patch of native vegetation (0.005 ha).
- Habitat Zone 5 (Photo 2); generally poorer quality native vegetation supporting high weed cover. The current design proposes the removal of this entire patch of native vegetation (0.011 ha).
- Habitat Zone 6 (Photo 3); generally poorer quality native vegetation supporting high weed cover. The current design proposes partial removal of this patch of native vegetation (0.012 ha).

- Habitat Zone 11 (Photo 4); higher quality native vegetation. The current design proposes partial removal of this patch of native vegetation (0.029 ha).

Areas of non-indigenous planted vegetation is also proposed for removal, totalling 0.13 hectares (Photo 5). No offsets are required for the removal of this vegetation, however these areas may still provide habitat for native fauna.

A Native Vegetation Removal Report (NVRR) identifies the offset requirements and was produced by DELWP's Native Vegetation Support team using spatial data and quality scores provided by Biosis. The NVRR is provided as an attachment and summarised in Table 1.

In summary, offsets comprising 0.019 general habitat units with a minimum strategic biodiversity value score of 0.593 would be required for the proposed removal of native vegetation.

Table 1 Summary of DELWP Native Vegetation Removal Report

Attribute	Outcome
Native Vegetation Removal Report summary	
Location category	1
Native vegetation removal extent	0.058 hectares
Assessment pathway	Basic
Habitat hectares to be removed	0.014
Strategic Biodiversity Value Score	0.608 – 0.840
Modelled habitat for rare or threatened species	N/A
Offset type	General
Offset multiplier	1.5
Offset amount: general habitat units	0.019 units
General offset vicinity	Corangamite Catchment Management Authority (CMA) or Colac Otway Shire Council
General offset minimum Strategic Biodiversity Value Score	0.593

Recommendations

The following recommendations are provided to further avoid, minimise and offset impacts of native vegetation associated with the Apollo Bay Harbour Development:

- If further changes to the development footprint are required, prioritise the retention of higher quality areas of native vegetation. In particular, removal of native vegetation from HZ17 should be avoided due to the presence of FFG Act threatened flora. Removal of planted vegetation should also be avoided and minimised where possible as these may still provide habitat for native fauna.
- Targeted surveys are recommended to determine the presence or absence of Leafy Greenhood *Pterostylis cucullata* within the study area if areas of high quality native vegetation are impacted. The

current proposal impacts two areas of high quality native vegetation (HZ4 and HZ11). These surveys would ideally be conducted prior to development plans being finalised. The surveys should be undertaken in early spring during the species flowering period from August-October.

- The mouth of the Barham River is approximately 300 metres south of the study area and Bass Strait is approximately 50 metres to the north and east of the study area. Erosion control measures should be installed and maintained to prevent runoff and ensure that the water quality levels of the Barham River are not impacted by the proposed works.
- The study area is on public land. Five protected flora species are present, and a protected flora permit from DELWP would be required if any of these species will be affected by future development.
- All areas of vegetation to be retained should be securely fenced/bunted prior to works occurring to prevent accidental damage.
- Specific detail relating to preventing impacts to retained native vegetation and aquatic and terrestrial habitat should be addressed in a site-specific Construction Environmental Management Plan. This will include issues relating to contractors such as environmental inductions, installation of temporary fencing/signage, drainage and sediment control.
- An Ecological Management Plan should be prepared by an ecological consultant to provide detailed advice on the ongoing protection and long-term management of retained vegetation/ habitat, creation of linkages and other habitat features such as wetlands, if proposed.

If you have any further questions please contact me on 0437 718 984 or jkenny@biosis.com.au.

Yours sincerely

Jane Kenny

Consultant Botanist

References

Biosis 2019. Apollo Bay Harbour: Terrestrial flora and fauna assessment. Report for Colac Otway Shire. Authors: Howard, J., Biosis Pty Ltd, Ballarat. Project no 29601.

DELWP 2017a. *Guidelines for the removal, destruction or lopping of native vegetation.* Government Department of Land, Water and Planning, Melbourne, Victoria.

Attachment 1 – Figures

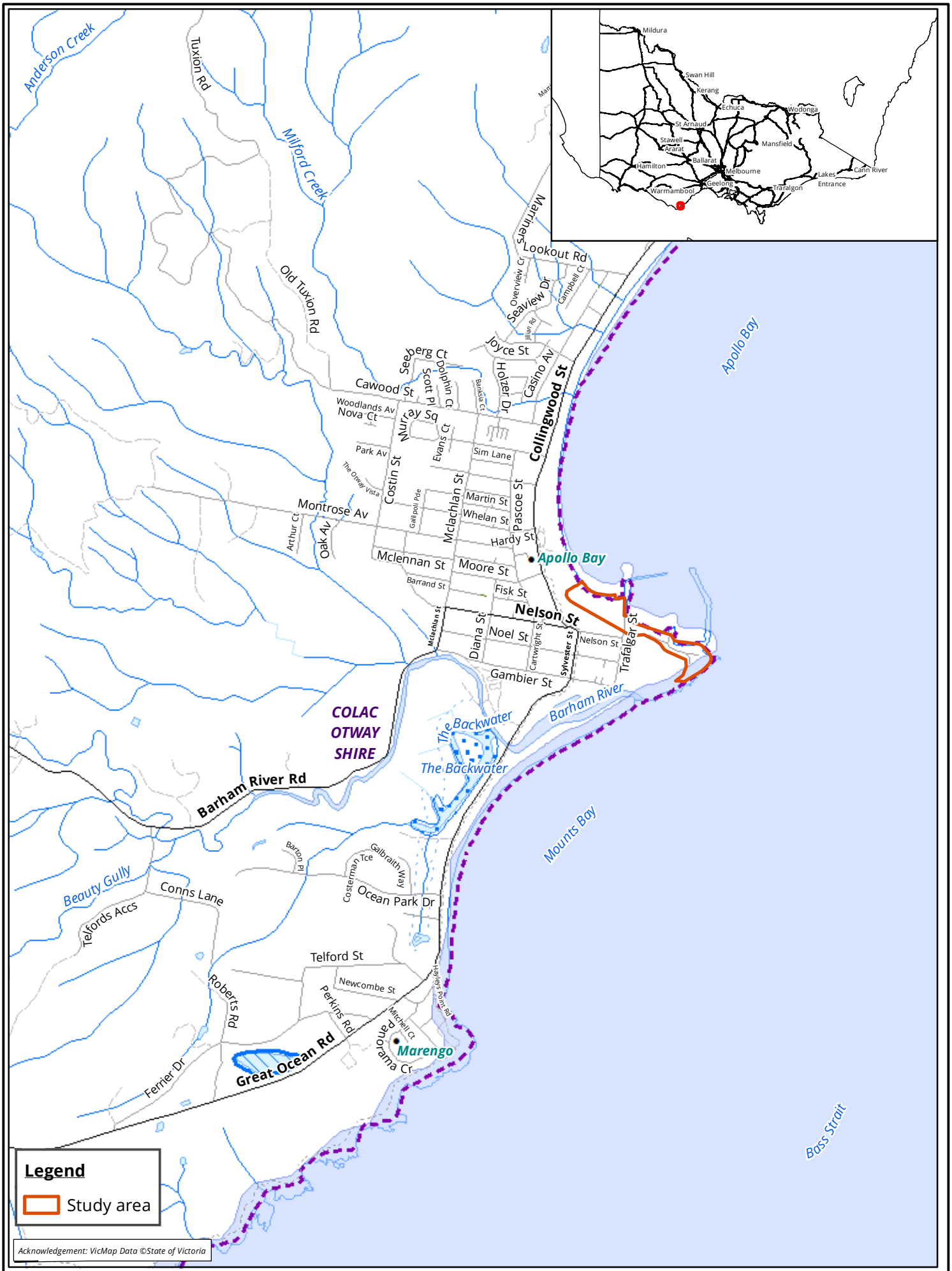
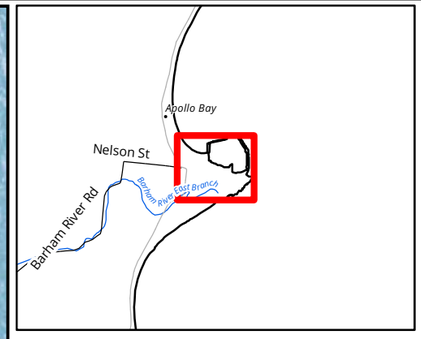


Figure 1 Location of the study area - Apollo Bay Harbour- Victoria

Biosis Pty Ltd
Albury, Ballarat, Melbourne,
Newcastle, Sydney, Wangaratta & Wollongong

Matter: 29601,
Date: 15 March 2019,
Checked by: JH, Drawn by: DK, Last edited by: dkazemi
Location:P:\29600s\29601\Mapping\29601_F1_Locality



Legend

- Study area
- Non-indigenous vegetation

Ecological Vegetation Class

- (OtP_0160) Coastal Dune Scrub
- (OtP_0879) Coastal Dune Grassland

Figure 2 Ecological features within study area

0 25 50 75 100 125

Metres
Scale: 1:2,500 @ A3
Coordinate System: GDA 1994 MGA Zone 55

N

Biosis Pty Ltd
Albury, Ballarat, Melbourne, Newcastle, Sydney, Wangaratta & Wollongong

Matter: 29601,
Date: 02 April 2019,
Checked by: JH, Drawn by: DK, Last edited by: dkazemi
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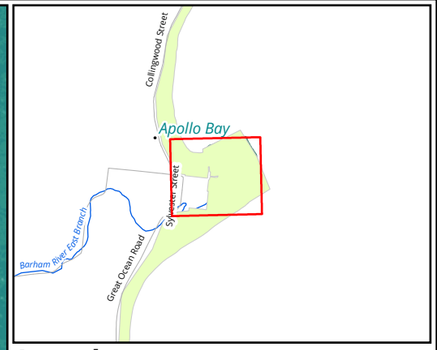


Legend

- Study area
- Vegetation to be removed (EVC)

Ecological Vegetation Class (EVC)

- (OtP_0160) Coastal Dune Scrub
- (OtP_0879) Coastal Dune Grassland

Non-indiginous vegetation

- Not removed
- To be removed

Figure 3 Native vegetation proposed for removal

0 20 40 60 80 100

Metres

Scale: 1:2,500 @ A3

Coordinate System: GDA 1994 VICGRID94

N

biosis

Matter: 35296,
Date: 03 February 2022 ,
Prepared for: JK, Prepared by: MK, Last edited by: mknudsen
Layout: 35296_F3_veg
Project: P:\35200s\35296\Mapping\
35296_ApollaBay_NVR.aprx

Acknowledgements: VicMap BaseMap©State of Victoria

Attachment 2 – Photos of the vegetation proposed for removal

Photo 1 Habitat Zone 4 – Coastal Dune Scrub, looking approximately north. 10 June 2021.

Photo 2 Habitat Zone 5 – Coastal Dune Scrub, looking approximately north east. 10 June 2021.

Photo 3 Habitat Zone 6 – Coastal Dune Scrub, looking approximately east. 10 June 2021.

Photo 4 Habitat Zone 11 – Coastal Dune Scrub, looking approximately east. 10 June 2021.

Photo 5 Non-indigenous planted vegetation, looking approximately north. 10 June 2021.

Attachment 3 – Native Vegetation Removal Report

Native vegetation removal report

This report provides information to support an application to remove, destroy or lop native vegetation in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation*. The report **is not an assessment by DELWP** of the proposed native vegetation removal. Native vegetation information and offset requirements have been determined using spatial data provided by the applicant or their consultant.

Date of issue: **04/02/2022**
Time of issue: **1:18 pm**

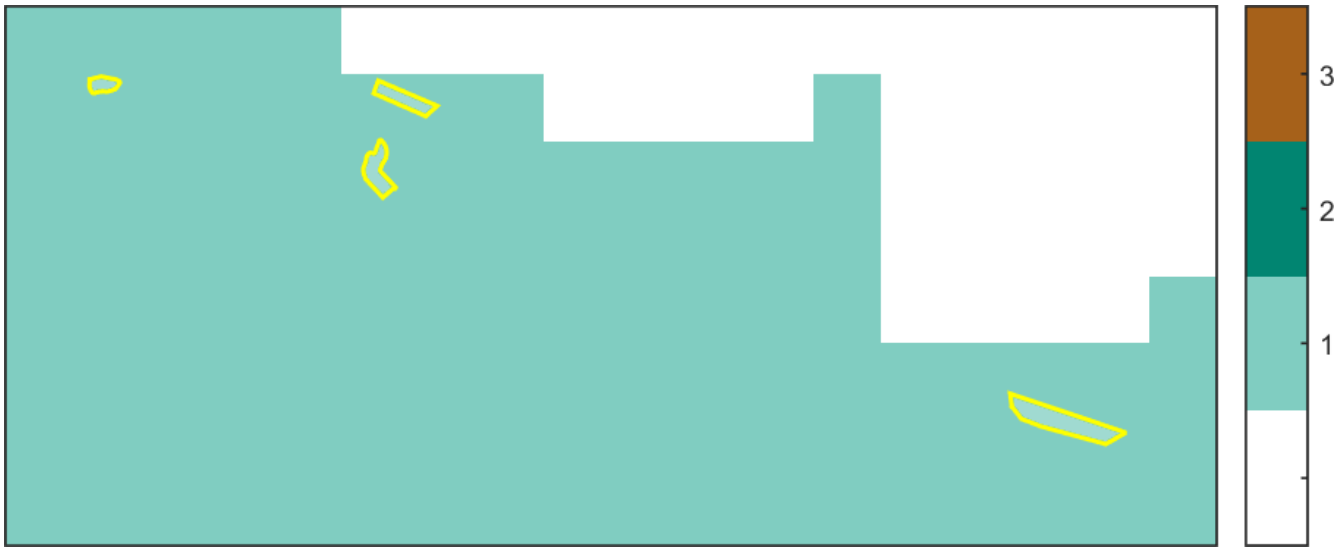
Report ID: BIO_2022_009

Project ID	EnSym_Data_Removal_35296_Updated

Assessment pathway

Assessment pathway	**Basic Assessment Pathway**
Extent including past and proposed	0.058 ha
Extent of past removal	0.000 ha
Extent of proposed removal	0.058 ha
No. Large trees proposed to be removed	0
Location category of proposed removal	Location 1 The native vegetation is not in an area mapped as an endangered Ecological Vegetation Class (as per the statewide EVC map), sensitive wetland or coastal area. Removal of less than 0.5 hectares in this location will not have a significant impact on any habitat for a rare or threatened species

1. Location map



Offset requirements if a permit is granted

Any approval granted will include a condition to obtain an offset that meets the following requirements:

General offset amount[1]	0.019 general habitat units
Vicinity	Corangamite Catchment Management Authority (CMA) or Colac Otway Shire Council
Minimum strategic biodiversity value score[2]	0.593
Large trees	0 large trees

NB: values within tables in this document may not add to the totals shown above due to rounding

Appendix 1 includes information about the native vegetation to be removed

Appendix 2 includes information about the rare or threatened species mapped at the site.

Appendix 3 includes maps showing native vegetation to be removed and extracts of relevant species habitat importance maps

1 The general offset amount required is the sum of all general habitat units in Appendix 1.

2 Minimum strategic biodiversity score is 80 per cent of the weighted average score across habitat zones where a general offset is required

Next steps

Any proposal to remove native vegetation must meet the application requirements of the Basic Assessment Pathway and it will be assessed under the Basic Assessment Pathway.

If you wish to remove the mapped native vegetation you are required to apply for a permit from your local council. Council will refer your application to DELWP for assessment, as required. **This report is not a referral assessment by DELWP.**

This *Native vegetation removal report* must be submitted with your application for a permit to remove, destroy or lop native vegetation.

Refer to the *Guidelines for the removal, destruction or lopping of native* vegetation (the Guidelines) for a full list of application requirements This report provides information that meets the following application requirements:

- The assessment pathway and reason for the assessment pathway
- A description of the native vegetation to be removed (met unless you wish to include a site assessment)
- Maps showing the native vegetation and property
- The offset requirements determined in accordance with section 5 of the Guidelines that apply if approval is granted to remove native vegetation.

Additional application requirements must be met including:

- Topographical and land information
- Recent dated photographs
- Details of past native vegetation removal
- An avoid and minimise statement
- A copy of any Property Vegetation Plan that applies
- A defendable space statement as applicable
- A statement about the Native Vegetation Precinct Plan as applicable
- An offset statement that explains that an offset has been identified and how it will be secured.

Authorised by the Victorian Government, 8 Nicholson Street, East Melbourne.

For more information contact the DELWP Customer Service Centre 136 186

www.delwp.vic.gov.au

Appendix 1: Description of native vegetation to be removed

All zones require a general offset, the general habitat units each zone is calculated by the following equation in accordance with the Guidelines:

General habitat units = extent x condition x general landscape factor x 1.5, where the general landscape factor = 0.5 + (strategic biodiversity value score/2)

The general offset amount required is the sum of all general habitat units per zone.

Native vegetation to be removed

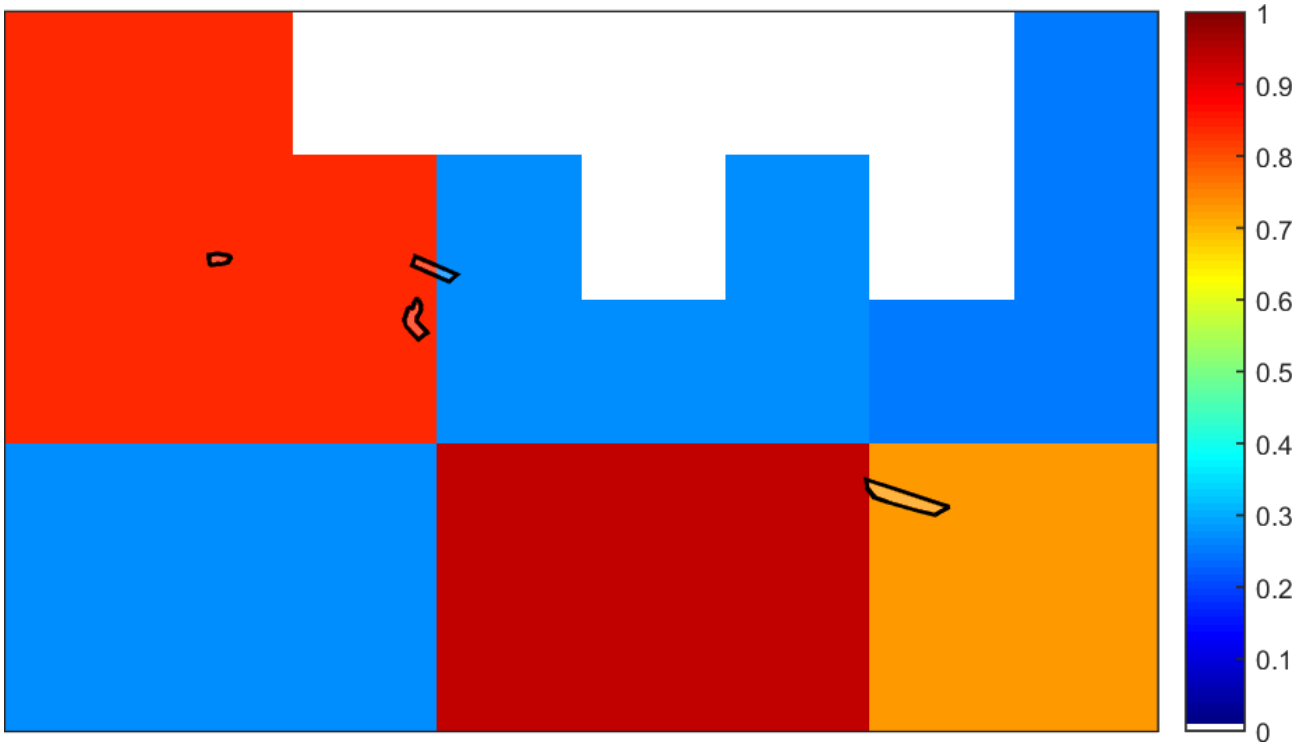
Information provided by or on behalf of the applicant in a GIS file							Information calculated by EnSym					
Zone	**Type**	**BioEVC**	**BioEVC conservation status**	**Large tree(s)**	**Partial removal**	**Condition score**	**Polygon Extent**	**Extent without overlap**	**SBV score**	**HI score**	**Habitat units**	**Offset type**
6-A	Patch	otp_0160	Depleted	0	no	0.193	0.012	0.012	0.840		0.003	General
5-A	Patch	otp_0160	Depleted	0	no	0.193	0.011	0.011	0.608		0.003	General
4-A	Patch	otp_0160	Depleted	0	no	0.288	0.005	0.005	0.840		0.002	General
11-A	Patch	otp_0160	Depleted	0	no	0.288	0.029	0.029	0.735		0.011	General

Appendix 2: Information about impacts to rare or threatened species' habitats on site

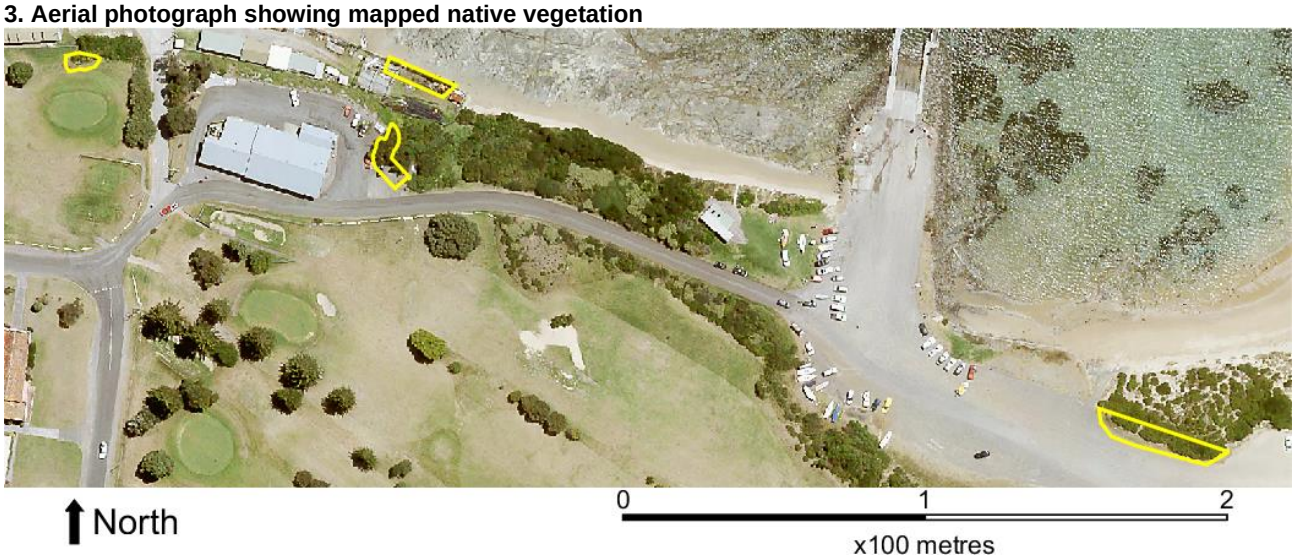
This is not applicable in the Basic Assessment Pathway.

Appendix 3 – Images of mapped native vegetation

2. Strategic biodiversity values map



3. Aerial photograph showing mapped native vegetation



4. Map of the property in context

Yellow boundaries denote areas of proposed native vegetation removal.